



Georgia-Pacific

**Georgia-Pacific Wood Products LLC
Mt. Hope OSB Plant**

Facility No. 01900034

**79 North Pax Avenue
Mt. Hope, Fayette County, West Virginia 25880**

**Title V Operating Permit
Renewal Application**

**Submitted to the
West Virginia Division of Air Quality**

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1. PERMIT APPLICATION SUMMARY

Georgia-Pacific Wood Products LLC (GP) owns and operates an oriented strandboard (OSB) manufacturing plant in Mt. Hope, Fayette County, West Virginia (referred to as the “Mt. Hope OSB Plant”, or, simply “the facility”). The facility is categorized under the Standard Industrial Classification (SIC) code 2493, Reconstituted Wood Products, and under the North American Industry Classification System (NAICS) code 321219.

The Mt. Hope OSB plant is a major stationary source under the Major Source (Title V) Operating Permit program administered by the West Virginia Division of Air Quality (WVDAQ) under Title 45, Series 30 (Requirements for Operating Permits) of the West Virginia Code of State Rules (Revised June 1, 2003). WVDAQ issued Title V Permit Number R30-01900034-2006 to the facility, effective May 8, 2006, with an expiration date of April 24, 2011. The permit requires submittal of a renewal permit application by October 24, 2010. GP is submitting this complete renewal permit application in advance of this deadline to meet the requirement for a timely and complete submittal.

1.1. FACILITY LOCATION

The Mt. Hope OSB facility is located in Fayette County on North Pax Avenue about 1 mile west of the town of Mt. Hope and 5 miles north of the town of Beckley. The area immediately surrounding the facility is primarily undeveloped, forested land. Fayette County has been designated by the U.S. Environmental Protection Agency (EPA) as “attainment” or “unclassified” for all criteria pollutants.¹

The location of the main process area is approximately 483.5 km East, 4,194.5 km North (Universal Transverse Mercator coordinates, Zone 17, North American Datum 1927). An area map and a plot plan are included in Appendix B.

1.2. PERMITTING HISTORY

WVDAQ issued the Mt. Hope OSB Plant’s currently effective Title V permit on April 24, 2006 as a renewal to the facility’s initial Title V operating permit. The current permit was amended most recently on December 16, 2009 to incorporate the requirements of the Plywood and Composite Wood Panels (PCWP) Maximum Achievable Control Technology (MACT) into the permit.

During the current Title V permit term, GP submitted several permit modification requests for changes to either existing permit conditions/requirements or changes to permitted equipment at the facility. The following changes to the existing Title V permit were completed during the permit term.

¹ 40 CFR §81.349.

- **Wellons Energy System Compliance Assurance Monitoring (CAM) Language Change (September 2006)**. This change administratively revised the existing permit condition 5.2.6 to allow an exception to the CAM limit for NO_x during periods of startup and shutdown of the Wellons Energy System.
- **PCWP and Boiler MACT Language Change (April 2007)**. This change administratively revised the existing permit conditions 3.1.18 and 3.1.19 to specify the deadlines for submitting significant Title permit modification applications to incorporate the PCWP and Boiler MACT requirements into the existing permit.
- **PCWP MACT Requirements Incorporation (December 2009)**. This change was a significant modification to incorporate the PCWP MACT requirements into the Title V permit pursuant to construction permits (Permit R13-1622G and Permit R13-1622H) which permitted the installation of controls required to achieve compliance with the PCWP MACT requirements for the press.

1.3. REQUEST FOR PERMIT APPLICATION SHIELD

Section 503(d) of the Clean Air Act (CAA) provides that once a timely and complete application for an operating permit has been filed, the applicant is shielded from enforcement action for operating without a permit until the permit has been issued or other action has been taken on the application. WVDAQ Code of State Rules 45-30-4.1.a.5 establishes this application shield for sources required to obtain and renew a major source operating permit in West Virginia. Because GP is submitting this complete Part 70 renewal application in advance of the October 24, 2010 deadline, the Mt. Hope OSB facility is authorized to continue operating under the current permit if the current Part 70 operating permit expires before a renewal permit is issued.

1.4. REQUEST FOR PERMIT SHIELD

Section 504(f) of the CAA authorizes the permitting authority to provide a “permit shield” whereby compliance with a Part 70 operating permit shall be deemed compliance with all applicable provisions of the Act. WVDAQ Code of State Rules 45-30-5.6 provides for such a permit shield. Accordingly, major sources in West Virginia may request a permit shield for all federal applicable requirements. GP requests a permit shield in accordance with these provisions. A detailed regulatory applicability analysis is provided in Appendix E of this application.

1.5. PERMIT APPLICATION CONTENTS

This application for a renewal Part 70 operating permit includes the following elements:

- Appendix A contains the Title V General Forms, Process Description, and Emissions Summary
- Appendix B contains an Area Map, Plot Plan, and Process Flow Diagrams

- Appendix C contains the process specific Title V forms and associated emission calculations.
- Appendix D contains the WV regulatory applicability review
- Appendix E contains the federal regulatory applicability review

In addition to conventional abbreviations for dimensional and time units (e.g., ft, hr, yr), the following abbreviations may be used in this submittal to describe emissions, production, operating units, and regulatory requirements:

- CO Carbon Monoxide
- BACT Best Available Control Technology
- HAP Hazardous Air Pollutants
- MACT Maximum Achievable Control Technology
- MMBtu Million British Thermal Units Heat Input
- MSF Thousand square feet of finished OSB
- NESHAP National Emissions Standards for Hazardous Air Pollutants
- NO_x Nitrogen Oxides
- NSPS New Source Performance Standards
- PM Particulate Matter
- PM₁₀ Particulate Matter less than or equal to 10 micrometers in aerodynamic diameter
- PM_{2.5} Particulate Matter less than or equal to 2.5 micrometers in aerodynamic diameter
- PSD Prevention of Significant Deterioration
- psi Pounds per square inch
- SO₂ Sulfur Dioxide
- tpd tons per day
- tpy tons per year
- VOC Volatile Organic Compounds

2. PROCESS DESCRIPTION

The Mt. Hope Plant manufactures OSB from softwood and soft hardwood logs. The nominal production capacity of the Mt. Hope Plant is 438,000,000 square feet (438 MMsf/yr) or 50,000 square feet per hour (50.0 Msf/hr) (3/8" basis) of finished OSB; however, individual process units may have a higher or lower capacity expressed in terms of equivalent OSB production. Each process at the facility is described in the subsections below. Simplified process flow diagrams are included in Appendix B. Significant emission units are denoted by emission unit and emission point numbers consistent with the plant's current operating permit.

2.1. GREEN END OPERATIONS

"Green end operations" refer to the initial portion of the OSB manufacturing process in which raw wood materials (i.e., logs) are received, stored, handled, and processed to create flakes for the OSB manufacturing process. Wood residuals including bark, sawdust, and chips are generated throughout the green end operations and either used on-site for fuel or shipped offsite for other uses. Emissions from green end operations consist of PM (including TSP, PM₁₀, and PM_{2.5}) from material handling and conveying and some VOC from raw wood and log conditioning. Enclosed conveyance systems are used to collect wood residual material throughout the green end operations for use as fuel or shipment off-site.

Tree length logs are brought to the mill by truck and/or rail and are unloaded, separated by species and length, and stored on the logyard. The process begins by loading logs on the deck to be aligned and cut. The logs are cut to appropriate length via the log chop saws. Logs from the chop saws are then sent to the debarkers (Emission Unit ID 1050) where the bark is removed. Bark from the debarking operation is conveyed to the bark hog (Emission Unit ID 2230) to be hogged prior to being sent to either the hog fuel silo or hog fuel storage pile where the material is stored prior to being used as fuel in the Wellons Energy System. The cut logs proceed to the Log Conditioning System in which hot water is sprayed over the logs for deicing purposes in winter conditions and to soften the logs prior to the flaking operation. Upon exiting the log conditioning system, the logs are mechanically conveyed to the flakers. The Log Conditioning System was not previously considered a significant emission unit; however, GP believes this process does not qualify as an insignificant activity based on current emission factors. Logs entering the flakers (Emission Unit ID 2000) are cut into flakes approximately 1.5 inches wide by 4 inches long. These are termed green flakes since they contain considerable moisture (approximately 50% by weight).

The green flakes are screened to remove unusable material prior to being conveyed and stored in the green flake bins. The screen fines are conveyed to either the hog fuel silo or ground fuel storage. The green flakes are then conveyed to the drying operation.

2.2. FLAKE DRYING

The Mt. Hope facility has a unique drying operation when compared to conventional OSB plants. It consists of a 240 MMBtu/hr Wellons Energy System, 3 rotary flake dryers, and 6 air-to-air heat exchangers all interconnected (see process flow diagram). Heat for the drying system is provided by a Wellons Energy System. The combustion gases generated in the Wellons Energy System are sent to an air-to-air heat exchanger (Primary Air Heater, one per dryer) to heat ambient air for use in that dryer. The heated ambient air is sent to each dryer where it is used to both convey the flakes through the dryer and to remove the moisture from the flakes. The dry flakes from each dryer are pneumatically conveyed to a cyclone collector where they are removed from the gas stream. The moisture laden dryer exhaust from the cyclone is sent to another air-to-air heat exchanger (Recuperator, one per dryer) where it is re-heated prior to being sent back to the Wellons Energy System for use as combustion air. The dryer exhaust gases are reheated with the Wellons combustion gases which exit the Primary Air Heaters. The combustion gases exiting the recuperators are sent through multicyclones (one per dryer) and an electrostatic precipitator (Control Device ID ESP) prior to being exhausted to atmosphere. The Wellons Energy System (Control Device ID WES-1) acts as a control device for pollutants generated in the drying process (PM, VOC, HAPs). The Wellons Energy System is equipped with the Nalco FuelTech NOxOut system (Control Device ID UI-1) in which urea is injected into the furnace at specified locations to control NOx generation. The Wellons Energy System also serves as the heat source for the thermal oil heat exchanger which indirectly heats the thermal oil for use to maintain press temperature.

The dried flakes are screened to remove finer material and are subsequently stored in the dry flake bins.

2.3. BLENDING, FORMING AND PRESSING

The dried, screened flakes are then conveyed to the blending operation (Emission Unit ID 6000) where a thermosetting resin and wax are mixed with the flakes. The blended product is then conveyed to a forming line where an 8' wide mat is produced by depositing the flakes in layers that are oriented at right angles. Once the proper thickness of mat is created, it is cut into 24' lengths and conveyed to the pressing operation (Emissions Unit ID 7890) where under heat and pressure the mat is compressed into a board. Pollutants (PM, VOC, HAPs) generated from the pressing operation are controlled by a Regenerative Thermal Oxidizer/Regenerative Catalytic Oxidizer (RTO/RCO). The unit was sized such that it can operate as a regenerative thermal oxidizer (RTO) but catalytic media was added to the top of the ceramic media to allow the unit to be operated as a regenerative catalytic oxidizer (RCO) which is operated at reduced temperatures when compared to a RTO. However, unlike a RCO which can only be operated in catalytic mode, this unit has the ability to be operated as a thermal unit at the end of the catalyst media life if the economics of replacing the catalytic media exceeds the cost of operating the unit at the increased temperatures required in a RTO. The only difference in the two operating modes of the control device is the combustion chamber temperature. Operating in the RTO mode, the

minimum combustion chamber temperature must be maintained at approximately 1500 °F. Operating in the RCO mode the minimum combustion chamber temperature must be maintained at approximately 900 °F.

Residual material generated in the mat sawing operation is pneumatically conveyed to a cyclone for material collection. The cyclone exhaust is directed to a fabric filter (Control Device ID FF3) for particulate removal. The collected material is returned to the process for reuse. Material generated in the forming area is pneumatically conveyed to a cyclone for material collection. The cyclone exhaust is directed to a fabric filter (Control Device ID FF2) for particulate removal. The material collected in both the cyclone and fabric filter is pneumatically conveyed a high efficiency cyclone (Emission Unit ID 8950) for deposition into the dry fuel silo. Material from the dry fuel silo is used as fuel in the Wellons Energy System.

2.4. FINISHING PROCESSES

The finishing processes begin when the rough panels from the pressing operation are trimmed. The boards (8' x 24') from the press are cut and trimmed into 4' x 8' sheets. The board trimmings and material generated during cutting are pneumatically conveyed to a cyclone for material collection. The cyclone exhaust is directed to a fabric filter (Control Device ID FF5) for particulate removal. The material collected in the cyclone and fabric filter are pneumatically conveyed to the high efficiency cyclone (Emission Unit ID 8950) for deposition into the dry fuel silo prior to being used for fuel in the Wellons Energy System.

Once the boards are trimmed to the appropriate dimensions, the edges of the board are sealed with a water based paint in a spray booth (Emission Point ID 8830/8835). The particulate overspray generated in the booth is controlled with fabric filters.

Some of the boards may be further finished by sanding. The sander dust collected in this operation is pneumatically conveyed to a fabric filter (Control Device ID FF6) for particulate removal and collection. The collected material is then pneumatically conveyed to the high efficiency cyclone (Emission Unit ID 9600) for deposition into the sander dust fuel silo prior to being used for fuel in the Wellons Energy System.

The boards are then packaged for transport and sale.

3. EMISSIONS INVENTORY

The manufacturing processes at the Mt. Hope OSB Plant emit various criteria pollutants and HAP to the atmosphere. In addition to process emissions, criteria pollutant and HAP emissions are generated as products of combustion from the wood-fired Wellons Energy System used to provide heat for drying flakes and for heating thermal oil for the press. This section describes the methodology used to estimate the air emissions from facility operations. Detailed emission calculations are presented in Appendix C for each specific process.

3.1. CALCULATION OF POTENTIAL EMISSIONS

Potential emissions were calculated based on the maximum operating capacity of the equipment and 8,760 hours of operation per year because the current Title V permit places no restrictions on operations. For processes not limited by equipment capacity or permit limit, an estimate of the maximum throughput was made based on past facility operation. The nominal maximum production capacity of the Mt. Hope OSB Plant is 438 MMsf/yr (3/8" basis); however, individual process units may have a higher or lower capacity that is the basis for potential emissions calculations.

GP has developed maximum emission factors that take into account the inherent variability and uncertainty regarding testing of emission sources, especially for trace compounds, and provide an adequate level of conservatism to assure continuous compliance. In this application, the maximum emission factor is generally calculated from the median plus two standard deviations when enough data are available and from the mean plus 20% if not enough data points are available. For selected pollutants and equipment, the highest of a range of values is used as the maximum value. For emission sources with widely reported emissions data such as fossil fuel combustion, the median value is utilized for maximum emissions. Due to the change in maximum emission factors over the years and since the last complete permit application, a number of emission sources reflect changes in maximum emissions from past applications. This difference is not due to any physical change to process equipment or any change to production or operating parameters.

This permit application provides information about emissions of all pollutants for which the source is considered to be major and describes all emissions of regulated air pollutants emitted from any emissions unit, except where such units are exempted as an insignificant activity.

3.2. OVERVIEW OF EMISSION FACTORS

Each emission factor has been recently reviewed by GP personnel familiar with the plant processes and stack test protocols for its applicability to GP process units and is based on one or more of the following resources:

- Published National Council for Air and Stream Improvement, Inc. (NCASI) technical reports;

- Georgia-Pacific specific factors;
- U.S. EPA's *AP-42 Compilation of Air Emission Factors*
- Material content data and vapor balance for evaporative sources; and
- Permit and regulatory limits

Each of these sources of information is discussed in more detail in the following sections.

3.2.1. NCASI Emission Factors

NCASI is “an independent, non-profit research institute that focuses on environmental topics of interest to the forest products industry... and was established in 1943 by the pulp and paper industry to provide technical assistance.” NCASI conducts research and provides technical information to all member companies through a variety of publications, including technical bulletins, special reports, handbooks, databases, and newsletters. The emission factor information presented in these resources is typically deemed the most accurate available for the forest products industry if representative mill-specific test data are unavailable.

GP is an active member of NCASI and utilized its technical bulletins and other resources for emission factor data for various Mill sources as part of the renewal application. These technical bulletins (TB) include the following:

- TB No. 768 (January 1999) *Volatile Organic Compound Emissions from Wood Products Manufacturing Facilities*
- TB No. 858 (February 2003), *Compilation of 'Air Toxic' and Total Hydrocarbon Emissions Data for Sources at Kraft, Sulfite and Non-Chemical Pulp Mills – An Update*
- *NCASI Handbook of Chemical-Specific Information for SARA Section 313 Form R Reporting* (Updated 2010)

3.2.2. Georgia-Pacific Specific Factors

Through experience, testing, and collaboration with NCASI, GP has developed a number of its own emission factors for use in permit applications.

3.2.2.1. Title V Emission Factors (1995, 2000)

Emission factors were developed in 1995 based on a testing program at a number of GP facilities. The goal of the source testing program was to establish improved emission rates for initial Title V applications. The test data were reviewed in conjunction with existing U.S. EPA and NCASI data to develop factors appropriate for GP facilities. Factors were generally established based upon an average value plus two standard deviations. These factors are periodically reviewed based on new data available from NCASI.

3.2.2.2. Database of Wood Products Emission Sources

NCASI developed a database of wood products emission source testing in conjunction with GP. Maximum emission factors are based on the median value from NCASI's database of all wood products emission source testing plus two standard deviations (or the median plus 20% if more than three tests are not available). Non-detects are set equal to one-half of the detection limit, except for when all data is non-detect and the emission factor has been set to zero.

3.2.2.3. Representation of VOC Emissions for Wood Products

The estimation of VOC emissions from wood products may not be well represented by U.S. EPA Method 25A due to low Flame Ionization Detector (FID) response factors for some industry VOC components such as formaldehyde and methanol. Recognizing that development of an ideal method was a long, technically challenging process, GP participated along with NCASI, the American Forest and Paper Association (AF&PA), and the U.S. EPA's Emission Measurement Center in a cooperative effort to develop an interim VOC emission measurement protocol designed to better approximate total VOC emissions from wood products industry sources. The resulting interim protocol known as Wood Products Protocol No.1 (WPP1) measures VOC on an "as propane" basis using EPA Method 25A and the result is adjusted using separate, site-specific determinations of formaldehyde and methanol to correct the results for poor FID response for these compounds. This protocol has been approved by the U.S. EPA and is published on EPA's Emission Measurement Center's website as Other Test Method 26 (OTM26). GP now uses VOC factors based on the WPP1 methodology (where available) for contemporaneous permitting activity with the anticipation that further method development activity will result in additional protocol and emission factor changes in the future. However, the emission estimates contained in previous applications and on which the current permit limits are based were generally obtained from using EPA Method 25A test data and expressed on an "as carbon" basis. In addition, the limits contained in the PCWP MACT are expressed on an "as carbon" basis. As such, this application contains various expressions of VOC in accordance with how the limit is expressed or how the underlying data were generated.

3.2.2.4. Representation of PM Emissions for Wood Products

PM emissions are variously represented as total suspended particulate (TSP), PM less than 10 microns (PM₁₀), and PM less than 2.5 microns (PM_{2.5}). PM generally means any finely divided solid and liquid material. PM emissions may be both filterable (i.e., particles captured in the "front-half" of a U.S. EPA Reference Method 5 sampling train) and condensable (i.e., particles that are emitted in vapor phase at stack conditions but that condense into liquid phase at ambient conditions and are captured using U.S. EPA Reference Method 202).

Conventionally, “PM” or “TSP” refers only to filterable PM as would be measured using Method 5 and under U.S. EPA guidance condensable PM emissions have been neglected because of concerns about the availability and reliability of emission factors and stack test measurements using currently available test methods. Recent rulemaking by U.S. EPA regarding implementation of permitting requirements for PM_{2.5} is currently undergoing review² and proposed stack test methods remain under public comment.³

In this Title V renewal application, GP has made a good-faith effort to quantify condensable PM emissions and distinguish PM_{2.5} from PM₁₀ and PM (TSP) using the best available emission factors. For certain sources, particularly those that are well-controlled and are not associated with a combustion process, a simplifying assumption was made that PM, PM₁₀, and PM_{2.5} emissions are equivalent. For certain sources (e.g., combustion) for which distinct emission factors are available, GP made the best estimate of different PM, PM₁₀, and PM_{2.5} emissions. In these cases, PM₁₀ and PM_{2.5} emissions may be reported to be greater than PM emissions, which is counterintuitive, but reflects that by convention PM₁₀ and PM_{2.5} emissions include condensable PM but PM (TSP) does not. GP reserves the right to revise emission factors based on improved data after promulgation and implementation of improved test methods for condensable PM, PM₁₀, and PM_{2.5}.

3.2.3. U.S. EPA AP-42 Emission Factors

Emission factors from U.S. EPA’s AP-42 database (5th edition unless otherwise noted) were relied upon to supplement the criteria and HAP emission factor data from NCASI for fuel combustion and selected processes. Additionally, AP-42 emission factors were utilized for several material handling activities and fugitive PM emissions. The following AP-42 sections were utilized in the emission calculations for the Mt. Hope OSB Plant:

- Section 1.4, *Natural Gas Combustion*
- Section 1.6, *Wood Residue Combustion in Boilers*
- Section 10.6, *Waferboard/Oriented Strandboard Manufacturing*
- Section 13.2.4, *Aggregate Handling and Storage Piles*

² U.S. EPA, “Final Rule: Implementation of the New Source Review (NSR) Program for Particulate Matter Less Than 2.5 Micrometers (PM_{2.5}),” 73 *Federal Register* No. 96, May 16, 2008, pp. 28,231-28,250.

³ U.S. EPA, “Methods for Measurement of Filterable PM₁₀ and PM_{2.5} and Measurement of Condensable Particulate Matter Emissions from Stationary Sources,” 74 *Federal Register* No. 107, June 5, 2009, pp. 27,002-27,003.

3.2.4. Evaporative Sources

Emissions of small amounts of VOC and HAP result from evaporation of volatile organic constituents of resins, glues, inks, oils, solvents, and sealers used throughout the manufacturing process. Emissions from storage tanks are believed to be insignificant based on the volatile components of stored materials and tank construction. Process uses of organic materials result in insignificant emission quantities; however, process uses cannot be considered insignificant because of the PCWP MACT work practice requirements to minimize HAP emissions. GP utilizes “non-HAP” Group 1 Miscellaneous Coatings, which are defined as “a coating with HAP contents below 0.1 percent by mass for Occupational Safety and Health Administration-defined carcinogens as specified in 29 CFR 1910.1200(d)(4), and below 1.0 percent by mass for other HAP compounds.”

3.2.5. Permit and Regulatory Limits

The existing Title V operating permit contains permit limits for certain regulated pollutants from various pieces of process equipment. These limits are considered the basis for potential emissions for that process equipment.

Under WVDAQ rules for PM (45CSR7), emission standards apply on the basis of process weight calculations for material handling and other manufacturing process units. For many of these units, the applicable standard derived from the process weight rule is much larger than expected emissions based on process unit performance and emissions control. Therefore, potential emissions are calculated based on expected performance at maximum operating capacity rather than overestimating potential emissions using the allowable process weight rate.

3.3. FACILITY-WIDE EMISSIONS ESTIMATES

A summary of the calculated facility-wide criteria emissions, total HAP emissions, and individual HAP emissions for which the Mt. Hope OSB Plant is a major source are provided in Table 3-1. Appendix C of this permit application contains detailed, annotated emissions calculations for each significant emissions unit and certain insignificant emissions units that are not categorically exempt from permitting.

TABLE 3-1. SUMMARY OF POTENTIAL EMISSIONS

<i>Criteria Air Pollutants</i>				
Pollutant	<u>PROCESS SOURCES</u>		<u>FUGITIVE SOURCES</u>	
	2009 Actual Emissions (tpy)	Potential Emissions (tpy)	2009 Actual Emissions (tpy)	Potential Emissions (tpy)
TSP	34.4	182.7	17.5	32.1
PM ₁₀	52.8	232.6	5.2	10.8
PM _{2.5}	52.8	230.8	3.1	7.6
CO	45.0	324.7		
NO _x	62.2	266.4		
SO ₂	0.3	21.3		
VOC	54.8	165.7		

<i>Hazardous Air Pollutants</i>				
Pollutant	<u>PROCESS SOURCES</u>		<u>FUGITIVE SOURCES</u>	
	2009 Actual Emissions (tpy)	Potential Emissions (tpy)	2009 Actual Emissions (tpy)	Potential Emissions (tpy)
Total HAP	35.1	109.6		
Acetaldehyde	5.5	14.6		
Formaldehyde	9.1	25.8		
Hydrogen chloride	3.8	11.6		
Methanol	13.3	46.4		

4. REGULATORY REVIEW

The primary objective of the Title V permit is to compile all applicable CAA requirements into one document. Conceptually, these requirements can be categorized as (1) emissions limits and work practices, or (2) testing, monitoring, recordkeeping or reporting requirements. To assemble a list of all the requirements with which a facility must comply, it is first necessary to determine which federal and state air regulations apply to the facility. This section supplements the applicability determinations made for all State and Federal air quality regulations presented in Appendix D and E of this report. Based on the results of these determinations, requirements associated with each regulation deemed to be applicable are compiled and presented in this section and/or included in the current Title V permit.

4.1. MAJOR SOURCE OPERATING PERMITTING PROGRAM

40 CFR Part 70 establishes the federal Title V operating permit program. West Virginia has incorporated the provisions of this federal program in Code of State Rules, Title 45, Series 30, Requirements for Operating Permits. This Title V renewal permit application is being submitted in accordance with the applicable regulations under that chapter.

4.2. PREVENTION OF SIGNIFICANT DETERIORATION

The air quality in Fayette County has been designated by the U.S. EPA as “attainment” or “unclassified” for all criteria pollutants.⁴ Therefore, the federal construction permitting program potentially applicable to the Mt. Hope OSB Plant is the Prevention of Significant Deterioration (PSD) permitting program. The facility is an existing major source under the PSD program because emissions of at least one criteria pollutant exceed the PSD major source threshold. Any “modifications” at the facility are examined with regards to PSD permitting applicability.

4.3. FEDERAL REGULATORY REQUIREMENTS

Federal air quality regulations reviewed include New Source Performance Standards (NSPS) (40 CFR Part 60), pollutant- and category-specific National Emission Standards for Hazardous Air Pollutants (NESHAPs) (40 CFR Parts 61 and 63), Compliance Assurance Monitoring (CAM) (40 CFR Part 64), Risk Management Plan (RMP) regulations (40 CFR Part 68), and stratospheric ozone protection, and Mandatory Greenhouse Gas Reporting (40 CFR Part 98).

4.3.1. New Source Performance Standards

NSPS require new, modified, or reconstructed sources to control emissions to the level achievable by the best-demonstrated technology as specified in the applicable provisions. Any source subject to an NSPS is also subject to the general provisions of NSPS Subpart A, unless specifically excluded.

⁴ 40 CFR §81.349

4.3.1.1. NSPS Subpart A – General Provisions

All affected sources are subject to the general provisions of NSPS Subpart A unless specifically excluded by the source-specific NSPS. Subpart A requires initial notification and performance testing, recordkeeping, and monitoring and provides reference methods and mandates general control device requirements for all other subparts as applicable.

4.3.1.2. NSPS Subpart Db – Steam Generating Units

NSPS Subpart Db, Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units, provides standards of performance for steam generating units with capacities greater than 100 MMBtu/hr for which construction, modification, or reconstruction commenced after June 19, 1984. The wood-fired Wellons Energy System was constructed after the applicability date of NSPS Subpart Db. However, pursuant to a negotiated settlement of the appeal (Appeal Number 93-06-P) of the initial permit issued to this facility which imposed NSPS Subpart Db requirements to the Wellons Energy System, the Wellons Energy System was determined not to be subject to this regulation.

4.3.1.3. NSPS Subpart Dc – Steam Generating Units

NSPS Subpart Dc, Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units, provides standards of performance for steam generating units with capacities greater 10 MMBtu/hr but less than 100 MMBtu/hr for which construction, modification, or reconstruction commenced after June 9, 1989. The natural gas fired auxiliary thermal oil heater (45 MMBtu/hr) is subject to this regulation.

4.3.1.4. NSPS Subpart Kb – Storage Tanks

NSPS Subpart Kb, Standards of Performance for Volatile Organic Liquid Storage Vessels, regulates storage vessels with a capacity greater than 75 cubic meters (m³) (19,813 gallons) that are used to store volatile organic liquids for which construction, reconstruction, or modification is commenced after July 23, 1984. No tanks at the Mt. Hope OSB Plant have a capacity greater than 75 m³; therefore, NSPS Subpart Kb does not apply.

4.3.1.5. NSPS Subpart IIII/JJJJ – Stationary Engines

NSPS Subpart IIII, Standards of Performance for Stationary Compression Ignition Internal Combustion Engines, was finalized on July 11, 2006. This rule provides performance standards for stationary compression ignition engines (including emergency engines) that commence reconstruction or modification after the proposal date of July 11, 2005 or construction of a new engine after April 1, 2006. The rule provides performance standards for both engine

manufacturers and operators. Engine operators must meet the specified emission standards and fuel type specifications.

NSPS Subpart JJJJ, Standards of Performance for Stationary Spark Ignition Internal Combustion Engines, was proposed on June 12, 2006 and was finalized January 18, 2008. This rule provides performance standards for stationary spark ignition engines (including emergency engines) that commence reconstruction or modification after the proposal date of June 12, 2006 or construction of a new engine after July 1, 2007. The rule provides performance standards for both engine manufacturers and operators. Engine operators must meet the specified emission standards and fuel type specifications.

The Mt. Hope OSB Plant has one, 255 horsepower compression ignition engine associated with the emergency fire pump system that was originally constructed in 1995 before the new source applicability date of April 2006. Therefore, NSPS Subpart IIII does not apply. The Mt. Hope OSB Plant has five, spark ignition engines ranging in size from 18 horsepower to 41 horsepower that are associated with the emergency thermal oil pump system or dryer drum systems that was originally constructed in 1995 before the new source applicability date of July 2007. Therefore, NSPS Subpart JJJJ does not apply.

4.3.1.6. Non-applicability of Other NSPS

NSPS standards are developed for particular industrial source categories. Other than NSPS developed for steam generating units, storage tanks, and engines, the applicability of a particular NSPS to a facility can readily be ascertained based on the industrial source category covered. Subparts Db, Dc, Kb, IIII, and JJJJ were previously addressed. All other NSPS are categorically not applicable to wood products manufacturing facilities.

4.3.2. National Emissions Standards for Hazardous Air Pollutants

NESHAP, federal regulations found in Title 40 Parts 61 and 63 of the CFR, are emission standards for HAP that apply to major sources of HAP (facilities that exceed the major source thresholds of 10 tpy of a single HAP and 25 tpy of any combination of HAP) or specifically designated area sources under Part 63. The Part 63 NESHAPs apply to sources in specifically regulated industrial source classifications (Clean Air Act Section 112(d)) or on a case-by-case basis (Clean Air Act Sections 112(g) and 112(j)) where U.S. EPA has failed to promulgate a 112(d) standard.

4.3.2.1. 40 CFR Part 63 Subpart A – General Provisions

All affected sources are subject to the general provisions of Part 63 NESHAP Subpart A unless specifically excluded by the source-specific NESHAP.

Subpart A requires initial notification and performance testing, recordkeeping,

monitoring, provides reference methods, and mandates general control device requirements for all other subparts as applicable.

4.3.2.2. 40 CFR Part 63 Subpart B – Section 112(g) and 112(j) Applicability

40 CFR Part 63 Subpart B – Requirements for Control Technology Determinations for Major Sources in Accordance with Clean Air Act Sections, contains case-by-case MACT requirements for new [Section 112(g)] and existing [Section 112(j)] equipment. Section 112(g) applies to a new or reconstructed major source of HAP emissions. The Section 112(j) requirements can be triggered for existing equipment in cases where U.S. EPA has failed to promulgate the Section 112(d) MACT standard by the pertinent deadline. The NESHAP for wood products (PCWP MACT) has already been promulgated and no additional NESHAP are anticipated for the wood products industry. Thus, case-by-case MACT is not applicable.

With the June 2007 vacatur of the Boiler MACT rule, U.S. EPA and some states have taken the position that the Section 112(j) case-by-case MACT provisions have been triggered for existing boilers. GP and most other regulated sources and industry organizations do not agree with this position because the rule was promulgated and later vacated. Although GP believes that Section 112(j) has not been triggered at this time, a Section 112(j) Part 1 Application was submitted on January 13, 2009 before the January 30, 2009 deadline and a Part 2 Application was submitted on March 25, 2009 before the March 30, 2009 deadline. U.S. EPA proposed a new Boiler MACT rule on June 4, 2010, for which the comment period closed on August 23, 2010. GP anticipates further evaluation of applicable requirements after U.S. EPA finalizes the Boiler MACT, which is supposed to occur by December 2010.

4.3.2.3. 40 CFR Part 63, Subpart DDDD – NESHAP for Plywood and Composite Wood Products

A NESHAP for the plywood and composite wood products (PCWP) source category, commonly known as the PCWP MACT, was initially finalized by U.S. EPA on July 30, 2004 and was reissued and amended after reconsideration on February 16, 2006. The rule was partially vacated and remanded by the D.C. Circuit Court of Appeals in June 2007. In 2009, the Mt. Hope OSB Plant submitted a permit revision to incorporate all Subpart DDDD requirements, which WVDAQ subsequently incorporated into the currently effective Title V permit.

The OSB press and rotary flake dryers are process units within the affected source under the PCWP MACT with applicable control requirements. The Mt. Hope OSB Plant met the initial compliance demonstration requirements of 40 CFR §63.2240 for the rotary flake dryers through the use of the Wellons Energy

System as an add-on control device to limit emissions of total HAP (measured as THC as carbon) from the rotary flake dryers to less than 20 ppmvd (Table 1B Add-on Control System Compliance Option). The Mt. Hope OSB Plant also met the initial compliance demonstration requirements of 40 CFR §63.2240 for the press through the use of the RTO/RCO as an add-on control device to limit emissions of total HAP (measured as THC as carbon) from the press to less than 20 ppmvd (Table 1B Add-on Control System Compliance Option). The facility reserves the right to select another compliance option within the menu of PCWP compliance options at a later date as more operational data and experience is available.

The plant established a minimum firebox temperature during the initial compliance test and continuously monitors the firebox temperature as a parameter indicative of control device performance. GP complies with 40 CFR §63.2240 and Table 2 (Operating Requirements) by monitoring and maintaining the 3-hour block average firebox temperature above the established minimum level and by checking the activity level of a representative sample of catalyst at least every 12 months.

The Mt. Hope OSB Plant uses only non-HAP coatings and therefore meets the work practice requirements for Group 1 Miscellaneous Coatings Operations. The PCWP affected source includes other operations/equipment utilized in the manufacture of PCWP; however, there are no applicable requirements for these operations.

GP met the initial notification and compliance testing requirements in a timely manner and submits semiannual compliance reports as required by Subpart DDDD and emission unit specific monitoring, recordkeeping, and reporting requirements. GP also submitted and received WVDAQ approval of a Routine Control Device Maintenance Exemption (RCDME) as allowed by the PCWP MACT.

4.3.2.4. 40 CFR Part 63, Subpart ZZZZ – Stationary Reciprocating Internal Combustion Engines

40 CFR Part 63, Subpart ZZZZ – NESHAP for Stationary Reciprocating Internal Combustion Engines (RICE), regulates HAP emissions from RICE located at major and area sources of HAP. The Mt. Hope OSB Plant has one, 255 horsepower compression ignition engine associated with the emergency fire pump system that was originally constructed in 1995. The Mt. Hope OSB Plant has five, spark ignition engines ranging in size from 18 horsepower to 41 horsepower that are associated with the emergency thermal oil pump system or dryer drum systems that were originally constructed in 1995.

Although there are no currently applicable requirements for the RICE operated at the Mt. Hope OSB Plant, the U.S. EPA recently promulgated MACT standards (March 3, 2010) for stationary RICE that will apply to these engines on the compliance date (May 3, 2013) and GP anticipates that WVDAQ will incorporate the applicable requirements into the renewal Title V permit.

4.3.2.5. 40 CFR Part 63 Subpart DDDDD – Industrial-Commercial-Institutional Boilers and Process Heaters

40 CFR Part 63, Subpart DDDDD – NESHAP for Industrial-Commercial-Institutional Boilers and Process Heaters (Boiler MACT), was promulgated on September 13, 2004 with compliance nominally required 3 years later, by September 13, 2007. However, the rule was vacated and remanded to U.S. EPA by the D.C. Circuit Court of Appeals in June 2007 (made final in the Court's mandate issued on July 30, 2007). The Mt. Hope OSB Plant is an existing major source of HAP and the auxiliary natural gas fired thermal oil heater and the wood-fired Wellons Energy System at the facility are potentially subject to this MACT rule, once re-promulgated by U.S. EPA. Section 4.3.2.2 of this report provided additional details about the applicability of Section 112(j).

Because of the vacatur, no requirements currently apply under Subpart DDDDD. U.S. EPA proposed a new Boiler MACT regulation on June 4, 2010, and the comment period closed on August 23, 2010. EPA is expected to promulgate the final rule in December 2010.

4.3.2.6. Non-applicability of Other NESHAP

As with the NSPS standards, NESHAP are primarily developed for particular industrial source categories. Therefore, the applicability of a particular NESHAP to a facility can be readily ascertained based on the industrial source category covered. All NESHAP regulations, both in 40 CFR Part 61 and 40 CFR Part 63, besides those specifically discussed above are not applicable to sources at wood products facilities.

4.3.3. Compliance Assurance Monitoring

Under 40 CFR Part 64, Compliance Assurance Monitoring (CAM) regulations, facilities are required to prepare and submit monitoring plans for certain emission units with the initial or renewal Part 70 operating permit application. Because GP is submitting this permit application for the *second* renewal of the facility's Title V permit, no additional requirements for CAM are triggered and the currently effective permit already contains CAM requirements for affected emission units. Therefore, no additional CAM plans are provided as part of this permit application. A review of each unit subject to CAM is provided in the following sub-sections for completeness.

Under the general applicability criteria, CAM only applies to emission units that use a control device to achieve compliance with an emission limit and whose pre-controlled emission levels exceed the major source thresholds under the Part 70 operating program. Under 40 CFR §64.2(b)(1), emissions units subject to “emission limitations or standards proposed by the Administrator after November 15, 1990 pursuant to Section 111 or 112 of the Act” are exempt from the CAM regulations.

4.3.3.1. Wellons Energy System

The Wellons Energy System emits pre or post-controlled emissions greater than the major source threshold for PM, and NOx. The system utilizes a mechanical collection device (multiclone) and ESP used to control PM emissions and a urea injection system to control NOx emissions. The multiclone is considered process equipment, not emissions control equipment. The multiclone is followed by a dry ESP to control PM to meet an emissions limit. Therefore, the dry ESP is subject to CAM for PM. The urea injection system is used to control NOx emissions to meet an emissions limit. Therefore, the urea injection system is subject to CAM for NOx. The current Title V permit establishes the federally enforceable, specific emissions monitoring requirements for the ESP and urea injection system based on previously submitted CAM plans.

4.3.3.2. Rotary Flake Dryer CAM Applicability

The rotary flake dryers would emit VOC in an amount greater than the major source threshold if not controlled by the Wellons Energy System that is operated by GP to maintain compliance with the PCWP MACT (40 CFR Part 63, Subpart DDDD). Because this NESHAP was proposed after November 15, 1990, and contains specific monitoring requirements, the CAM rules provide an exemption for this source. Nonetheless, a CAM plan was implemented in the renewal Title V permit issued in 2006, presumably because the pollutant subject to CAM (VOC) is not the pollutant subject to the MACT requirement (total HAP) albeit the same control device is utilized to meet both requirements. The current Title V permit establishes the federally enforceable, specific emissions monitoring requirements for the Wellons Energy System based on the previously submitted CAM plan.

4.3.3.3. Press CAM Applicability

The OSB press would emit PM in an amount greater than the major source threshold if not controlled by the Regenerative Thermal Oxidizer (RTO)/Regenerative Catalytic Oxidizer (RCO) that is operated by GP to maintain compliance with the PCWP MACT (40 CFR Part 63, Subpart DDDD). Because this NESHAP was proposed after November 15, 1990, and contains specific monitoring requirements, the CAM rules provide an exemption for this

source. Nonetheless, a CAM plan was implemented in the major modification of the Title V permit issued in 2009, presumably because the pollutant subject to CAM (PM) is not the pollutant subject to the MACT requirement (total HAP) albeit the same control device is utilized to meet both requirements. The current Title V permit establishes the federally enforceable, specific emissions monitoring requirements for the RTO/RCO based on the previously submitted CAM plan.

4.3.3.4. Cyclone/Baghouse CAM Applicability

The facility operates a number of cyclones and baghouses which are used for material recovery. These cyclones are operated for material transfer and byproduct (i.e., wood residue) recovery and are therefore inherent to the manufacturing process. CAM does not apply to the cyclones and baghouses because inherent process equipment are not considered control devices to which CAM would otherwise apply. The currently effective Title V permit contains no CAM requirements for the cyclones and baghouse associated with the manufacturing operations.

4.3.4. Risk Management Plan

Subpart B of 40 CFR Part 68 outlines requirements for risk management prevention plans pursuant to Section 112(r) of the Clean Air Act. Applicability of the subpart is determined based on the type and quantity of chemicals stored at the facility. GP has evaluated the amount of Section 112(r) mandatory substances stored at the facility and has determined that no chemicals are stored in a quantity above the triggering threshold. Facility Wide Condition No. 3.1.17 of the current Title V permit contains the requirement to address this program should the facility begin storing a regulated chemical above the threshold. GP anticipates that the renewal Title V permit will maintain these general conditions related to 40 CFR Part 68.

4.3.5. Stratospheric Ozone Protection

The requirements originating from Title VI of the Clean Air Act, entitled Protection of Stratospheric Ozone, are contained in 40 CFR Part 82. Facility Wide Condition No. 3.1.16 of the current Title V permit contains the potentially applicable provisions of 40 CFR Part 82, including Subpart B – Servicing of Motor Vehicle Air Conditioners and Subpart F – Recycling and Emissions Reduction. GP anticipates that the renewal Title V permit will maintain these general conditions related to 40 CFR Part 82.

4.3.6. Mandatory Greenhouse Gas Reporting

The U.S. EPA has promulgated a rule requiring mandatory reporting of greenhouse gas (GHG) emissions. The proposed rule was published in April 2009 (74 FR 16448, 4/10/09) and the final rule was published in October 2009 (74 FR 56260, 10/30/09) and is contained in 40 CFR Part 98.

Facilities with processes that fall into specific source categories (*e.g.*, petroleum refinery, pulp and paper manufacturing) and facilities that contain certain equipment like boilers, process heaters, engines, turbines, etc. with a total capacity of at least 30 million British thermal units per hour (MMBtu/hr) and that emit 25,000 or more metric tons per year of carbon dioxide equivalents (MT CO₂e/yr) are required to submit annual GHG emission reports to USEPA. Emissions of carbon dioxide (CO₂) from burning biomass (*e.g.*, wood residue) are excluded from the threshold determination [40 CFR 98.2(b)(2)] but are required to be reported if the threshold is exceeded from fossil fuel combustion activities.

The gases covered by this reporting rule are CO₂, methane (CH₄), nitrous oxide (N₂O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), sulfur hexafluoride (SF₆) and other fluorinated gases including nitrogen trifluoride and hydrofluorinated ethers. Of these, the three GHGs relevant to the Mt. Hope facility are CO₂, CH₄ and N₂O. Since the facility only contains stationary fuel combustion equipment, the potentially applicable subparts of the GHG reporting rule would be Subpart A (general provisions) and Subpart C (stationary fuel combustion equipment).

Based on the amount of fossil fuels combusted at the Mt. Hope, WV facility in 2009, this facility is not subject to this GHG reporting rule. In any case, U.S. EPA has affirmed that the GHG reporting rule is not an “applicable requirement” for purposes of inclusion in Title V permits.

4.4. WEST VIRGINIA REGULATORY REQUIREMENTS

In addition to federal air regulations, the state of West Virginia establishes regulations for the control and abatement of air pollution applicable at the emission unit and at the facility levels. The rules also contain requirements related to the need for construction and/or operating permits. The following state regulations potentially apply to the Mt. Hope OSB Plant. GP has achieved, demonstrated, and maintained compliance with applicable requirements under these regulations during the current Title V permit term. GP anticipates that currently effective specific permit conditions based on these requirements will remain in the renewal Title V permit.

- 45CSR2 establishes emission limitations for smoke and particulate matter which are discharged from fuel burning units. These requirements apply to the auxiliary thermal oil heater.
- 45CSR2A provides guidance and clarification for complying with the testing, monitoring, recordkeeping and reporting requirements of 45CSR2. These requirements apply to the auxiliary thermal oil heater.
- 45CSR4 is designed to prevent and control the discharge of pollutants into the open air which causes or contributes to an objectionable odor or odors. This rule applies generally to the facility.
- 45CSR7 is the rule developed to prevent and control particulate matter air pollution from manufacturing processes and associated operations. The emission standards for process equipment apply to all manufacturing operations at the facility. PM standards are based on process throughput
- 45CSR7A establishes test procedures for complying with the requirements of 45CSR7.

- 45CSR10 is the rule developed to prevent and control emissions of sulfur oxides from manufacturing processes and associated operations. The emission standards apply to the auxiliary thermal oil heater and the Wellons Energy System.
- 45CSR10A provides guidance and clarification for complying with the testing, monitoring, recordkeeping and reporting requirements of 45CSR10.
- 45CSR13 sets forth the procedures for stationary source reporting, and the criteria for obtaining a permit to construct and operate a new stationary source which is not a major stationary source, to modify a non-major stationary source, to make modifications which are not major modifications to an existing major stationary source and to relocate non-major stationary sources within the state of West Virginia. This rule applies generally to potential new construction activities or modifications of existing equipment.
- 45CSR14 sets forth the procedures for major stationary sources to construct or modify a major stationary source of air pollution in an area classified as attaining National or West Virginia Ambient Air Quality Standards. This rule applies generally to potential new construction activities or modifications of existing equipment.
- 45CSR16 establishes and adopts standards of performance for new stationary sources (NSPS) promulgated by USEPA pursuant to section 111(b) of the federal Clean Air Act (CAA), as amended. The auxiliary thermal oil heater is subject to an NSPS, 40 CFR 60, Subpart Dc.
- 45CSR17 is the rule developed to prevent and control particulate matter air pollution from materials handling, preparation, storage and other sources of fugitive particulate matter.
- 45CSR20 is the rule that was promulgated to ensure that the degree of emission limitation required for the control of any air pollutant is not affected by that portion of any stack height which exceeds good engineering practice or by any other dispersion technique.
- 45CSR22 established the program to collect fees for certificates to operate and for permits to construct, modify or relocate sources of air pollution. This rule is generally applicable.
- 45CSR27 is the rule developed to prevent and control the discharge of toxic air pollutants requiring the application of best available technology. This rule is applicable to the Wellons Energy System/Dryers and the Press at the Mt. Hope plant.
- 45CSR28 established a voluntary statewide air pollutant emissions trading program which provides incentives to make progress toward the attainment or maintenance of the national ambient air quality standards, the reduction or prevention of hazardous air pollutant emissions and the protection of human health, welfare and the environment.
- 45CSR30 established the comprehensive air quality permitting system consistent with the requirements of Title V of the Clean Air Act.
- 45CSR30B provides guidance with respect to which stationary sources are required to count fugitive emissions, and the proper method of identifying such emissions, in making major source determinations for the purpose of determining applicability of the permitting program under 45CSR30 "Requirements for Operating Permits."
- 45CSR31, 45CSR31A, and 45CSR31B established the requirements for claiming information submitted to the Director as confidential and the procedures for determinations of confidentiality in accordance with the provisions of W. Va. Code '22-5-10.

- 45CSR34 establishes and adopts national emission standards for hazardous air pollutants (NESHAPS) promulgated by USEPA pursuant to 40 CFR Part 63 and Section 112 of the federal Clean Air Act (CAA), as amended.
- 45CSR38 clarifies the types of data that may be used by an owner of a facility subject to air pollutant emission standards or by the Director of the Division of Environmental Protection in determining whether the facility is in compliance with or violation of the emission standards. This rule is generally applicable.
- 45CSR42 establishes a greenhouse gas emissions inventory program in West Virginia that requires the reporting and inventory of greenhouse gas emissions by stationary sources that emit more than a *de minimis* amount of greenhouse gases on an annual basis.

4.5. CURRENT PERMIT CONDITIONS

Provisions contained in the Title V permit previously issued to the Mt. Hope OSB Plant by WVDAQ are applicable requirements under West Virginia's Title V Operating Permit Program (45CSR30). These conditions incorporate the federal and SIP-related requirements as described in Sections 4.3 and 4.4 above.

5. COMPLIANCE CERTIFICATION

A certification of compliance signed by the responsible official of the Mt. Hope OSB Plant is provided with the Title V application forms included in Appendix A of this application package.

5.1. DETERMINATION OF COMPLIANCE STATUS

Compliance requirements applicable to the Mt. Hope OSB Plant include federally enforceable numeric mass emissions limits, operating conditions, and general provisions. GP has previously certified compliance with these requirements via the annual compliance certifications.

5.2. COMPLIANCE PLAN

In accordance with the provisions contained in 45CSR30-4.3.h.1.A., which is consistent with 40 CFR 70.5(c)(8)(ii)(A), GP will continue to comply with the applicable requirements identified in this permit application for all units currently in compliance.

In accordance with the provisions contained in 45CSR30-4.3.h.1.B., which is consistent with 40 CFR 70.5(c)(8)(ii)(B), GP will meet, on a timely basis, all new applicable requirements that become effective during the permit term.

5.3. SCHEDULE FOR SUBMITTAL OF REQUIRED REPORTS AND ANNUAL COMPLIANCE CERTIFICATION

In accordance with 45CSR30-4.3.i., and Facility-Wide Condition 3.5.5 of the current Title V permit, which are consistent with 40 CFR §70.6(c), GP will continue to provide written certifications signed by the responsible official to WVDAQ, at least annually, of compliance with the Title V permit conditions. GP anticipates that these requirements of 45CSR30-5.1.c.3.A., and Facility-Wide Condition 3.5.6 of the current Title V permit will be maintained to require semiannual reports of permit deviations on a schedule established by WVDAQ. GP will also continue to submit periodic certifications as required by the PCWP MACT.

APPENDIX A

Title V General Forms, Process Description, and Emission Summary



WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION

DIVISION OF AIR QUALITY

601 57th Street SE
Charleston, WV 25304
Phone: (304) 926-0475

www.wvdep.org/daq

INITIAL/RENEWAL TITLE V PERMIT APPLICATION - GENERAL FORMS

Section 1: General Information

Form with 10 numbered sections: 1. Name of Applicant, 2. Facility Name or Location, 3. DAQ Plant ID No., 4. Federal Employer ID No. (FEIN), 5. Permit Application Type, 6. Type of Business Entity, 7. Is the Applicant the, 8. Number of onsite employees, 9. Governmental Code, 10. Business Confidentiality Claims.

11. Mailing Address		
Street or P.O. Box: 79 N. Pax Avenue		
City: Mt. Hope	State: WV	Zip: 25580
Telephone Number: (304) 254-7255	Fax Number: (304) 877-5677	

12. Facility Location		
Street: 79 N. Pax Avenue	City: Mt. Hope	County: Fayette
UTM Easting: 483.5 km	UTM Northing: 4,194.5 km	Zone: <input checked="" type="checkbox"/> 17 or <input type="checkbox"/> 18
Directions: North of Beckley on Highway 19. Take Mt. Hope exit off Highway 19. Turn left onto Pax Avenue and take first right into plant entrance.		
Portable Source? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
Is facility located within a nonattainment area? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If yes, for what air pollutants?	
Is facility located within 50 miles of another state? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If yes, name the affected state(s). Virginia	
Is facility located within 100 km of a Class I Area ¹ ? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If yes, name the area(s).	
If no, do emissions impact a Class I Area ¹ ? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
¹ Class I areas include Dolly Sods and Otter Creek Wilderness Areas in West Virginia, and Shenandoah National Park and James River Face Wilderness Area in Virginia.		

13. Contact Information		
Responsible Official: Neill R. Belt		Title: Plant Manager
Street or P.O. Box: 79 N. Pax Avenue		
City: Mt. Hope	State: WV	Zip: 245880
Telephone Number: (304) 254-7255	Fax Number: (304) 877-5677	
E-mail address: nrbelt@gapac.com		
Environmental Contact: Kim L. Casto		Title: Environmental Manager
Street or P.O. Box: 79 N. Pax Avenue		
City: Mt. Hope	State: WV	Zip: 25880
Telephone Number: (304) 254-7225	Fax Number: (304) 877-5677	
E-mail address: klcasto@gapac.com		
Application Preparer: Clifford Bowling		Title: Sr. Env. Eng.
Company: Georgia-Pacific LLC		
Street or P.O. Box: P.O. Box 340		
City: Brookneal	State: VA	Zip: 24528
Telephone Number: (434) 283-6211	Fax Number: (434) 283-3008	
E-mail address: cbowlin@gapac.com		

14. Facility Description

List all processes, products, NAICS and SIC codes for normal operation, in order of priority. Also list any process, products, NAICS and SIC codes associated with any alternative operating scenarios if different from those listed for normal operation.

Process	Products	NAICS	SIC
Oriented Strandboard Manufacturing	Oriented Strandboard (OSB)	321219	2493

Provide a general description of operations.

See attached process description and file (Word document) entitled "Mt. Hope OSB Process Description.doc"

15. Provide an **Area Map** showing plant location as **ATTACHMENT A**.

16. Provide a **Plot Plan(s)**, e.g. scaled map(s) and/or sketch(es) showing the location of the property on which the stationary source(s) is located as **ATTACHMENT B**. For instructions, refer to "Plot Plan - Guidelines."

17. Provide a detailed **Process Flow Diagram(s)** showing each process or emissions unit as **ATTACHMENT C**. Process Flow Diagrams should show all emission units, control equipment, emission points, and their relationships.

Section 2: Applicable Requirements

18. Applicable Requirements Summary	
Instructions: Mark all applicable requirements.	
<input checked="" type="checkbox"/> SIP	<input type="checkbox"/> FIP
<input checked="" type="checkbox"/> Minor source NSR (45CSR13)	<input type="checkbox"/> PSD (45CSR14)
<input type="checkbox"/> NESHAP (45CSR15)	<input type="checkbox"/> Nonattainment NSR (45CSR19)
<input type="checkbox"/> Section 111 NSPS	<input checked="" type="checkbox"/> Section 112(d) MACT standards
<input type="checkbox"/> Section 112(g) Case-by-case MACT	<input type="checkbox"/> 112(r) RMP
<input type="checkbox"/> Section 112(i) Early reduction of HAP	<input type="checkbox"/> Consumer/commercial prod. reqts., section 183(e)
<input type="checkbox"/> Section 129 Standards/Reqts.	<input checked="" type="checkbox"/> Stratospheric ozone (Title VI)
<input type="checkbox"/> Tank vessel reqt., section 183(f)	<input type="checkbox"/> Emissions cap 45CSR§30-2.6.1
<input type="checkbox"/> NAAQS, increments or visibility (temp. sources)	<input checked="" type="checkbox"/> 45CSR27 State enforceable only rule
<input checked="" type="checkbox"/> 45CSR4 State enforceable only rule	<input type="checkbox"/> Acid Rain (Title IV, 45CSR33)
<input type="checkbox"/> Emissions Trading and Banking (45CSR28)	<input checked="" type="checkbox"/> Compliance Assurance Monitoring (40CFR64)
<input type="checkbox"/> CAIR NO _x Annual Trading Program (45CSR39)	<input type="checkbox"/> CAIR NO _x Ozone Season Trading Program (45CSR40)
<input type="checkbox"/> CAIR SO ₂ Trading Program (45CSR41)	

19. Non Applicability Determinations
<p>List all requirements which the source has determined not applicable and for which a permit shield is requested. The listing shall also include the rule citation and the reason why the shield applies.</p> <p>See Appendices D and E or the attached files (Word documents) entitled “Mt. Hope Federal Applicability Review.doc” and “Mt. Hope WV Regulatory Applicability Review.doc”</p>
<input checked="" type="checkbox"/> Permit Shield

19. Non Applicability Determinations (Continued) - Attach additional pages as necessary.

List all requirements which the source has determined not applicable and for which a permit shield is requested. The listing shall also include the rule citation and the reason why the shield applies.

Permit Shield

20. Facility-Wide Applicable Requirements

List all facility-wide applicable requirements. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements).

Open Burning Prohibited (Refuse) - Permit R30-01900034-2006 SM01; Condition 3.1.1 (45 CSR 6-3.1)
Open Burning Prohibited (Atmospheric Stagnation) - Permit R30-01900034-2006 SM01; Condition 3.1.2 (45 CSR 6-3.2)
Asbestos - Permit R30-01900034-2006 SM01; Condition 3.1.3 (45 CSR 6-3.2)
Objectionable Odor Prohibited – Permit R30-01900034-2006 SM01; Condition 3.1.4 (45CSR4-3.1 and 45CSR13, Permit R13-1622 (Condition 3.1.4.)
Accidental Discharge - Permit R30-01900034-2006 SM01;Condition 3.1.5 (45CSR4-4.1)
Acceptable Control Program - Permit R30-01900034-2006 SM01;Condition 3.1.6 (45CSR4-6.1)
Opacity (20%) – Permit R30-01900034-2006 SM01; Condition 3.1.7 (45CSR7-3.1 and 45CSR13, Permit R13-2261 (Condition B.3)
Fugitive Dust (Manufacturing) - Permit R30-01900034-2006 SM01; Condition 3.1.8 (45CSR7-4.1 and 45CSR13, Permit R13-2261 (Condition B.3)
Fugitive Dust (Roads) - Permit R30-01900034-2006 SM01; Condition 3.1.10 (45CSR7-5.2 and 45CSR13, Permit R13-2261 (Condition B.3)
Emergency Discharge - Permit R30-01900034-2006 SM01; Condition 3.1.12 (45CSR7-9.1 and 45CSR13, Permit R13-2261 (Condition B.3)
Submit Standby plan if requested - Permit R30-01900034-2006 SM01; Condition 3.1.12 (45CSR11-5.2)
Suspension of Operations - Permit R30-01900034-2006 SM01; Condition 3.1.14 (45CSR13, Permit R13-2261 (Condition C.5 and Permit R13-1622 (Condition 2.14)

Permit Shield

For all facility-wide applicable requirements listed above, provide monitoring/testing / recordkeeping / reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number and/or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

Open Burning Prohibited (Refuse) - Permit R30-01900034-2006 SM01; Condition 3.1.1 (45 CSR 6-3.1)
Open Burning Prohibited (Atmospheric Stagnation) - Permit R30-01900034-2006 SM01; Condition 3.1.2 (45 CSR 6-3.2)
Asbestos - Permit R30-01900034-2006 SM01; Condition 3.1.3 (45 CSR 6-3.2)
Objectionable Odor Prohibited – Permit R30-01900034-2006 SM01; Condition 3.1.4 (45CSR4-3.1 and 45CSR13, Permit R13-1622 (Condition 3.1.4.)
Accidental Discharge - Permit R30-01900034-2006 SM01;Condition 3.1.5 (45CSR4-4.1)
Acceptable Control Program - Permit R30-01900034-2006 SM01;Condition 3.1.6 (45CSR4-6.1)
Opacity (20%) – Permit R30-01900034-2006 SM01; Condition 3.2.1 (30-5.1.c.)
Fugitive Dust (Manufacturing) - Permit R30-01900034-2006 SM01; Condition 3.1.9 (45CSR7-5.1 and 45CSR13, Permit R13-2261 (Condition B.3)
Fugitive Dust (Roads) - Permit R30-01900034-2006 SM01; Condition 3.1.11 (45CSR13, Permit R13-1622 (Condition 4.1.3 and 4.1.4); Condition 3.4.4 (45CSR30-5.1.c.)
Emergency Discharge - Permit R30-01900034-2006 SM01; Condition 3.1.12 (45CSR7-9.1 and 45CSR13, Permit R13-2261 (Condition B.3)
Submit Standby Plan - Permit R30-01900034-2006 SM01; Condition 3.1.12 (45CSR11-5.2)
Suspension of Operations - Permit R30-01900034-2006 SM01; Condition 3.1.14 (45CSR13, Permit R13-2261 (Condition C.5 and Permit R13-1622 (Condition 2.14)

Are you in compliance with all facility-wide applicable requirements? Yes No

If no, complete the **Schedule of Compliance Form** as ATTACHMENT F.

20. Facility-Wide Applicable Requirements (Continued) - Attach additional pages as necessary.

List all facility-wide applicable requirements. For each applicable requirement, include the rule citation and/or permit with the condition number.

Annual Emissions Inventory - Permit R30-01900034-2006 SM01; Condition 3.1.15 (WV Code 22-5-4(a)(14));
Ozone Depleting Substances - Permit R30-01900034-2006 SM01; Condition 3.1.16 (40 CFR 82)
Risk Management Program - Permit R30-01900034-2006 SM01; Condition 3.1.17 (40 CFR 68)
Boiler MACT - Permit R30-01900034-2006 SM01; Condition 3.1.18 (45 CSR 34 and 40 CFR 63.52)
Testing - Permit R30-01900034-2006 SM01; Condition 3.3.1 (WV Code 22-5-4(a)(15); Condition 3.3.2 (45CSR7-8.2 and 45CSR13, Permit No. R13-2261 (Condition B.3.))
Recordkeeping - Permit R30-01900034-2006 SM01; Condition 3.4.1 (45CSR30-5.1.c.2.A., 45CSR13, Permit No. R13-1622 (Condition 4.3.1.); Condition 3.4.2 (45CSR30-5.1.c.2.B); Condition 3.4.5 (45CSR13, Permit No. R13-1622 (Condition 4.3.2.); Condition 3.4.6 (45CSR13, Permit No. R13-1622 (Condition 4.3.3.)
Reporting - Permit R30-01900034-2006 SM01; Condition 3.5.1 (45CSR30-4.4 and 45CSR30-5.1.c.3.D.); Condition 3.5.2 (45CSR30-5.1.c.2.E); Condition 3.5.3 (45CSR30); Condition 3.5.4 (45CSR30-8); Condition 3.5.5 (45CSR30-5.3.e); Condition 3.5.6 (45CSR30-5.1.c.3.A); Condition 3.5.8 (45CSR30-5.1.c.3.C. and 45CSR30-5.1.c.3.B.);
New Applicable Requirements - Permit R30-01900034-2006 SM01; Condition 3.5.9 (45CSR30-4.4.3.h.1.B.)

Permit Shield

For all facility-wide applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number and/or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

Annual Emissions Inventory - Permit R30-01900034-2006 SM01; Condition 3.1.15 (WV Code 22-5-4(a)(14));
Condition 3.5.4 (45CSR§30-8)
Ozone Depleting Substances - Permit R30-01900034-2006 SM01; Condition 3.1.16 (40 CFR 82)
Risk Management Program - Permit R30-01900034-2006 SM01; Condition 3.1.17 (40 CFR 68)
Boiler MACT - Permit R30-01900034-2006 SM01; Condition 3.1.18 (45 CSR 34 and 40 CFR 63.52)
Testing - Permit R30-01900034-2006 SM01; Condition 4.3.1 (45CSR2-8.1.b); Condition 5.3.1 (45CSR13, Permit No. R13-1622 (Condition 4.2.1.)); Condition 6.3.3 (45 CSR 30-5.1.c); Condition 6.3.4 (45CSR13, Permit No. R13-1622 (Condition 4.2.3.)
Recordkeeping - Permit R30-01900034-2006 SM01; Condition 3.4.1 (45CSR30-5.1.c.2.A., 45CSR13, Permit No. R13-1622 (Condition 4.3.1.); Condition 3.4.2 (45CSR30-5.1.c.2.B); Condition 3.4.5 (45CSR13, Permit No. R13-1622 (Condition 4.3.2.); Condition 3.4.6 (45CSR13, Permit No. R13-1622 (Condition 4.3.3.)
Reporting - Permit R30-01900034-2006 SM01; Condition 3.5.1 (45CSR30-4.4 and 45CSR30-5.1.c.3.D.); Condition 3.5.2 (45CSR30-5.1.c.2.E); Condition 3.5.3 (45CSR30); Condition 3.5.4 (45CSR30-8); Condition 3.5.5 (45CSR30-5.3.e); Condition 3.5.6 (45CSR30-5.1.c.3.A); Condition 3.5.8 (45CSR30-5.1.c.3.C. and 45CSR30-5.1.c.3.B.);
New Applicable Requirements - Permit R30-01900034-2006 SM01; Condition 3.5.9 (45CSR30-4.4.3.h.1.B.)

Are you in compliance with all facility-wide applicable requirements? Yes No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

Section 3: Facility-Wide Emissions

23. Facility-Wide Emissions Summary [Tons per Year]	
Criteria Pollutants	Potential Emissions
Carbon Monoxide (CO)	See attached Emission Summary or file entitled "Emissions Summary.xls"
Nitrogen Oxides (NO _x)	
Lead (Pb)	
Particulate Matter (PM _{2.5}) ¹	
Particulate Matter (PM ₁₀) ¹	
Total Particulate Matter (TSP)	
Sulfur Dioxide (SO ₂)	
Volatile Organic Compounds (VOC)	
Hazardous Air Pollutants ²	Potential Emissions
Regulated Pollutants other than Criteria and HAP	Potential Emissions

¹PM_{2.5} and PM₁₀ are components of TSP.
²For HAPs that are also considered PM or VOCs, emissions should be included in both the HAPs section and the Criteria Pollutants section.

Section 4: Insignificant Activities

24. Insignificant Activities (Check all that apply)	
<input checked="" type="checkbox"/>	1. Air compressors and pneumatically operated equipment, including hand tools.
<input checked="" type="checkbox"/>	2. Air contaminant detectors or recorders, combustion controllers or shutoffs.
<input checked="" type="checkbox"/>	3. Any consumer product used in the same manner as in normal consumer use, provided the use results in a duration and frequency of exposure which are not greater than those experienced by consumer, and which may include, but not be limited to, personal use items; janitorial cleaning supplies, office supplies and supplies to maintain copying equipment.
<input checked="" type="checkbox"/>	4. Bathroom/toilet vent emissions.
<input checked="" type="checkbox"/>	5. Batteries and battery charging stations, except at battery manufacturing plants.
<input type="checkbox"/>	6. Bench-scale laboratory equipment used for physical or chemical analysis, but not lab fume hoods or vents. Many lab fume hoods or vents might qualify for treatment as insignificant (depending on the applicable SIP) or be grouped together for purposes of description.
<input type="checkbox"/>	7. Blacksmith forges.
<input checked="" type="checkbox"/>	8. Boiler water treatment operations, not including cooling towers.
<input checked="" type="checkbox"/>	9. Brazing, soldering or welding equipment used as an auxiliary to the principal equipment at the source.
<input type="checkbox"/>	10. CO ₂ lasers, used only on metals and other materials which do not emit HAP in the process.
<input checked="" type="checkbox"/>	11. Combustion emissions from propulsion of mobile sources, except for vessel emissions from Outer Continental Shelf sources.
<input type="checkbox"/>	12. Combustion units designed and used exclusively for comfort heating that use liquid petroleum gas or natural gas as fuel.
<input checked="" type="checkbox"/>	13. Comfort air conditioning or ventilation systems not used to remove air contaminants generated by or released from specific units of equipment.
<input checked="" type="checkbox"/>	14. Demineralized water tanks and demineralizer vents.
<input type="checkbox"/>	15. Drop hammers or hydraulic presses for forging or metalworking.
<input type="checkbox"/>	16. Electric or steam-heated drying ovens and autoclaves, but not the emissions from the articles or substances being processed in the ovens or autoclaves or the boilers delivering the steam.
<input type="checkbox"/>	17. Emergency (backup) electrical generators at residential locations.
<input type="checkbox"/>	18. Emergency road flares.
<input checked="" type="checkbox"/>	<p>19. Emission units which do not have any applicable requirements and which emit criteria pollutants (CO, NO_x, SO₂, VOC and PM) into the atmosphere at a rate of less than 1 pound per hour and less than 10,000 pounds per year aggregate total for each criteria pollutant from all emission units.</p> <p>Please specify all emission units for which this exemption applies along with the quantity of criteria pollutants emitted on an hourly and annual basis:</p> <p><u>Storage Tanks (Emission Unit ID 3990) - VOC - Negligible Emissions</u></p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p>

24. Insignificant Activities (Check all that apply)	
<input type="checkbox"/>	<p>20. Emission units which do not have any applicable requirements and which emit hazardous air pollutants into the atmosphere at a rate of less than 0.1 pounds per hour and less than 1,000 pounds per year aggregate total for all HAPs from all emission sources. This limitation cannot be used for any source which emits dioxin/furans nor for toxic air pollutants as per 45CSR27.</p> <p>Please specify all emission units for which this exemption applies along with the quantity of hazardous air pollutants emitted on an hourly and annual basis:</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p>
<input type="checkbox"/>	21. Environmental chambers not using hazardous air pollutant (HAP) gases.
<input checked="" type="checkbox"/>	22. Equipment on the premises of industrial and manufacturing operations used solely for the purpose of preparing food for human consumption.
<input type="checkbox"/>	23. Equipment used exclusively to slaughter animals, but not including other equipment at slaughterhouses, such as rendering cookers, boilers, heating plants, incinerators, and electrical power generating equipment.
<input type="checkbox"/>	24. Equipment used for quality control/assurance or inspection purposes, including sampling equipment used to withdraw materials for analysis.
<input type="checkbox"/>	25. Equipment used for surface coating, painting, dipping or spray operations, except those that will emit VOC or HAP.
<input checked="" type="checkbox"/>	26. Fire suppression systems.
<input checked="" type="checkbox"/>	27. Firefighting equipment and the equipment used to train firefighters.
<input type="checkbox"/>	28. Flares used solely to indicate danger to the public.
<input checked="" type="checkbox"/>	29. Fugitive emission related to movement of passenger vehicle provided the emissions are not counted for applicability purposes and any required fugitive dust control plan or its equivalent is submitted.
<input checked="" type="checkbox"/>	30. Hand-held applicator equipment for hot melt adhesives with no VOC in the adhesive formulation.
<input checked="" type="checkbox"/>	31. Hand-held equipment for buffing, polishing, cutting, drilling, sawing, grinding, turning or machining wood, metal or plastic.
<input type="checkbox"/>	32. Humidity chambers.
<input type="checkbox"/>	33. Hydraulic and hydrostatic testing equipment.
<input checked="" type="checkbox"/>	34. Indoor or outdoor kerosene heaters.
<input checked="" type="checkbox"/>	35. Internal combustion engines used for landscaping purposes.
<input type="checkbox"/>	36. Laser trimmers using dust collection to prevent fugitive emissions.
<input type="checkbox"/>	37. Laundry activities, except for dry-cleaning and steam boilers.
<input checked="" type="checkbox"/>	38. Natural gas pressure regulator vents, excluding venting at oil and gas production facilities.
<input checked="" type="checkbox"/>	39. Oxygen scavenging (de-aeration) of water.
<input type="checkbox"/>	40. Ozone generators.
<input checked="" type="checkbox"/>	41. Plant maintenance and upkeep activities (e.g., grounds-keeping, general repairs, cleaning, painting, welding, plumbing, re-tarring roofs, installing insulation, and paving parking lots) provided these activities are not conducted as part of a manufacturing process, are not related to the source's primary business activity, and not otherwise triggering a permit modification. (Cleaning and painting activities qualify if they are not subject to VOC or HAP control requirements. Asphalt batch plant

24. Insignificant Activities (Check all that apply)	
	owners/operators must still get a permit if otherwise requested.)
<input checked="" type="checkbox"/>	42. Portable electrical generators that can be moved by hand from one location to another. "Moved by Hand" means that it can be moved without the assistance of any motorized or non-motorized vehicle, conveyance, or device.
<input checked="" type="checkbox"/>	43. Process water filtration systems and demineralizers.
<input checked="" type="checkbox"/>	44. Repair or maintenance shop activities not related to the source's primary business activity, not including emissions from surface coating or de-greasing (solvent metal cleaning) activities, and not otherwise triggering a permit modification.
<input checked="" type="checkbox"/>	45. Repairs or maintenance where no structural repairs are made and where no new air pollutant emitting facilities are installed or modified.
<input checked="" type="checkbox"/>	46. Routing calibration and maintenance of laboratory equipment or other analytical instruments.
<input type="checkbox"/>	47. Salt baths using nonvolatile salts that do not result in emissions of any regulated air pollutants. Shock chambers.
<input type="checkbox"/>	48. Shock chambers.
<input type="checkbox"/>	49. Solar simulators.
<input checked="" type="checkbox"/>	50. Space heaters operating by direct heat transfer.
<input checked="" type="checkbox"/>	51. Steam cleaning operations.
<input checked="" type="checkbox"/>	52. Steam leaks.
<input type="checkbox"/>	53. Steam sterilizers.
<input checked="" type="checkbox"/>	54. Steam vents and safety relief valves.
<input type="checkbox"/>	55. Storage tanks, reservoirs, and pumping and handling equipment of any size containing soaps, vegetable oil, grease, animal fat, and nonvolatile aqueous salt solutions, provided appropriate lids and covers are utilized.
<input type="checkbox"/>	56. Storage tanks, vessels, and containers holding or storing liquid substances that will not emit any VOC or HAP. Exemptions for storage tanks containing petroleum liquids or other volatile organic liquids should be based on size limits such as storage tank capacity and vapor pressure of liquids stored and are not appropriate for this list.
<input type="checkbox"/>	57. Such other sources or activities as the Director may determine.
<input type="checkbox"/>	58. Tobacco smoking rooms and areas.
<input checked="" type="checkbox"/>	59. Vents from continuous emissions monitors and other analyzers.

Section 5: Emission Units, Control Devices, and Emission Points

25. Equipment Table
Fill out the Title V Equipment Table and provide it as ATTACHMENT D .
26. Emission Units
For each emission unit listed in the Title V Equipment Table , fill out and provide an Emission Unit Form as ATTACHMENT E .
For each emission unit not in compliance with an applicable requirement, fill out a Schedule of Compliance Form as ATTACHMENT F .
27. Control Devices
For each control device listed in the Title V Equipment Table , fill out and provide an Air Pollution Control Device Form as ATTACHMENT G .
For any control device that is required on an emission unit in order to meet a standard or limitation for which the potential pre-control device emissions of an applicable regulated air pollutant is greater than or equal to the Title V Major Source Threshold Level, refer to the Compliance Assurance Monitoring (CAM) Form(s) for CAM applicability. Fill out and provide these forms, if applicable, for each Pollutant Specific Emission Unit (PSEU) as ATTACHMENT H .
CAM requirements addressed in previous Title V renewal application and in significant modification applications previously submitted. As such, no CAM forms are provided in this application.

Section 6: Certification of Information

28. Certification of Truth, Accuracy and Completeness and Certification of Compliance

*Note: This Certification must be signed by a responsible official. The **original**, signed in **blue ink**, must be submitted with the application. Applications without an **original** signed certification will be considered as incomplete.*

a. Certification of Truth, Accuracy and Completeness

I certify that I am a responsible official (as defined at 45CSR§30-2.38) and am accordingly authorized to make this submission on behalf of the owners or operators of the source described in this document and its attachments. I certify under penalty of law that I have personally examined and am familiar with the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine and/or imprisonment.

b. 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.

Responsible official (type or print)

Name: Neill R. Belt	Title: Plant Manager
---------------------	----------------------

Responsible official's signature:

Signature: _____ Signature Date: _____
 (Must be signed and dated in blue ink)

Note: Please check all applicable attachments included with this permit application:

<input checked="" type="checkbox"/>	ATTACHMENT A: Area Map
<input checked="" type="checkbox"/>	ATTACHMENT B: Plot Plan(s)
<input checked="" type="checkbox"/>	ATTACHMENT C: Process Flow Diagram(s)
<input checked="" type="checkbox"/>	ATTACHMENT D: Equipment Table
<input checked="" type="checkbox"/>	ATTACHMENT E: Emission Unit Form(s)
<input type="checkbox"/>	ATTACHMENT F: Schedule of Compliance Form(s)
<input checked="" type="checkbox"/>	ATTACHMENT G: Air Pollution Control Device Form(s)
<input type="checkbox"/>	ATTACHMENT H: Compliance Assurance Monitoring (CAM) Form(s)

All of the required forms and additional information can be found and downloaded from, the DEP website at www.wvdep.org/dag, requested by phone (304) 926-0475, and/or obtained through the mail.

Process Description

Process Description

Tree length logs are brought to the mill by truck and/or rail and are unloaded, separated by species and length, and stored on the logyard. The process begins by loading logs on the deck to be aligned and cut. The logs are cut to appropriate length via the log chop saws. Logs from the chop saws are then sent to the debarkers (Emission Unit ID 1050) where the bark is removed. Bark from the debarking operation is conveyed to the bark hog (Emission Unit ID 2230) to be hogged prior to being sent to the hog fuel silo where the material is stored prior to being used as fuel in the Wellons Energy System. Logs from debarking are then sent to the flakers (Emission Unit ID 2000) where the logs are cut into flakes approximately 1.5 inches wide by 4 inches long. These are termed green flakes since they contain considerable moisture (approximately 50% by weight).

The green flakes are screened to remove unusable material prior to being conveyed and stored in the green flake bins. The screen fines are conveyed to either the hog fuel silo or ground fuel storage. The green flakes are then conveyed to the drying operation. The Mt. Hope facility has a unique drying operation when compared to conventional OSB plants. It consists of a 240 MMBtu/hr Wellons Energy System, 3 rotary flake dryers, and 6 air-to-air heat exchangers all interconnected (see enclosed process flow diagram). Heat for the drying system is provided by a Wellons Energy System. The combustion gases generated in the Wellons Energy System are sent to an air-to-air heat exchanger (Primary Air Heater, one per dryer) to heat ambient air for use in that dryer. The heated ambient air is sent to each dryer where it is used to both convey the flakes through the dryer and to remove the moisture from the flakes. The dry flakes from each dryer are pneumatically conveyed to a cyclone collector where they are removed from the gas stream. The moisture laden dryer exhaust from the cyclone is sent to another air-to-air heat exchanger (Recuperator, one per dryer) where it is re-heated prior to being sent back to the Wellons Energy System for use as combustion air. The dryer exhaust gases are reheated with the Wellons combustion gases which exit the Primary Air Heaters. The combustion gases exiting the recuperators are sent through multicyclones (one per dryer) and an electrostatic precipitator (Control Device ID ESP) prior to being exhausted to atmosphere. The Wellons Energy System (Control Device ID WES-1) acts as a control device for pollutants generated in the drying process (PM, VOC, HAPs). The Wellons Energy System is equipped with the Nalco FuelTech NOxOut system (Control Device ID UI-1) in which urea is injected into the furnace at specified locations to control NOx generation. The Wellons Energy System also serves as the heat source for the thermal oil heat exchanger which indirectly heats the thermal oil for use to maintain press temperature.

The dried flakes are screened to remove finer material and are subsequently stored in the dry flake bins. The dried, screen flakes are then conveyed to the blending operation (Emission Unit ID 6000) where a thermosetting resin and wax are mixed with the flakes. The blended product is then conveyed to a forming line where an 8' wide mat is produced by depositing the flakes in layers that are oriented at right angles. Once the proper thickness of mat is created, it is cut into 24' lengths and conveyed to the pressing

operation (Emissions Unit ID 7890) where under heat and pressure the mat is compressed into a board. Pollutants (PM, VOC, HAPs) generated from the pressing operation will be controlled by a Regenerative Thermal Oxidizer/Regenerative Catalytic Oxidizer (RTO/RCO). The unit will be sized such that it can operate a regenerative thermal oxidizer (RTO) but catalytic media will be added to the top of the ceramic media to allow the unit to be operated as a regenerative catalytic oxidizer (RCO) which is operated at reduced temperatures when compared to a RTO. However, unlike a RCO which can only be operated in catalytic mode, this unit will be able to be operated as a thermal unit at the end of the catalyst media life if the economics of replacing the catalytic media exceeds the cost of operating the unit at the increased temperatures required in a RTO. The only difference in the two operating modes of the control device is the combustion chamber temperature. Operating in the RTO mode, the minimum combustion chamber temperature must be maintained at approximately 1500 °F. Operating in the TCO mode the minimum combustion chamber temperature must be maintained at approximately 900 °F.

Material generated in the mat sawing operation is pneumatically conveyed to a cyclone for material collection. The cyclone exhaust is directed to a fabric filter (Control Device ID FF3) for particulate removal. The collected material is returned to the process for reuse. Material generated in the forming area is pneumatically conveyed to a cyclone for material collection. The cyclone exhaust is directed to a fabric filter (Control Device ID FF2) for particulate removal. The material collected in both the cyclone and fabric filter is pneumatically conveyed a high efficiency cyclone (Emission Unit ID 8950) for deposition into the dry fuel silo. Material from the dry fuel silo is used a fuel in the Wellons Energy System.

The boards (8' x 24') from the press are then cut and trimmed into 4' x 8' sheets. The board trimmings and material generated during cutting are pneumatically conveyed to a cyclone for material collection. The cyclone exhaust is directed to a fabric filter (Control Device ID FF5) for particulate removal. The material collected in the cyclone and fabric filter are pneumatically conveyed to the high efficiency cyclone (Emission Unit ID 8950) for deposition into the dry fuel silo prior to being used for fuel in the Wellons Energy System..

Once the boards are trimmed to the appropriate dimensions, the edges of the board are sealed with a water based paint in a spray booth (Emission Point ID 8830/8835). The particulate overspray generated in the booth is controlled with fabric filters.

Some of the boards may be further finished by sanding. The sanderdust collected in this operation is pneumatically conveyed to a fabric filter (Control Device ID FF6) for particulate removal and collection. The collected material is then pneumatically conveyed to the high efficiency cyclone (Emission Unit ID 9600) for deposition into the sanderdust fuel silo prior to be used for fuel in the Wellons Energy System.

The boards are then packaged for transport and sale.

Emissions Summary

Georgia-Pacific Wood Products LLC
Mt. Hope OSB Plant

Criteria Air Pollutants				
Pollutant	PROCESS SOURCES		FUGITIVE SOURCES	
	2009 Actual Emissions (tpy)	Potential Emissions (tpy)	2009 Actual Emissions (tpy)	Potential Emissions (tpy)
TSP	34.41	182.69	17.53	32.10
PM ₁₀	52.83	232.55	5.19	10.80
PM _{2.5}	52.83	230.79	3.12	7.59
CO	45.0	324.7		
NO _x	62.2	266.4		
SO ₂	0.25	21.3		
VOC	54.8	165.7		
Total HAP	35.1	109.6		
Organic/Inorganic Hazardous Air Pollutants				
Pollutant	PROCESS SOURCES		FUGITIVE SOURCES	
	2009 Actual Emissions (tpy)	Potential Emissions (tpy)	Actual Emissions (tpy)	Potential Emissions (tpy)
Acetaldehyde	5.54	14.60		
Acetophenone	0.00011	0.00033		
Acrolein	0.71	1.81		
Benzene	0.19	0.54		
Bis(2-Ethylhexyl)phthalate	0.000019	0.000059		
Bromomethane	0.006	0.019		
Carbon disulfide	0.053	0.16		
Carbon tetrachloride	0.00037	0.0011		
Chlorine	0.27	0.83		
Chlorobenzene	0.007	0.021		
Chloroform	0.015	0.047		
Chloromethane	0.009	0.029		
Cumene	0.01	0.02		
Dichlorobenzene	0.000020	0.000046		
1,2-Dichloroethane	0.012	0.037		
Dichloromethane	0.14	0.44		
1,2-Dichloropropane	0.014	0.042		
Di-n-butyl Phthalate	0.014	0.042		
Dinitro-2-methylphenol-4,6	0.0009	0.0026		
2,4-Dinitrophenol	0.00011	0.00033		
2,4-Dinitrotoluene	0.00039	0.0012		
Ethylbenzene	0.0028	0.0086		
Formaldehyde	9.11	25.75		
Hexachlorobenzene	0.0004	0.0013		
n-Hexane	0.16	0.78		
Hydrogen chloride	3.76	11.56		
Methanol	13.28	46.41		
Methyl isobutyl ketone	0.01	0.03		
2-Methylnaphthalene	0.000055	0.00017		
Naphthalene	0.041	0.13		
4-Nitrophenol	0.000049	0.00015		
Pentachlorophenol	0.000019	0.00006		
Phenol	0.96	4.08		
Propionaldehyde	0.20	0.48		
Styrene	0.040	0.110		
Tetrachloroethene (Tetrachloroethylene)	0.021	0.066		
Toluene	0.11	0.30		
1,2,4-Trichlorobenzene	0.023	0.069		
1,1,1-Trichloroethane	0.017	0.053		
1,1,2-Trichloroethane	0.049	0.151		
Trichloroethylene	0.016	0.049		
2,4,6-Trichlorophenol	0.000010	0.000030		
Vinyl chloride	0.007	0.023		
m,p-Xylene	0.00	0.01		
o-Xylene	0.007	0.021		

Georgia-Pacific Wood Products LLC
Mt. Hope OSB Plant

Organic/Inorganic Hazardous Air Pollutants				
Pollutant	PROCESS SOURCES		FUGITIVE SOURCES	
	2009 Actual Emissions (tpy)	Potential Emissions (tpy)	Actual Emissions (tpy)	Potential Emissions (tpy)
Chlorinated dibenzo-p-dioxins (CDDs)				
Heptachlorodibenzo-p-dioxins	6.84E-07	2.10E-06		
Hexachlorodibenzo-p-dioxins	5.47E-04	1.68E-03		
Octachlorodibenzo-p-dioxins	2.26E-05	6.94E-05		
Pentachlorodibenzo-p-dioxins	5.13E-07	1.58E-06		
2,3,7,8 - Tetrachlorodibenzo-p-dioxins	2.94E-09	9.04E-09		
Chlorinated dibenzofurans (CDFs)				
Heptachlorodibenzo-p-furans	8.21E-08	2.52E-07		
Hexachlorodibenzo-p-furans	9.58E-08	2.94E-07		
Octachlorodibenzo-p-furans	3.01E-08	9.25E-08		
Pentachlorodibenzo-p-furans	1.44E-07	4.42E-07		
2,3,7,8 - Tetrachlorodibenzo-p-furans	3.08E-08	9.46E-08		
Polychlorinated biphenyls (PCBs)				
Decachlorobiphenyl	1.11E-07	3.41E-07		
Dichlorobiphenyl	3.69E-07	1.14E-06		
Heptachlorobiphenyl	2.26E-08	6.94E-08		
Hexachlorobiphenyl	3.28E-07	1.01E-06		
Monochlorobiphenyl	7.53E-08	2.31E-07		
Pentachlorobiphenyl	7.39E-07	2.27E-06		
Tetrachlorobiphenyl	1.40E-06	4.29E-06		
Trichlorobiphenyl	2.26E-06	6.94E-06		
Polynuclear Aromatic Hydrocarbons (PAHs)				
Acenaphthene	3.11E-04	9.57E-04		
Acenaphthylene	1.71E-03	5.26E-03		
Anthracene	1.03E-03	3.15E-03		
Benzo(a)anthracene	2.22E-05	6.83E-05		
Benzo(a)pyrene	8.90E-04	2.73E-03		
Benzo(b)fluoranthene	3.42E-05	1.05E-04		
Benzo(e)pyrene	8.90E-07	2.73E-06		
Benzo(g,h,i)perylene	3.18E-05	9.78E-05		
Benzo(j,k)fluoranthene	5.47E-05	1.68E-04		
Benzo(k)fluoranthene	1.23E-05	3.78E-05		
Carbazole	6.16E-04	1.89E-03		
2-Chloronaphthalene	8.21E-07	2.52E-06		
2-Chlorophenol	8.21E-06	2.52E-05		
Chrysene	1.30E-05	3.99E-05		
Dibenzo(a,h)anthracene	3.11E-06	9.57E-06		
Fluoranthene	5.47E-04	1.68E-03		
Fluorene	1.16E-03	3.57E-03		
Indeno(1,2,3,c,d)pyrene	2.98E-05	9.15E-05		
Perylene	1.78E-07	5.47E-07		
Phenanthrene	2.39E-03	7.36E-03		
Pyrene	1.27E-03	3.89E-03		

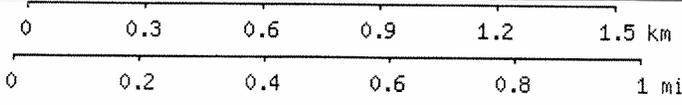
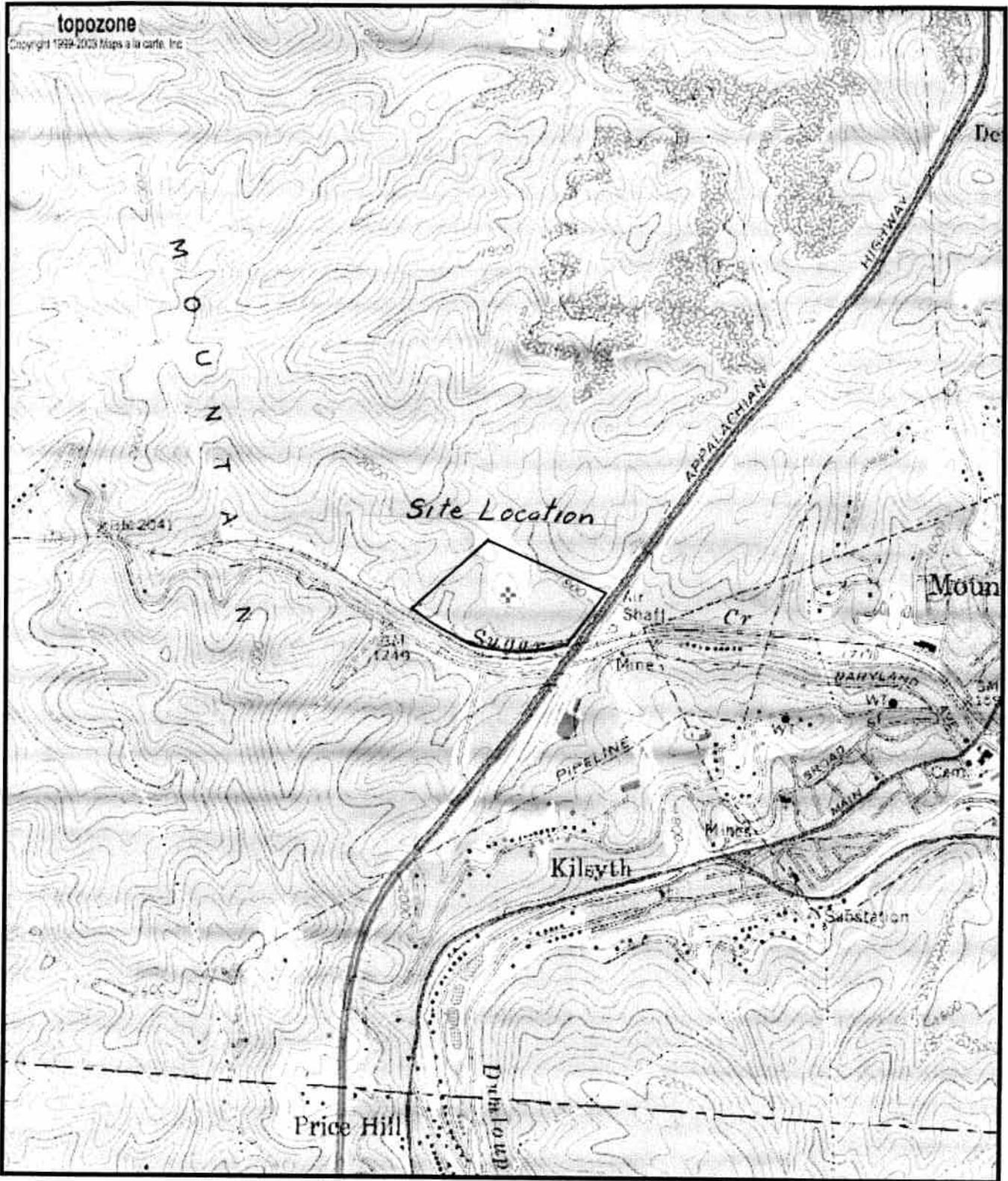
Georgia-Pacific Wood Products LLC
Mt. Hope OSB Plant

Trace Metal Hazardous Air Pollutants				
Pollutant	PROCESS SOURCES		FUGITIVE SOURCES	
	2009 Actual Emissions (tpy)	Potential Emissions (tpy)	Actual Emissions (tpy)	Potential Emissions (tpy)
Antimony	2.05E-04	6.31E-04		
Arsenic	4.83E-04	1.52E-03		
Barium	8.21E-03	2.52E-02		
Beryllium	2.29E-05	7.04E-05		
Cadmium	1.02E-03	3.30E-03		
Chromium, hexavalent	1.22E-03	3.73E-03		
Chromium (Total)	2.01E-03	6.42E-03		
Cobalt	8.39E-05	2.72E-04		
Lead	2.82E-03	8.74E-03		
Manganese	9.24E-02	2.84E-01		
Mercury	2.76E-04	8.93E-04		
Nickel	4.83E-03	1.52E-02		
Phosphorous	4.06E-02	1.25E-01		
Selenium	2.50E-04	7.67E-04		
Zinc	1.15E-01	3.53E-01		
Non-Hazardous/Non-Criteria Pollutants				
Pollutant	PROCESS SOURCES		FUGITIVE SOURCES	
	2009 Actual Emissions (tpy)	Potential Emissions (tpy)	Actual Emissions (tpy)	Potential Emissions (tpy)
Acetone	1.40	3.29		
Ammonia	17.01	30.15		
Benzaldehyde	0.0012	0.0038		
Benzoic Acid	0.009	0.029		
Bis(2-Chloroisopropyl) ether	0.00025	0.00078		
n-Butyraldehyde	0.025	0.077		
Butylbenzylphthalate	0.0053	0.0164		
2-Chlorophenol	0.000012	0.000038		
Copper	0.0053	0.0164		
Crotonaldehyde	0.0045	0.014		
1,2-Dibromoethene	0.023	0.069		
Diethylphthalate	0.018	0.056		
2,5-Dimethylbenzaldehyde	0.018	0.057		
Di-n-octyl Phthalate	0.000045	0.00014		
Ethanol	0.028	0.086		
Hexaldehyde	0.014	0.042		
Isopropanol	1.23	3.78		
Methyl ethyl ketone (2-Butanone)	0.06	0.16		
2-Nitrophenol	0.000017	0.000053		
alpha-Pinene	15.49	38.45		
beta-Pinene	2.83	7.38		
Silver	0.00041	0.0012		
alpha-Terpineol	0.00014	0.00042		
Thallium	0.0008	0.0024		
o-Tolualdehyde	0.053	0.16		
p-Tolualdehyde	0.0038	0.0116		
Trichlorofluoromethane	0.017	0.052		
Valeraldehyde	0.038	0.12		

APPENDIX B

Area Map, Plot Plan, and Process Flow Diagrams

Area Map



Map center is UTM 17 483790E 4194494N (WGS84/NAD83)
Oak Hill quadrangle
 Projection is UTM Zone 17 NAD83 Datum

M*
 6
 M=-7.499
 G=-0.113

Plot Plan

Process Flow Diagrams

APPENDIX C

Source Specific Permit Application Forms and Emission Estimates

ATTACHMENT D - Title V Equipment Table
(includes all emission units at the facility except those designated as
insignificant activities in Section 4, Item 24 of the General Forms)

Emission Point ID ¹	Control Device ¹	Emission Unit ID ¹	Emission Unit Description	Design Capacity	Year Installed/ Modified
5600	WES-1 UI-1 ESP	5600	Wellons Energy System OSB Rotary Dryers (3) each with a 15 MMBtu/hr natural gas burner.	240 MMBtu/hr 46.5 OD tons/hr	1995
3600	None	3600	Auxiliary Thermal Oil Heater	45 MMBtu/hr	1995
6000	None	6000	Blenders	46.5 OD tons/hr	1995
6800	FF2	6800	Forming Line Dedust System	57.7 MSF/hr	1995
6900	FF3	6900	Mat Trim System	57.7 MSF/hr	1995
7890	RTO/RCO	7890	Board Press	57.7 MSF/hr	2008
8830/8835	8830/8835	8830/8835	Edge Seal Paint Booth	15 gallons/hr	1995
8900	FF5	8900	Finishing Area	57.7 MSF/hr	1995
8950	HEC1	8950	Mat Trim Transfer System/Dry Fuel Silo	57.7 MSF/hr	1995
9500	FF6	9500	Sanding Area	36 MSF/hr	1995
9600	HEC2	9600	Sanderdust Transfer System/Sanderdust Silo	36 MSF/hr	1995
8960	FF7	8960	Screen Fines Transfer System	7.9 tons/hr	1999
8970	FF8	8970	Screening Building Dedust System	2.7 tons/hr	1999
2230	None	2230	Bark Hog	27 tons/hr	1995
1050	None	1050	Log Debarkers	90 tons/hr	1995
2000	None	2000	Log Flakers	90 tons/hr	1995
3990	None	3990	Storage Tanks	NA	1995
8010	None	8010	Nail Line Applicator	NA	2000
Log Deicing	None	Fugitive	Log Deicing/Conditioning	90 tons/hr	1995
Misc. Coatings	None	Fugitive	Miscellaneous Coating Operations under PCWP MACT		1995
RICE	None	RICE	Emergency use – Reciprocating Internal Combustion Engines (RICE)	18 – 255 hp	1995

¹For 45CSR13 permitted sources, the numbering system used for the emission points, control devices, and emission units should be consistent with the numbering system used in the 45CSR13 permit. For grandfathered sources, the numbering system should be consistent with registrations or emissions inventory previously submitted to DAQ. For emission points, control devices, and emissions units which have not been previously labeled, use the following 45CSR13 numbering system: 1S, 2S, 3S,... or other appropriate description for emission units; 1C, 2C, 3C,... or other appropriate designation for control devices; 1E, 2E, 3E, ... or other appropriate designation for emission points.

C.1 - DEBARKERS

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: 1050	Emission unit name: Debarkers (2)	List any control devices associated with this emission unit: None
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Provide a description of the emission unit (type, method of operation, design parameters, etc.):

The debarkers are used to remove the bark from the log prior to further processing. The bark is used as fuel in the Wellons Energy System

Manufacturer: Nicholson	Model number:	Serial number:
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Construction date:	Installation date: 04/01/1995	Modification date(s):
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Design Capacity (examples: furnaces - tons/hr, tanks - gallons):

Debarkers have a capacity of 90 tons/hr.

Maximum Hourly Throughput: 90 tons/hr	Maximum Annual Throughput: 788,400 tons	Maximum Operating Schedule: 8760 hours
---	---	--

Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? ___ Yes <u>X</u> No	If yes, is it? ___ Indirect Fired ___ Direct Fired
--	--

Maximum design heat input and/or maximum horsepower rating:	Type and Btu/hr rating of burners:
--	---

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

Emissions Data See attached spreadsheet entitled "Debarkers_1050.xls"		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)		
Nitrogen Oxides (NO _x)		
Lead (Pb)		
Particulate Matter (PM _{2.5})	0.99	4.34
Particulate Matter (PM ₁₀)	0.99	4.34
Total Particulate Matter (TSP)	1.80	7.88
Sulfur Dioxide (SO ₂)		
Volatile Organic Compounds (VOC)		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

U.S. EPA Fire Database, SCC 3-07-008-01, expressed in pounds emissions per ton of material handled.

Filterable PM_{2.5} emissions assumed equal to Filterable PM₁₀.

Total PM₁₀ = Filterable PM₁₀ + Condensable PM. Total PM_{2.5} = Filterable PM_{2.5} + Condensable PM

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

PM – R30-01900034-2006 SM01 - Condition 7.1.1. – 32.8 lbs/hr (45 CSR 7–4.1)
40 CFR 63 Subpart DDDD – Included as part of the source category but no applicable requirements.

Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

PM – R30-01900034-2006 SM01 - Condition 7.2.3. (45 CSR 30-5.1.c)

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the **Schedule of Compliance Form** as ATTACHMENT F.

Georgia-Pacific Wood Products LLC
Mt. Hope OSB Plant

Unit Name: Debarkers (2)
Emission Unit ID: 1050
Control Device ID: None
Unit Description: Logs are conveyed to the debarkers, which removes the bark from the logs, causing fugitive emissions.

<u>Actual Operating Parameters</u>	2009	Calendar Year	<u>Potential Operating Parameters</u>		
Hours:	5,355	hours/year	Hours:	8,760	hours/year
Log Throughput:	341,571	tons/year	Log Throughput:	90	tons/hour

<i>Criteria Air Pollutants</i>						
Pollutant	Emission Factor lb/ton	Reference	Calendar Year 2009		Potential Emissions	
			Actual Emissions		lb/hr	tpy
			lb/hr	tpy		
TSP	0.020	1	1.28	3.42	1.80	7.88
TPM10		3	0.70	1.88	0.99	4.34
TPM2.5		3	0.70	1.88	0.99	4.34
FPM10	0.011	2	0.70	1.88	0.99	4.34
FPM2.5	0.011	2	0.70	1.88	0.99	4.34
CPM						

References

- 1 U.S. EPA Fire Database, SCC 3-07-008-01, expressed in pounds emissions per ton of material handled.
- 2 Filterable PM2.5 emissions assumed equal to Filterable PM10.
- 3 Total PM10 = Filterable PM10 + Condensable PM. Total PM2.5 = Filterable PM2.5 + Condensable PM.

C.2 – BARK HOG

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: 2230	Emission unit name: Bark Hog	List any control devices associated with this emission unit. None
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Provide a description of the emission unit (type, method of operation, design parameters, etc.):
Bark generated from the debarking operation is sent to a bark hog (grinder) where any oversized material is reduced to appropriate size to be utilized as fuel in the Wellons Energy System.

Manufacturer:	Model number:	Serial number:
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Construction date:	Installation date: 04/01/1995	Modification date(s):
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Design Capacity (examples: furnaces - tons/hr, tanks - gallons):
27 tons/hr

Maximum Hourly Throughput: 27 tons	Maximum Annual Throughput: 233,600 tons	Maximum Operating Schedule: 8760 hours
--	---	--

Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? ___ Yes <input checked="" type="checkbox"/> No	If yes, is it? ___ Indirect Fired ___ Direct Fired
---	--

Maximum design heat input and/or maximum horsepower rating:	Type and Btu/hr rating of burners:
--	---

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

Emissions Data See attached spreadsheet entitled "Bark_Hog_2230.xls"

Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)		
Nitrogen Oxides (NO _x)		
Lead (Pb)		
Particulate Matter (PM _{2.5})	0.29	1.29
Particulate Matter (PM ₁₀)	0.29	1.29
Total Particulate Matter (TSP)	0.53	2.34
Sulfur Dioxide (SO ₂)		
Volatile Organic Compounds (VOC)		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

U.S. EPA Fire Database, SCC 3-07-008-02, expressed in pounds emissions per ton of fuel processed.

Filterable PM_{2.5} emissions assumed equal to Filterable PM₁₀.

Total PM₁₀ = Filterable PM₁₀ + Condensable PM. Total PM_{2.5} = Filterable PM_{2.5} + Condensable PM.

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

PM – R30-01900034-2006 SM01 - Condition 7.1.1. – 31.2 lbs/hr (45 CSR 7–4.1)
40 CFR 63 Subpart DDDD – Included as part of the source category but no applicable requirements.

Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

PM – R30-01900034-2006 SM01 - Condition 7.2.3. (45 CSR 30-5.1.c)

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the **Schedule of Compliance Form** as ATTACHMENT F.

Georgia-Pacific Wood Products LLC
Mt. Hope OSB Plant

Unit Name: Bark Hog
Emission Unit ID: 2230
Control Device ID: None

Unit Description: Bark generated from the debarking operation is conveyed to the fuel hog to be hogged prior to being sent the hog fuel silo for use as fuel.

<u>Actual Operating Parameters</u>	2009	Calendar Year	<u>Potential Operating Parameters</u>		
Hours:	5,355	hours/year	Hours:	8,760	hours/year
Process Throughput:	76,027	tons/year	Process Throughput:	233,600	tons/year
Processing Factor:	100%				

<i>Criteria Air Pollutants</i>						
Pollutant	<u>Emission Factor</u> lb/ton	Reference	<u>Calendar Year 2009</u>		<u>Potential Emissions</u>	
			<u>Actual Emissions</u>		lb/hr	tpy
			lb/hr	tpy		
TSP	0.020	1	0.28	0.76	0.53	2.34
TPM10		3	0.16	0.42	0.29	1.28
TPM2.5		3	0.16	0.42	0.29	1.28
FPM10	0.011	2	0.16	0.42	0.29	1.28
FPM2.5	0.011	2	0.16	0.42	0.29	1.28
CPM						

References

- 1 U.S. EPA Fire Database, SCC 3-07-008-02, expressed in pounds emissions per ton of fuel processed. Emission factors for debarking operations are assumed to apply.
- 2 Filterable PM2.5 emissions assumed equal to Filterable PM10.
- 3 Total PM10 = Filterable PM10 + Condensable PM. Total PM2.5 = Filterable PM2.5 + Condensable PM.

C.3 – FLAKERS

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: 2000	Emission unit name: Flakers	List any control devices associated with this emission unit: None
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Provide a description of the emission unit (type, method of operation, design parameters, etc.):

Debarked logs are sent to tree length flakers where the logs are reduced to thin flakes approximately 1.5 in.x 4 in. in size.

Manufacturer: CAE	Model number:	Serial number:
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Construction date:	Installation date: 04/01/1995	Modification date(s):
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Design Capacity (examples: furnaces - tons/hr, tanks - gallons):

Flakers have a capacity of 90 tons/hr.

Maximum Hourly Throughput: 90 tons/hr	Maximum Annual Throughput: 788,400 tons	Maximum Operating Schedule: 8760 hours
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? ___ Yes <u> X </u> No	If yes, is it? ___ Indirect Fired ___ Direct Fired
--	--

Maximum design heat input and/or maximum horsepower rating:	Type and Btu/hr rating of burners:
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List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)		
Nitrogen Oxides (NO _x)		
Lead (Pb)		
Particulate Matter (PM _{2.5})		
Particulate Matter (PM ₁₀)		
Total Particulate Matter (TSP)		
Sulfur Dioxide (SO ₂)		
Volatile Organic Compounds (VOC)		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

Emissions from this operation are thought to be negligible since the material being processed contains significant moisture content and the processing occurs inside a building. In addition, there are no emission factors available to estimate any potential emissions.

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

PM – R30-01900034-2006 SM01 - Condition 7.1.1. – 32 lbs/hr (45 CSR 7–4.1)
40 CFR 63 Subpart DDDD – Included as part of the source category but no applicable requirements.

Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

PM – R30-01900034-2006 SM01 - Condition 7.2.3. (45 CSR 30-5.1.c)

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the **Schedule of Compliance Form** as ATTACHMENT F.

**C.4 – WELLONS ENERGY SYSTEM/
OSB ROTARY DRYERS**

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: 5600	Emission unit name: Wellons Energy System/Rotary OSB Dryers	List any control devices associated with this emission unit: None Wellons Energy System (WES-1) Electrostatic Precipitator (ESP) Urea Injection System (UI-1)
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Provide a description of the emission unit (type, method of operation, design parameters, etc.):
 The Mt. Hope facility has a unique drying operation when compared to conventional OSB plants. It consists of a 240 MMBtu/hr Wellons Energy System, 3 rotary flake dryers, and 6 air-to-air heat exchangers all interconnected (see enclosed process flow diagram). Heat for the drying system is provided by the Wellons Energy System. The combustion gases generated in the Wellons Energy System are sent to an air-to-air heat exchangers (Primary Air Heater, one per dryer) to heat ambient air for use in that dryer. The heated ambient air is sent to each dryer where it is used to both convey the flakes through the dryer and to remove the moisture from the flakes. The dry flakes from each dryer are pneumatically conveyed to a cyclone collector where they are removed from the gas stream. The moisture laden dryer exhaust from the cyclone is sent to another air-to-air heat exchanger (Recuperator, one per dryer) where it is re-heated prior to being sent back to the Wellons Energy System for use as combustion air. The dryer exhaust gases are reheated with the Wellons combustion gases which exit the Primary Air Heaters. The combustion gases exiting the recuperators are sent through multicyclones (one per dryer) and an electrostatic precipitator (Control Device ID ESP) prior to being exhausted to atmosphere. The Wellons Energy System (WES-1) acts as a control device for pollutants generated in the drying process (PM, VOC, HAPs). The Wellons Energy System is equipped with the Nalco FuelTech NOxOut system (UI-1) in which urea is injected into the furnace at specified locations to control NOx generation. The Wellons Energy System also serves as the heat source for the thermal oil heat exchanger which indirectly heats the thermal oil for use to maintain press temperature.

Manufacturer: Wellons Energy System – Wellons Rotary Dryers - MEC	Model number:	Serial number:
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Construction date:	Installation date: 04/01/1995	Modification date(s):
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Design Capacity (examples: furnaces - tons/hr, tanks - gallons):
 Wellons Energy System – 240 MMBtu/hr
 Rotary Dryers – 46.5 OD tons/hr

Maximum Hourly Throughput: 240 MMBtu/hr - Wellons 46.5 OD tons/hr – Rotary Dryers	Maximum Annual Throughput: 2.1 x 10 ⁶ MMBtu/yr - Wellons 407.340 OD tons/yr - Rotary Dryers	Maximum Operating Schedule: 8760 hours
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If yes, is it? <input checked="" type="checkbox"/> Indirect Fired <input checked="" type="checkbox"/> Direct Fired
--	--

Maximum design heat input and/or maximum horsepower rating: Wellons Energy System – 240 MMBtu/hr Each Dryer has a 15 MMBtu/hr natural gas burner	Type and Btu/hr rating of burners: 15 MMBtu/hr
---	--

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Wellons Energy System – Wood Residuals Fired (27 tons/hr and 233,600 tons/yr)
 Burners – Natural Gas (15,000 CF/hr and 131.4 MMCF/yr each).
 The Wellons is also utilized to combust the following miscellaneous waste streams: wastewater and wastewater sludge, paint solids, wax and resin waste, oil and oil contaminated materials, other wood wastes.

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
Wood Residuals	Negligible	8%	5,158/lb
Natural Gas	Negligible	Negligible	1,020/CF

Emissions Data See attached spreadsheet entitled “Wellons_Dryers_Emissions_5600.xls”

Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)	48.0	210.2
Nitrogen Oxides (NO _x)	50.0	219.0
Lead (Pb)	0.00197	0.0086
Particulate Matter (PM _{2.5})	33.6	147.2
Particulate Matter (PM ₁₀)	33.6	147.2
Total Particulate Matter (TSP)	24.0	105.1
Sulfur Dioxide (SO ₂)	4.80	21.0
Volatile Organic Compounds (VOC)	3.00	13.1
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
See attached spreadsheet		
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

See attached spreadsheet (Wellons_Dryers_Emissions_5600.xls) for the references to the various sources used to calculate emissions from this source.

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

40 CFR 63 Subpart DDDD – R30-01900034-2006 SM01 – Condition 3.1.19 (40 CFR 62.2250(a) and (b), Permit No. R13-1622, Condition 4.1.12); Condition 3.1.20 (40 CFR 62.2250(c), Permit No. R13-1622, Condition 4.1.12); Condition 3.4.7 (40 CFR 63.2282(a), (b), and (e); 45CSR34; 45CSR13, Permit No. R13-1622 (Condition 4.1.12.); Condition – 3.4.8 (40 CFR 63.2283(a), (b), and (c); 45CSR34; 45CSR13, Permit No. R13-1622 (Condition 4.1.12.); Condition 3.5.10 (40 CFR 63.2280(g)(1) and (g)(3); 45CSR34; 45CSR13, Permit No. R13-1622 (Condition 4.1.12.); Condition 3.5.11 (40 CFR 63.2281(a), (c), (d), (e), and (g), and §63.2271(b); 45CSR34; 45CSR13, Permit No. R13-1622 (Condition 4.1.12.); Condition 3.5.12 (40 CFR 63.2281(b); 45CSR34; 45CSR13, Permit No. R13-1622 (Condition 4.1.12.); Condition 3.5.13 (40 CFR 63.2281(a); 45CSR34; 45CSR13, Permit No. R13-1622 (Condition 4.1.12.); Condition 5.1.8 (40 CFR 63.2240(b) and 63.2262(k)(2); 45CSR34; 45CSR13, Permit No. R13-1622 (Condition 4.1.12.);

PM – R30-01900034-2006 SM01– Condition 5.1.1 (45CSR§7-3.1, 45CSR13, Permit No. R13-1622 (Conditions 4.1.11. and 4.1.11.1.);

PM, Opacity – R30-01900034-2006 SM01 – Condition 5.1.2 (45CSR13, Permit No. R13-1622 (Condition 4.1.11.1.1.);

Limit of Operation - R30-01900034-2006 SM01 – Condition 5.1.3 (45CSR13, Permit No. R13-1622 (Condition 4.1.5.); Condition 5.1.5 (45CSR13, Permit No. R13-1622 (Condition 4.1.1.); Condition 5.1.6 (45CSR13, Permit No. R13-1622 (Condition 4.1.10) and 45 CSR 30-12.7); Condition 5.1.7 (45CSR13, Permit No. R13-1622 (Condition 4.1.6.);

SO₂ – R30-01900034-2006 SM01– Condition 5.1.4 (45 CSR 10-4.1);

40 CFR 64 - R30-01900034-2006 SM01 – Condition 3.4.9 (40 CFR 64.9(b); 45CSR§30-5.1.c.); Condition 3.5.14 (40 CFR 64.9(a); 45CSR§30-5.1.c.);

Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

40 CFR 63 Subpart DDDD – R30-01900034-2006 SM01 – Condition 3.2.2 (40 CFR 63.2269(a) and (b); 45CSR34; 40 CFR 64.3(b)(1), 64.3(b)(3), 64.3(b)(4), 64.7(b); 45CSR30-5.1.c.; 45CSR13, Permit No. R13-1622 (Condition 4.1.12); Condition 3.2.3 (40 CFR 63.2270(a), (b), (c), (d) and (f); 45CSR34; 40 CFR 64.3(b)(4), 64.7(c); 45CSR30-5.1.c.; 45CSR13, Permit No. R13-1622 (Condition 4.1.12.); Condition 5.2.6 (40 CFR 63.2271(a); 45CSR34; 45CSR13, Permit No. R13-1622 (Condition 4.1.12.)

40 CFR 64 - R30-01900034-2006 SM01 – Condition 3.2.2 (40 CFR 63.2269(a) and (b); 45CSR34; 40 CFR 64.3(b)(1), 64.3(b)(3), 64.3(b)(4), 64.7(b); 45CSR30-5.1.c.; 45CSR13, Permit No. R13-1622 (Condition 4.1.12); Condition 3.2.3 (40 CFR 63.2270(a), (b), (c), (d) and (f); 45CSR34; 40 CFR 64.3(b)(4), 64.7(c); Condition 3.2.4, (40 C.F.R. §64.7(a); 45CSR§30-5.1.c.); Condition 3.2.5, (40 C.F.R. §64.7(d); 45CSR§30-5.1.c.); Condition 3.2.6, (40 C.F.R. §64.7(e); 45CSR§30-5.1.c.); Condition 3.2.7 (40 C.F.R. §64.8; 45CSR§30-5.1.c.);Condition 5.3.4 (40 CFR 64.3(b)(3); 45CSR30-5.1.c.); Condition 5.4.1 (45CSR13, Permit No. R13-1622 (Conditions 4.3.4.2., 4.3.4.3., and 4.3.4.4.); Condition 5.4.2 (40 CFR 64.3(b)(4); 45CSR30-5.1.c.); Condition 5.4.3 (40 CFR 64.7(d); 45CSR30-5.1.c.);

PM, Opacity – R30-01900034-2006 SM01 – Condition 5.2.1 (45CSR13, Permit No. R13-1622 (Conditions 4.3.4., 4.3.4.1., 4.3.4.5., 4.3.4.6., 4.3.4.7., and 4.3.7); Condition 5.5.1 (45CSR13, Permit No. R13-1622 (Condition 4.4.1.) and 40CSR§30-12.7)

SO₂ – R30-01900034-2006 SM01 – Condition 5.3.3 (45 CSR 10-8.2.c);

Limit of Operation - R30-01900034-2006 SM01 – Condition 5.2.2 (45CSR30-5.1.c and 40 CFR 64.3(a)(3) & (b)(4)); Condition 5.2.3 (45CSR30-5.1.c and 40 CFR 64.7(d)); Condition 5.2.4 (45CSR30-5.1.c and 40 CFR 64.3(d)(1)); Condition 5.2.5 (45CSR30-5.1.c and 40 CFR 64.3(a)(3)(i));

Testing - R30-01900034-2006 SM01 - Condition 5.3.1 (45CSR13, Permit No. R13-1622 (Conditions 4.2.1); Condition 5.3.2 (45CSR13, Permit No. R13-1622 (Conditions 4.2.2);

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT G - Air Pollution Control Device Form

Control device ID number: WES-1	List all emission units associated with this control device. OSB Rotary Dryers (Emission Unit ID 5600)
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Manufacturer: Wellons	Model number: NA	Installation date: 04/01/1995
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Type of Air Pollution Control Device:

<input type="checkbox"/> Baghouse/Fabric Filter	<input type="checkbox"/> Venturi Scrubber	<input type="checkbox"/> Multiclone
<input type="checkbox"/> Carbon Bed Adsorber	<input type="checkbox"/> Packed Tower Scrubber	<input type="checkbox"/> Single Cyclone
<input type="checkbox"/> Carbon Drum(s)	<input type="checkbox"/> Other Wet Scrubber	<input type="checkbox"/> Cyclone Bank
<input type="checkbox"/> Catalytic Incinerator	<input type="checkbox"/> Condenser	<input type="checkbox"/> Settling Chamber
<input checked="" type="checkbox"/> Thermal Incinerator	<input type="checkbox"/> Flare	<input type="checkbox"/> Other (describe) _____
<input type="checkbox"/> Wet Plate Electrostatic Precipitator	<input type="checkbox"/> Dry Plate Electrostatic Precipitator	

List the pollutants for which this device is intended to control and the capture and control efficiencies.

Pollutant	Capture Efficiency	Control Efficiency
VOC, Organic HAPs	100%	90%

Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).
 The Wellons Energy System serves as a thermal oxidizer to control VOC and organic HAP emissions generated during the flake drying process. Temperature is the key design parameter for the control device.

Is this device subject to the CAM requirements of 40 C.F.R. 64? Yes No

If Yes, **Complete ATTACHMENT H:** CAM requirements already included in Title V permit from previous renewal. No additional requirements. As such, No CAM plan is included.

If No, **Provide justification.**

Describe the parameters monitored and/or methods used to indicate performance of this control device.
 Combustion and Blend Chamber Temperature

ATTACHMENT G - Air Pollution Control Device Form

Control device ID number: MC-1	List all emission units associated with this control device. Wellons Energy System, OSB Rotary Dryers
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Manufacturer: Wellons	Model number: NA	Installation date: 04/01/1995
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Type of Air Pollution Control Device:

<input type="checkbox"/> Baghouse/Fabric Filter	<input type="checkbox"/> Venturi Scrubber	<input checked="" type="checkbox"/> Multiclone (1 per dryer system)
<input type="checkbox"/> Carbon Bed Adsorber	<input type="checkbox"/> Packed Tower Scrubber	<input type="checkbox"/> Single Cyclone
<input type="checkbox"/> Carbon Drum(s)	<input type="checkbox"/> Other Wet Scrubber	<input type="checkbox"/> Cyclone Bank
<input type="checkbox"/> Catalytic Incinerator	<input type="checkbox"/> Condenser	<input type="checkbox"/> Settling Chamber
<input type="checkbox"/> Thermal Incinerator	<input type="checkbox"/> Flare	<input type="checkbox"/> Other (describe) _____
<input type="checkbox"/> Wet Plate Electrostatic Precipitator	<input type="checkbox"/> Dry Plate Electrostatic Precipitator	

List the pollutants for which this device is intended to control and the capture and control efficiencies.

Pollutant	Capture Efficiency	Control Efficiency
PM	100%	50%

Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).
 Gas flow rate 225,000 acfm
 Pressure drop 5.0" water
 Multiclones are upstream of the ESP.

Is this device subject to the CAM requirements of 40 C.F.R. 64? Yes No

If Yes, Complete ATTACHMENT H:

If No, Provide justification. The multiclones are considered inherent process equipment since they are required for the proper or safe functioning of the process and were not installed for compliance with air pollution regulations. The ESP is the air pollution control device.

Describe the parameters monitored and/or methods used to indicate performance of this control device.

ATTACHMENT G - Air Pollution Control Device Form

Control device ID number: ESP	List all emission units associated with this control device. Wellons Energy System, OSB Rotary Dryers (Emission Unit ID 5600)
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Manufacturer: Preciptech	Model number: NA	Installation date: 04/01/1995
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Type of Air Pollution Control Device:

<input type="checkbox"/> Baghouse/Fabric Filter	<input type="checkbox"/> Venturi Scrubber	<input type="checkbox"/> Multiclone
<input type="checkbox"/> Carbon Bed Adsorber	<input type="checkbox"/> Packed Tower Scrubber	<input type="checkbox"/> Single Cyclone
<input type="checkbox"/> Carbon Drum(s)	<input type="checkbox"/> Other Wet Scrubber	<input type="checkbox"/> Cyclone Bank
<input type="checkbox"/> Catalytic Incinerator	<input type="checkbox"/> Condenser	<input type="checkbox"/> Settling Chamber
<input type="checkbox"/> Thermal Incinerator	<input type="checkbox"/> Flare	<input type="checkbox"/> Other (describe) _____
<input type="checkbox"/> Wet Plate Electrostatic Precipitator	<input checked="" type="checkbox"/> Dry Plate Electrostatic Precipitator	

List the pollutants for which this device is intended to control and the capture and control efficiencies.

Pollutant	Capture Efficiency	Control Efficiency
PM	100%	95%

Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).
 Gas flow rate 225,000 acfm
 Active collection surface 56,207 sq. ft.
 Three fields in series, each field has two series bus sections. (Only 2 fields required to operate to maintain compliance)
 Gravity impact rappers.

Is this device subject to the CAM requirements of 40 C.F.R. 64? Yes No

If Yes, **Complete ATTACHMENT H:** CAM requirements already included in Title V permit from previous renewal. No additional requirements. As such, No CAM plan is included.

If No, **Provide justification.**

Describe the parameters monitored and/or methods used to indicate performance of this control device.
 Continuous opacity monitor
 Secondary voltage
 Secondary current

ATTACHMENT G - Air Pollution Control Device Form

Control device ID number: UI-1	List all emission units associated with this control device. Wellons Energy System (Emission Unit ID 5600)
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Manufacturer: Nalco Fueltech	Model number: NA	Installation date: 12/01/1997
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Type of Air Pollution Control Device:

<input type="checkbox"/> Baghouse/Fabric Filter	<input type="checkbox"/> Venturi Scrubber	<input type="checkbox"/> Multiclone
<input type="checkbox"/> Carbon Bed Adsorber	<input type="checkbox"/> Packed Tower Scrubber	<input type="checkbox"/> Single Cyclone
<input type="checkbox"/> Carbon Drum(s)	<input type="checkbox"/> Other Wet Scrubber	<input type="checkbox"/> Cyclone Bank
<input type="checkbox"/> Catalytic Incinerator	<input type="checkbox"/> Condenser	<input type="checkbox"/> Settling Chamber
<input type="checkbox"/> Thermal Incinerator	<input type="checkbox"/> Flare	<input checked="" type="checkbox"/> Other (describe) <u>urea injection</u>
<input type="checkbox"/> Wet Plate Electrostatic Precipitator	<input type="checkbox"/> Dry Plate Electrostatic Precipitator	

List the pollutants for which this device is intended to control and the capture and control efficiencies.

Pollutant	Capture Efficiency	Control Efficiency
NOx	100%	40%

Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).
 Injects urea solution into the upper combustion zone of the Wellons Energy System. Injection rate is controlled by continuously monitoring stack gas concentration using a CEM system.

Is this device subject to the CAM requirements of 40 C.F.R. 64? Yes No

If Yes, **Complete ATTACHMENT H:** CAM requirements already included in Title V permit from previous renewal. No additional requirements. As such, No CAM plan is included.

If No, **Provide justification.**

Describe the parameters monitored and/or methods used to indicate performance of this control device.
 Wellons Energy System Combustion Temperature.
 NOx/CO2 Concentrations

Georgia-Pacific Wood Products LLC
Mt. Hope OSB Plant

Unit Name: Wellons/Dryers System
Emission Unit ID: 5600
Control Device ID: WB-1, UI-1, ESP

Unit Description:

There are 3 dryers at the Mt. Hope facility with the exhaust from the dryers being routed back to the Wellons Energy System (WES-1) for control of VOC and hazardous air pollutants generated during the drying process. The exhaust from the Wellons Energy System is used to heat ambient air, via an air-to-air heat exchanger, for use in the drying process. Each dryer has a separate air-to-air heat exchanger (Primary Air Heater). From the primary air heaters, the Wellons exhaust goes to another air-to-air heat exchanger to recover heat by heating up the dryer exhaust gases prior to them going back to the Wellons system for use as combustion air. Each dryer system is equipped with a separate air-to-air heat exchanger (Recuperator). The Wellons exhaust then goes through multiclones prior to exhausting to the electrostatic precipitator (ESP). A urea injection system (UI-1) was installed to ensure compliance with the NOx limit contained in our current permit. Each dryer system is equipped with an abort system which can vent to atmosphere in the event of an emergency (fire, etc.).

Actual Operating Parameters

2009 Calendar Year
 Hours: 5,355 hours/year
 Fuel Consumption: 76,027 tons/year
 Dryer Flake Production: 157,106 ODT/year
 Facility OSB Production: 216.3 MMsf/year (3/8" Basis)

Potential Operating Parameters

Hours: 8,760 hours/year
 Energy System Heat Input: 240 MMBtu/hr
 Fuel Consumption: 233,600 tons/yr of fuel (permit limit)
 Dryer Flake Production: 46.5 ODT/hour
 Dryer Flake Production: 407,340 ODT/year
 Facility OSB Production: 57.7 Msf/hour (3/8" Basis)
 Facility OSB Production: 438.0 MMsf/year (3/8" Basis)

<i>Criteria Air Pollutants</i>													
Pollutant	Fuel Combustion		Process Throughput		Emission Factors Permit Limits		Specifications			Calendar Year 2009 Actual Emissions ¹		Potential Emissions ²	
	lb/MMBtu	lb/ton	lb/ODT	lb/Msf	lb/hr	tpy	ppm	Control Efficiency	Reference	lb/hr	tpy	lb/hr	tpy
TSP	0.044	0.45			24			97.5%	1, 2	6.44	17.25	24.0	105.1
TPM10	0.084	0.87							12	12.30	32.94	33.6	147.2
TPM2.5	0.084	0.87							12	12.30	32.94	33.6	147.2
FPM10	0.044	0.45			24			97.5%	10	6.44	17.25	24.0	105.1
FPM2.5	0.044	0.45			24			97.5%	10	6.44	17.25	24.0	105.1
CPM	0.04	0.41							11	5.86	15.69	9.6	42.0
CO	0.1	1.03			48			60%	1, 2	14.65	39.21	48.0	210.2
NOX	0.14	1.44			50			50%	1, 2	20.50	54.90	50.0	219.0
SO2	0.0006	0.0062			4.8				3	0.09	0.24	4.80	21.0
VOC	0.0098	0.10			3.0			90%	1, 2	1.44	3.84	3.00	13.1
Total HAP								90%	5	4.98	13.33	8.53	37.4
<i>Organic/Inorganic Hazardous Air Pollutants</i>													
Pollutant	Fuel Combustion		Process Throughput		Emission Factors Permit Limits		Specifications			Calendar Year 2009 Actual Emissions		Potential Emissions	
	lb/MMBtu	lb/ton	lb/ODT	lb/Msf	lb/hr	tpy	ppm	Control Efficiency	Reference	lb/hr	tpy	lb/hr	tpy
Acetaldehyde	2.76E-04	2.48E-03	0.560					90%	6, 7	1.68	4.49	2.67	11.70
Acetophenone	3.12E-07	2.81E-06						90%	6	0.000040	0.00011	0.000075	0.00033
Acrolein	9.36E-05	8.42E-04	0.078					90%	6, 7	0.24	0.64	0.39	1.69
Benzene	3.24E-04	2.92E-03	0.010					90%	6, 8	0.071	0.19	0.12	0.54
Bis(2-Ethylhexyl)phthalate	5.64E-08	5.08E-07							6	0.0000072	0.000019	0.000014	0.000059
Bromomethane	1.80E-05	1.62E-04							6	0.0023	0.006	0.0043	0.019
Carbon disulfide	1.56E-04	1.40E-03							6	0.020	0.053	0.037	0.16
Carbon tetrachloride	1.07E-06	9.61E-06							6	0.00014	0.00037	0.00026	0.0011
Chlorine	7.90E-04	7.11E-03							6	0.10	0.27	0.19	0.83
Chlorobenzene	2.04E-05	1.84E-04							6	0.0026	0.007	0.0049	0.021
Chloroform	4.44E-05	4.00E-04							6	0.0057	0.015	0.011	0.047
Chloromethane	2.76E-05	2.48E-04							6	0.0035	0.009	0.0066	0.029
Cumene	2.16E-05	1.94E-04							6	0.0028	0.01	0.01	0.02
1,2-Dichloroethane	3.48E-05	3.13E-04							6	0.0044	0.012	0.0084	0.04
Dichloromethane	4.20E-04	3.78E-03							6	0.054	0.14	0.10	0.44

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Pollutant	Emission Factors								Calendar Year 2009		Potential Emissions ²		
	Fuel Combustion		Process Throughput		Permit Limits		Specifications		Actual Emissions ¹		lb/hr	tpy	
	lb/MMBtu	lb/ton	lb/ODT	lb/Msf	lb/hr	tpy	ppm	Control Efficiency	Reference	lb/hr			tpy
1,2-Dichloropropane	3.96E-05	3.56E-04							6	0.0051	0.014	0.0095	0.042
Di-n-butyl Phthalate	3.96E-05	3.56E-04							6	0.0051	0.014	0.0095	0.042
Dinitro-2-methylphenol-4,6	2.52E-06	2.27E-05							6	0.00032	0.0009	0.00060	0.0026
2,4-Dinitrophenol	3.12E-07	2.81E-06							6	0.000040	0.00011	0.000075	0.00033
2,4-Dinitrotoluene	1.13E-06	1.02E-05							6	0.00014	0.00039	0.00027	0.0012
Ethylbenzene	8.16E-06	7.34E-05							6	0.0010	0.0028	0.0020	0.0086
Formaldehyde	8.52E-04	7.67E-03	0.14					90%	2, 6, 7	0.52	1.39	0.86	3.75
Hexachlorobenzene	1.20E-06	1.08E-05							6	0.00015	0.00041	0.00029	0.0013
n-Hexane	3.48E-04	3.13E-03							6	0.044	0.12	0.084	0.37
Hydrogen chloride	1.10E-02	9.90E-02							9	1.406	3.76	2.64	11.56
Methanol	1.03E-03	9.29E-03	0.12					90%	6, 7	0.48	1.30	0.81	3.53
Methyl isobutyl ketone	2.76E-05	2.48E-04							6	0.004	0.01	0.01	0.03
2-Methylnaphthalene	1.60E-07	1.44E-06							6	0.000020	0.000055	0.000038	0.00017
Naphthalene	1.20E-04	1.08E-03							6	0.015	0.041	0.029	0.13
4-Nitrophenol	1.44E-07	1.30E-06							6	0.000018	0.000049	0.000035	0.00015
Pentachlorophenol	5.52E-08	4.97E-07							6	0.0000071	0.000019	0.000013	0.000058
Phenol	1.09E-05	9.83E-05	0.015					90%	6, 7	0.045	0.12	0.07	0.32
Propionaldehyde	7.32E-05	6.59E-04	0.013					90%	6, 7	0.047	0.13	0.08	0.34
Styrene	3.84E-05	3.46E-04	0.0034					90%	6, 8	0.0149	0.040	0.025	0.110
Tetrachloroethene (Tetrachloroethylene)	6.24E-05	5.62E-04							6	0.0080	0.021	0.015	0.066
Toluene	3.24E-05	2.92E-04	0.013					90%	6, 8	0.042	0.11	0.07	0.30
1,2,4-Trichlorobenzene	6.60E-05	5.94E-04							6	0.008	0.023	0.016	0.069
1,1,1-Trichloroethane	5.04E-05	4.54E-04							6	0.0064	0.017	0.012	0.053
1,1,2-Trichloroethane	1.44E-04	1.30E-03							6	0.018	0.049	0.035	0.15
Trichloroethylene	4.68E-05	4.21E-04							6	0.0060	0.016	0.011	0.049
2,4,6-Trichlorophenol	2.88E-08	2.59E-07							6	0.0000037	0.000010	0.0000069	0.000030
Vinyl chloride	2.16E-05	1.94E-04							6	0.0028	0.007	0.0052	0.023
m,p-Xylene	6.36E-06	5.72E-05							6	0.001	0.00	0.00	0.01
o-Xylene	2.04E-05	1.84E-04							6	0.0026	0.007	0.0049	0.021
Chlorinated dibenzo-p-dioxins (CDDs)													
Heptachlorodibenzo-p-dioxins	2.00E-09	1.80E-08							6	2.56E-07	6.84E-07	4.80E-07	2.10E-06
Hexachlorodibenzo-p-dioxins	1.60E-06	1.44E-05							6	2.04E-04	5.47E-04	3.84E-04	1.68E-03
Octachlorodibenzo-p-dioxins	6.60E-08	5.94E-07							6	8.43E-06	2.26E-05	1.58E-05	6.94E-05
Pentachlorodibenzo-p-dioxins	1.50E-09	1.35E-08							6	1.92E-07	5.13E-07	3.60E-07	1.58E-06
2,3,7,8 - Tetrachlorodibenzo-p-dioxins	8.60E-12	7.74E-11							6	1.10E-09	2.94E-09	2.06E-09	9.04E-09
Chlorinated dibenzofurans (CDFs)													
Heptachlorodibenzo-p-furans	2.40E-10	2.16E-09							6	3.07E-08	8.21E-08	5.76E-08	2.52E-07
Hexachlorodibenzo-p-furans	2.80E-10	2.52E-09							6	3.58E-08	9.58E-08	6.72E-08	2.94E-07
Octachlorodibenzo-p-furans	8.80E-11	7.92E-10							6	1.12E-08	3.01E-08	2.11E-08	9.25E-08
Pentachlorodibenzo-p-furans	4.20E-10	3.78E-09							6	5.37E-08	1.44E-07	1.01E-07	4.42E-07
2,3,7,8 - Tetrachlorodibenzo-p-furans	9.00E-11	8.10E-10							6	1.15E-08	3.08E-08	2.16E-08	9.46E-08
Polychlorinated biphenyls (PCBs)													
Decachlorobiphenyl	3.24E-10	2.92E-09							6	4.14E-08	1.11E-07	7.78E-08	3.41E-07
Dichlorobiphenyl	1.08E-09	9.72E-09							6	1.38E-07	3.69E-07	2.59E-07	1.14E-06
Heptachlorobiphenyl	6.60E-11	5.94E-10							6	8.43E-09	2.26E-08	1.58E-08	6.94E-08
Hexachlorobiphenyl	9.60E-10	8.64E-09							6	1.23E-07	3.28E-07	2.30E-07	1.01E-06
Monochlorobiphenyl	2.20E-10	1.98E-09							6	2.81E-08	7.53E-08	5.28E-08	2.31E-07
Pentachlorobiphenyl	2.16E-09	1.94E-08							6	2.76E-07	7.39E-07	5.18E-07	2.27E-06
Tetrachlorobiphenyl	4.08E-09	3.67E-08							6	5.21E-07	1.40E-06	9.79E-07	4.29E-06

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Pollutant	Emission Factors								Calendar Year 2009		Potential Emissions ²		
	Fuel Combustion		Process Throughput		Permit Limits		Specifications		Actual Emissions ¹		lb/hr	tpy	
	lb/MMBtu	lb/ton	lb/ODT	lb/Msf	lb/hr	tpy	ppm	Control Efficiency	Reference	lb/hr	tpy	lb/hr	tpy
Trichlorobiphenyl	6.60E-09	5.94E-08							6	8.43E-07	2.26E-06	1.58E-06	6.94E-06
Polynuclear Aromatic Hydrocarbons (PAHs)													
Acenaphthene	9.10E-07	8.19E-06							6	1.16E-04	3.11E-04	2.18E-04	9.57E-04
Acenaphthylene	5.00E-06	4.50E-05							6	6.39E-04	1.71E-03	1.20E-03	5.26E-03
Anthracene	3.00E-06	2.70E-05							6	3.83E-04	1.03E-03	7.20E-04	3.15E-03
Benzo(a)anthracene	6.50E-08	5.85E-07							6	8.31E-06	2.22E-05	1.56E-05	6.83E-05
Benzo(a)pyrene	2.60E-06	2.34E-05							6	3.32E-04	8.90E-04	6.24E-04	2.73E-03
Benzo(b)fluoranthene	1.00E-07	9.00E-07							6	1.28E-05	3.42E-05	2.40E-05	1.05E-04
Benzo(c)pyrene	2.60E-09	2.34E-08							6	3.32E-07	8.90E-07	6.24E-07	2.73E-06
Benzo(g,h,i)perylene	9.30E-08	8.37E-07							6	1.19E-05	3.18E-05	2.23E-05	9.78E-05
Benzo(j,k)fluoranthene	1.60E-07	1.44E-06							6	2.04E-05	5.47E-05	3.84E-05	1.68E-04
Benzo(k)fluoranthene	3.60E-08	3.24E-07							6	4.60E-06	1.23E-05	8.64E-06	3.78E-05
Carbazole	1.80E-06	1.62E-05							6	2.30E-04	6.16E-04	4.32E-04	1.89E-03
2-Chloronaphthalene	2.40E-09	2.16E-08							6	3.07E-07	8.21E-07	5.76E-07	2.52E-06
2-Chlorophenol	2.40E-08	2.16E-07							6	3.07E-06	8.21E-06	5.76E-06	2.52E-05
Chrysene	3.80E-08	3.42E-07							6	4.86E-06	1.30E-05	9.12E-06	3.99E-05
Dibenzo(a,h)anthracene	9.10E-09	8.19E-08							6	1.16E-06	3.11E-06	2.18E-06	9.57E-06
Fluoranthene	1.60E-06	1.44E-05							6	2.04E-04	5.47E-04	3.84E-04	1.68E-03
Fluorene	3.40E-06	3.06E-05							6	4.34E-04	1.16E-03	8.16E-04	3.57E-03
Indeno(1,2,3,c,d)pyrene	8.70E-08	7.83E-07							6	1.11E-05	2.98E-05	2.09E-05	9.15E-05
Perylene	5.20E-10	4.68E-09							6	6.64E-08	1.78E-07	1.25E-07	5.47E-07
Phenanthrene	7.00E-06	6.30E-05							6	8.94E-04	2.39E-03	1.68E-03	7.36E-03
Pyrene	3.70E-06	3.33E-05							6	4.73E-04	1.27E-03	8.88E-04	3.89E-03
<i>Trace Metal Hazardous Air Pollutants</i>													
Pollutant	Emission Factors								Calendar Year 2009		Potential Emissions		
	Fuel Combustion		Process Throughput		Permit Limits		Specifications		Actual Emissions		lb/hr	tpy	
	lb/MMBtu	lb/ton	lb/ODT	lb/Msf	lb/hr	tpy	ppm	Control Efficiency	Reference	lb/hr	tpy	lb/hr	tpy
Antimony	6.00E-07	5.40E-06							8	0.000077	0.00021	0.00014	0.00063
Arsenic	1.40E-06	1.26E-05							9	0.000179	0.00048	0.000336	0.00147
Barium	2.40E-05	2.16E-04							8	0.0031	0.008	0.0058	0.025
Beryllium	6.70E-08	6.03E-07							9	0.000009	0.000023	0.000016	0.00007
Cadmium	2.90E-06	2.61E-05							9	0.00037	0.00099	0.00070	0.0030
Chromium, hexavalent	3.50E-06	3.15E-05							8	0.00045	0.0012	0.00084	0.0037
Chromium (Total)	5.80E-06	5.22E-05							9	0.00074	0.0020	0.00139	0.0061
Cobalt	2.40E-07	2.16E-06							8	0.000031	0.00008	0.000058	0.00025
Lead	8.20E-06	7.38E-05							9	0.00105	0.0028	0.00197	0.0086
Manganese	2.70E-04	2.43E-03							9	0.034	0.092	0.065	0.28
Mercury	7.92E-07	7.13E-06							8	0.00010	0.00027	0.00019	0.00083
Nickel	1.40E-05	1.26E-04							9	0.00179	0.0048	0.00336	0.0147
Phosphorous	1.19E-04	1.07E-03							8	0.015	0.041	0.029	0.12
Selenium	7.30E-07	6.57E-06							9	0.00009	0.00025	0.00018	0.00077
Zinc	3.36E-04	3.02E-03							8	0.043	0.11	0.081	0.35
<i>Non-Hazardous/Non-Criteria Pollutants</i>													
Pollutant	Emission Factors								Calendar Year 2009		Potential Emissions		
	Fuel Combustion		Process Throughput		Permit Limits		Specifications		Actual Emissions		lb/hr	tpy	
	lb/MMBtu	lb/ton	lb/ODT	lb/Msf	lb/hr	tpy	ppm	Control Efficiency	Reference	lb/hr	tpy	lb/hr	tpy
Acetone	2.40E-04	2.16E-03	0.041						6, 8	0.15	0.40	0.25	1.09
Ammonia									20	6.35	17.01	6.88	30.15
Benzaldehyde	3.60E-06	3.24E-05							6	0.00046	0.0012	0.00086	0.0038

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Pollutant	Emission Factors								Calendar Year 2009		Potential Emissions ²		
	Fuel Combustion		Process Throughput		Permit Limits		Specifications		Actual Emissions ¹		lb/hr	tpy	
	lb/MMBtu	lb/ton	lb/ODT	lb/Msf	lb/hr	tpy	ppm	Control Efficiency	Reference	lb/hr			tpy
Benzoic Acid	2.76E-05	2.48E-04							6	0.0035	0.009	0.0066	0.029
Bis(2-Chloroisopropyl) ether	7.44E-07	6.70E-06							6	0.00010	0.00025	0.00018	0.00078
n-Butyraldehyde	7.32E-05	6.59E-04							6	0.009	0.025	0.018	0.077
Butylbenzylphthalate	1.56E-05	1.40E-04							6	0.0020	0.0053	0.0037	0.016
2-Chlorophenol	3.60E-08	3.24E-07							6	0.0000046	0.000012	0.0000086	0.000038
Copper	1.56E-05	1.40E-04							6	0.0020	0.0053	0.0037	0.016
Crotonaldehyde	1.32E-05	1.19E-04							6	0.0017	0.0045	0.0032	0.0139
p-Cymene	3.12E-06	2.81E-05							6	0.00	0.00	0.00	0.00
1,2-Dibromoethene	6.60E-05	5.94E-04							6	0.008	0.023	0.0158	0.0694
Diethylphthalate	5.28E-05	4.75E-04							6	0.0067	0.018	0.013	0.056
2,5-Dimethylbenzaldehyde	5.40E-05	4.86E-04							6	0.0069	0.018	0.013	0.057
Di-n-octyl Phthalate	1.32E-07	1.19E-06							6	0.000017	0.000045	0.000032	0.00014
Ethanol	8.16E-05	7.34E-04							6	0.010	0.028	0.020	0.086
Hexaldehyde	3.96E-05	3.56E-04							6	0.0051	0.014	0.0095	0.042
Isopropanol	3.60E-03	3.24E-02							6	0.46	1.23	0.86	3.78
Methyl ethyl ketone (2-Butanone)	1.08E-05	9.72E-05	0.0071				90%	6, 8	6	0.022	0.06	0.04	0.16
2-Nitrophenol	5.04E-08	4.54E-07							6	0.0000064	0.000017	0.000012	0.000053
alpha-Pinene	4.08E-07	3.67E-06							6	0.00	0.00	0.00	0.00
beta-Pinene	1.12E-03	1.00E-02							6	0.14	0.38	0.27	1.17
Silver	1.19E-06	1.07E-05							6	0.00015	0.00041	0.00029	0.0012
alpha-Terpineol	3.96E-07	3.56E-06							6	0.000051	0.00014	0.000095	0.00042
Thallium	2.28E-06	2.05E-05							6	0.00029	0.0008	0.00055	0.0024
o-Tolualdehyde	1.56E-04	1.40E-03							6	0.020	0.05	0.037	0.164
p-Tolualdehyde	1.10E-05	9.94E-05							6	0.0014	0.0038	0.0026	0.0116
Trichlorofluoromethane	4.92E-05	4.43E-04							6	0.0063	0.017	0.012	0.0517
Valeraldehyde	1.12E-04	1.00E-03							6	0.014	0.038	0.027	0.117

References

- 1 Particulate matter (PM or TSP), NO_x, CO, and VOC combustion/process emission factors based on tests conducted on the Wellons Energy/Dryer system at Mt. Hope on July 11, 2006. Conversion from lb/MMBtu to lb/ton of fuel is based on fuel heat content of 5,158 Btu/lb (as fired).
- 2 Particulate matter (PM or TSP), NO_x, CO, SO₂, VOC, and HCHO potential emissions based on current permit limits.
- 3 Sulfur dioxide fuel combustion emission factor obtained from *AP-42 Compilation of Air Emission Factors* (5th Ed.). Section 1.6, *Wood Residue Combustion in Boilers* (revised September 2003), Table 1.6-2, "Emission Factors for NO_x, SO₂ and CO from Wood Residue Combustion." Conversion from lb/MMBtu to lb/ton based on site-specific fuel heating value of 5,960 Btu/lb for moist and dry wood residuals.
- 4 Volatile organic compound (VOC) emissions based on permit limits, which were established on a "VOC as carbon basis."
- 5 Total Hazardous air pollutant (HAP) emissions derived as the sum of individual pollutants.
- 6 Fuel combustion emission factors selected from (1) NCASI Technical Bulletin No. 858, *Compilation of 'Air Toxic' and Total Hydrocarbon Emissions Data for Sources at Kraft, Sulfite and Non-Chemical Pulp Mills – An Update* (February 2003). Table 20A, "Summary of 'Air Toxic' Emissions from Wood-Fired Boilers." Median emission factor calculated with non-detect values (ND) set to one-half the detection limit or (2) U.S. EPA, *AP-42 Compilation of Air Emission Factors* (5th Ed.). Section 1.6, *Wood Residue Combustion in Boilers* (revised September 2003). Table 1.6-3, "Emission Factors for Speciated Organic Compounds, TOC, VOC, Nitrous Oxide, and Carbon Dioxide From Wood Residue Combustion."
- 7 Process emission factors based on median value from NCASI Wood Products Database 1-13-2010. Control efficiency only applied to the emisisions associated with the process contribution not the combustion related emissions.
- 8 U.S. EPA, *AP-42 Compilation of Air Emission Factors* (5th Ed.). Section 10.6.1, *Waferboard/Oriented Strandboard Manufacturing* (revised March 2002). Table 10.6.1-3, "Emission Factors for OSB Dryers - Organics." Rotary-dryer, wood-fired, hardwood, uncontrolled. Control efficiency only applied to the emisisions associated with the process contribution not the combustion related emissions.
- 9 Emission factors based on site-specific metals emissions testing, Mt. Hope OSB Plant, July 2006.
- 10 Filterable PM₁₀ and PM_{2.5} emissions assumed equal to TSP emissions.
- 11 Condensable PM emissions calculated based on results of stack tests at Brookneal using EPA Method 202, 1996 and 1997.
- 12 Total PM₁₀ = Filterable PM₁₀ + Condensable PM. Total PM_{2.5} = Filterable PM_{2.5} + Condensable PM.

C.5 – AUXILIARY THERMAL OIL HEATER

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: 3600	Emission unit name: Auxiliary Thermal Oil Heater	List any control devices associated with this emission unit: None
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Provide a description of the emission unit (type, method of operation, design parameters, etc.):
The auxiliary thermal oil heater is used to keep the thermal oil at required temperature during periods when the Wellons Energy System is down.

Manufacturer: Heatech	Model number:	Serial number:
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Construction date:	Installation date: 04/01/1995	Modification date(s):
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Design Capacity (examples: furnaces - tons/hr, tanks - gallons): 45 MMBtu/hr

Maximum Hourly Throughput: 45,000 cubic feet	Maximum Annual Throughput: 386.5 MMSCF/yr	Maximum Operating Schedule: 8760 hours
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If yes, is it? <input type="checkbox"/> Indirect Fired <input checked="" type="checkbox"/> Direct Fired
--	---

Maximum design heat input and/or maximum horsepower rating: 45 MMBtu/hr	Type and Btu/hr rating of burners: 45 MMBtu/hr
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List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Natural Gas – 45,000 CF/hr and 386.5 MMCF/yr

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
Natural Gas	Negligible	Negligible	1,020

Emissions Data See attached spreadsheet entitled "Auxiliary_Thermal_Oil_Heater_2600.xls"		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)	4.41	19.32
Nitrogen Oxides (NO _x)	3.71	16.23
Lead (Pb)	2.21E-05	9.66E-05
Particulate Matter (PM _{2.5})	0.34	1.47
Particulate Matter (PM ₁₀)	0.34	1.47
Total Particulate Matter (TSP)	0.34	1.47
Sulfur Dioxide (SO ₂)	0.03	0.12
Volatile Organic Compounds (VOC)	0.24	1.06
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

U.S. EPA, AP-42 Compilation of Air Emission Factors (5th Ed.). Section 1.4, Natural Gas Combustion (Revised September 1998). Tables 1.4-1, 1.4-2, 1.4-3, and 1.4-4.

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

PM, Opacity – R30-01900034-2006 SM01 – Condition 4.1.1 (45 CSR 2-3.1)
PM, – R30-01900034-2006 SM01– Condition 4.1.2 - 4.05 lbs/hr (45 CSR 2-4.1 and 4.1.b.)
SO₂ – R30-01900034-2006 SM01– Condition 4.1.3 (45 CSR 2-4.4)
Operation & Maintenance - R30-01900034-2006 SM01 – Condition 4.1.4 (45 CSR 2-9.1)
PM, Opacity – R30-01900034-2006 SM01 – Condition 4.1.5 (45 CSR 2-9.3)
SO₂ – R30-01900034-2006 SM01– Condition 4.1.6 – 144 lbs/hr (45 CSR 10-3.3.f)
Limit of Operation - R30-01900034-2006 SM01 – Condition 4.1.7 (45 CSR 13, Permit R13-1622, Condition 4.1.7)
40 CFR 60 Subpart Dc

___ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

PM, Opacity – R30-01900034-2006 SM01 – Condition 4.2.2 (45 CSR 2-3.2), Condition 4.3.1 (45 CSR 2-8.1.b), Condition 4.4.2 (45 CSR 30-5.1.c).

SO₂ – R30-01900034-2006 SM01 – Condition 4.2.1 (45 CSR 10-8.2.a); Condition 4.3.1 (45 CSR 2-8.1.b), Condition 4.4.2 (45 CSR 30-5.1.c).

Operation & Maintenance - R30-01900034-2006 SM01 – Condition 4.4.1 (45 CSR 2-8.3.c and 45 CSR 2A-7.1.a)

Limit of Operation - R30-01900034-2006 SM01 – Condition 4.4.3 (45 CSR 13, Permit R13-1622, Condition 4.3.5)

40 CFR 60 Subpart Dc - Condition 4.4.1 (45 CSR 2-8.3.c and 45 CSR 2A-7.1.a), Condition 4.4.2 (45 CSR 30-5.1.c), Condition 4.4.3 (45 CSR 13, Permit R13-1622, Condition 4.3.5)

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

Georgia-Pacific Wood Products LLC
Mt. Hope OSB Plant

Unit Name: Auxiliary Thermal Oil Heater
Emission Unit ID: 3600
Control Device ID: None
Unit Description: The auxiliary thermal oil heater is used on occasions when the Wellons Energy System is down and heat deamnd to the thermal oil loop is still required.

Actual Operating Parameters 2009 Calendar Year
Hours: 687 hours/year
Natural Gas Consumption: 9.0 MMscf/year

Potential Operating Parameters
Hours: 8,760 hours/year
Burner Heat Input: 45 MMBtu/hr
Natural Gas Heating Value: 1,020 Btu/scf
Natural Gas Consumption: 386.5 MMscf/year

<i>Criteria Air Pollutants</i>									
Pollutant	Emission Factors				Control Efficiency	Calendar Year 2009		Potential Emissions	
	Natural Gas	Permit Limits		Actual Emissions		Potential Emissions			
	lb/MMscf	lb/hr	tpy	Reference		lb/hr	tpy	lb/hr	tpy
TSP	7.6			1	0.10	0.034	0.34	1.47	
TPM10	7.6			1	0.10	0.034	0.34	1.47	
TPM2.5	7.6			1	0.10	0.034	0.34	1.47	
FPM10	1.9			1	0.02	0.0086	0.08	0.37	
FPM2.5	1.9			1	0.02	0.0086	0.08	0.37	
CPM	5.7			1	0.07	0.026	0.25	1.10	
CO	100			1	1.31	0.450	4.41	19.33	
NOX	84			1	1.10	0.378	3.71	16.23	
SO2	0.6			1	0.008	0.003	0.03	0.12	
VOC	5.5			1	0.07	0.025	0.24	1.06	
Total HAP				2	0.025	0.0085	0.083	0.36	
<i>Organic/Inorganic Hazardous Air Pollutants</i>									
Pollutant	Emission Factors				Control Efficiency	Calendar Year 2009		Potential Emissions	
	Natural Gas	Permit Limits		Actual Emissions		Potential Emissions			
	lb/MMscf	lb/hr	tpy	Reference		lb/hr	tpy	lb/hr	tpy
Benzene	0.00210			1	2.75E-05	9.45E-06	9.27E-05	4.06E-04	
Dichlorobenzene	0.00120			1	1.57E-05	5.40E-06	5.29E-05	2.32E-04	
Formaldehyde	0.0750			1	9.83E-04	3.38E-04	3.31E-03	1.45E-02	
Hexane	1.80			1	2.36E-02	8.10E-03	7.94E-02	3.48E-01	
Naphthalene	0.000610			1	7.99E-06	2.75E-06	2.69E-05	1.18E-04	
Toluene	0.00340			1	4.45E-05	1.53E-05	1.50E-04	6.57E-04	
<i>Trace Metal Hazardous Air Pollutants</i>									
Pollutant	Emission Factors				Control Efficiency	Calendar Year 2009		Potential Emissions	
	Natural Gas	Permit Limits		Actual Emissions		Potential Emissions			
	lb/MMscf	lb/hr	tpy	Reference		lb/hr	tpy	lb/hr	tpy
Arsenic	0.000200			1	2.62E-06	9.00E-07	8.82E-06	3.87E-05	
Cadmium	0.00110			1	1.44E-05	4.95E-06	4.85E-05	2.13E-04	
Chromium	0.00140			1	1.83E-05	6.30E-06	6.18E-05	2.71E-04	
Cobalt	0.0000840			1	1.10E-06	3.78E-07	3.71E-06	1.62E-05	
Lead	0.000500			1	6.55E-06	2.25E-06	2.21E-05	9.66E-05	
Manganese	0.000380			1	4.98E-06	1.71E-06	1.68E-05	7.34E-05	
Mercury	0.000260			1	3.41E-06	1.17E-06	1.15E-05	5.02E-05	
Nickel	0.00210			1	2.75E-05	9.45E-06	9.27E-05	4.06E-04	

References

- 1 U.S. EPA, *AP-42 Compilation of Air Emission Factors (5th Ed.)* . Section 1.4, Natural Gas Combustion (Revised September 1998). Tables 1.4-1, 1.4-2, 1.4-3, and 1.4-4.
- 2 Total Hazardous air pollutant (HAP) emissions derived as the sum of individual pollutants.

C.6 – SCREEN FINES TRANSFER

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: 8960	Emission unit name: Screen Fines Transfer System	List any control devices associated with this emission unit: FF7
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Provide a description of the emission unit (type, method of operation, design parameters, etc.):

The baghouse collects the material generated from the drum screening operation for deposition into the dry fuel silo for use as fuel in the Wellons Energy System.

Manufacturer:	Model number:	Serial number:
Construction date:	Installation date: 04/26/1999	Modification date(s):

Design Capacity (examples: furnaces - tons/hr, tanks - gallons):
7.9 tons/hr

Maximum Hourly Throughput: 7.9 tons/hr	Maximum Annual Throughput: 69,400 tons/yr	Maximum Operating Schedule: 8760 hours/yr
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If yes, is it? <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired
--	--

Maximum design heat input and/or maximum horsepower rating:	Type and Btu/hr rating of burners:
--	---

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

Emissions Data See attached spreadsheet entitled "Screen_Fines_Transfer_FF7.xls"		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)		
Nitrogen Oxides (NO _x)		
Lead (Pb)		
Particulate Matter (PM _{2.5})	1.13	4.95
Particulate Matter (PM ₁₀)	1.13	4.95
Total Particulate Matter (TSP)	1.13	4.95
Sulfur Dioxide (SO ₂)		
Volatile Organic Compounds (VOC)		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

TSP is based on current permit limit that reflects filterable particulate only.

Filterable PM10 and PM2.5 emissions assumed equal to TSP emissions.

Total PM10 = Filterable PM10 + Condensable PM. Total PM2.5 = Filterable PM2.5 + Condensable PM.

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

PM – R30-01900034-2006 SM01 – Condition 7.1.1 – 13.5 lbs/hr (45 CSR 7-4.1); 1.13 lbs/hr/4.95 tpy (Permit No. R13-2261, Condition A.1, B.3)
Malfunction - R30-01900034-2006 SM01 – Condition 7.1.4 (45 CSR 7-9)
40 CFR 63 Subpart DDDD – Included as part of the source category but no applicable requirements.

Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

PM – R30-01900034-2006 SM01 – Condition 7.2.1 (45 CSR 30-5.1.c., Permit No. R13-2261, Condition A.3); Condition 7.3.1 (45 CSR 13)
Malfunction - R30-01900034-2006 SM01 – Condition 7.2.1 (45 CSR 30-5.1.c., Permit No. R13-2261, Condition A.3)

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the **Schedule of Compliance Form** as ATTACHMENT F.

ATTACHMENT G - Air Pollution Control Device Form

Control device ID number: FF7	List all emission units associated with this control device. Screen Fines Transfer System (Emission Unit ID 8960)
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Manufacturer: Pneumafil	Model number: 11.5-224-8	Installation date: 04/26/1999
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Type of Air Pollution Control Device:

<input checked="" type="checkbox"/> Baghouse/Fabric Filter	<input type="checkbox"/> Venturi Scrubber	<input type="checkbox"/> Multiclone
<input type="checkbox"/> Carbon Bed Adsorber	<input type="checkbox"/> Packed Tower Scrubber	<input type="checkbox"/> Single Cyclone
<input type="checkbox"/> Carbon Drum(s)	<input type="checkbox"/> Other Wet Scrubber	<input type="checkbox"/> Cyclone Bank
<input type="checkbox"/> Catalytic Incinerator	<input type="checkbox"/> Condenser	<input type="checkbox"/> Settling Chamber
<input type="checkbox"/> Thermal Incinerator	<input type="checkbox"/> Flare	<input type="checkbox"/> Other (describe) _____
<input type="checkbox"/> Wet Plate Electrostatic Precipitator	<input type="checkbox"/> Dry Plate Electrostatic Precipitator	

List the pollutants for which this device is intended to control and the capture and control efficiencies.

Pollutant	Capture Efficiency	Control Efficiency
PM	100%	99.9%

Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).
 Gas Flow Rate 13,200 acfm
 Pressure Drop 4.0" water
 Air to Cloth Ratio 8:1
 Total Cloth Area 1650 sq. ft.
 Number of Bags 309
 Ambient Temperature

Is this device subject to the CAM requirements of 40 C.F.R. 64? Yes No

If Yes, **Complete ATTACHMENT H**

If No, **Provide justification.** The baghouse collects the material generated from the drum screening operation and is considered inherent process equipment since it is required for the process to operate properly. As such, it is not subject to CAM requirements.

Describe the parameters monitored and/or methods used to indicate performance of this control device.
 Differential Pressure
 Method 22

Georgia-Pacific Wood Products LLC
Mt. Hope OSB Plant

Unit Name: Screen Fines Transfer
Emission Unit ID: 8960
Control Device ID: FF7

Unit Description: This baghouse is a materials handling unit which collects material from the drum screening operation. The collected material is deposited in the Dry Fuel Silo.

Actual Operating Parameters	2009	Calendar Year	Potential Operating Parameters		
Hours:	5,355	hours/year	Hours:	8,760	hours/year
Exhaust Air Flow:	13,200	dscfm	Exhaust Air Flow:	13,200	dscfm
Facility OSB Production:	40.4	Msf/hour (3/8" Basis)	Facility OSB Production:	57.7	Msf/hour (3/8" Basis)
Facility OSB Production:	216.3	MMSf/year (3/8" Basis)	Facility OSB Production:	438	MMSf/yr (3/8" Basis)

<i>Criteria Air Pollutants</i>									
Pollutant	Emission Factor	Permit Limits		Control Efficiency	Reference	Calendar Year		Potential Emissions	
		lbs/hr	tpy			Actual Emissions		lb/hr	tpy
						lb/hr	tpy		
TSP	0.01 gr/dscf	1.13	4.95	99.9%	1	1.13	3.02	1.13	4.95
TPM10					3	1.13	3.02	1.13	4.95
TPM2.5					3	1.13	3.02	1.13	4.95
FPM10	0.01 gr/dscf			99.9%	2	1.13	3.02	1.13	4.95
FPM2.5	0.01 gr/dscf			99.9%	2	1.13	3.02	1.13	4.95
CPM									

References

- 1 The current permit limit reflects filterable particulate only.
- 2 Filterable PM10 and PM2.5 emissions assumed equal to TSP emissions.
- 3 Total PM10 = Filterable PM10 + Condensable PM. Total PM2.5 = Filterable PM2.5 + Condensable PM.

C.7 – SCREENING BUILDING DEDUST

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: 8970	Emission unit name: Screening Building Dedust	List any control devices associated with this emission unit: FF8
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Provide a description of the emission unit (type, method of operation, design parameters, etc.):

The baghouse collects the material generated from the screening operation dedust system for deposition into the dry fuel silo for use as fuel in the Wellons Energy System.

Manufacturer:	Model number:	Serial number:
Construction date:	Installation date: 02/25/1999	Modification date(s):

Design Capacity (examples: furnaces - tons/hr, tanks - gallons):
2.7 tons/hr

Maximum Hourly Throughput: 2.7 tons/hr	Maximum Annual Throughput: 23,650 tons/yr	Maximum Operating Schedule: 8760 hours/yr
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? ___ Yes <u> X </u> No	If yes, is it? ___ Indirect Fired ___ Direct Fired
--	--

Maximum design heat input and/or maximum horsepower rating:	Type and Btu/hr rating of burners:
--	---

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

Emissions Data See attached spreadsheet entitled "Screening_Building_Dedust_FF8.xls"		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)		
Nitrogen Oxides (NO _x)		
Lead (Pb)		
Particulate Matter (PM _{2.5})	0.62	2.70
Particulate Matter (PM ₁₀)	0.62	2.70
Total Particulate Matter (TSP)	0.62	2.70
Sulfur Dioxide (SO ₂)		
Volatile Organic Compounds (VOC)		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

TSP is based on current permit limit that reflects filterable particulate only.

Filterable PM10 and PM2.5 emissions assumed equal to TSP emissions.

Total PM10 = Filterable PM10 + Condensable PM. Total PM2.5 = Filterable PM2.5 + Condensable PM.

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

PM – R30-01900034-2006 SM01 – Condition 7.1.1 –5.4 lbs/hr (45 CSR 7-4.1); 0.62 lbs/hr/2.72 tpy (Permit No. R13-2261, Condition A.1, B.3)
Malfunction - R30-01900034-2006 SM01 – Condition 7.1.4 (45 CSR 7-9)
40 CFR 63 Subpart DDDD – Included as part of the source category but no applicable requirements.

Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

PM – R30-01900034-2006 SM01 – Condition 7.2.1 (45 CSR 30-5.1.c., Permit No. R13-2261, Condition A.3); Condition 7.3.1 (45 CSR 13)
Malfunction - R30-01900034-2006 SM01 – Condition 7.2.1 (45 CSR 30-5.1.c., Permit No. R13-2261, Condition A.3)

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the **Schedule of Compliance Form** as ATTACHMENT F.

ATTACHMENT G - Air Pollution Control Device Form

Control device ID number: FF8	List all emission units associated with this control device. Screen Building Dedust System (Emission Unit ID 8970)
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Manufacturer: MAC	Model number: 99AVS64	Installation date: 02/05/1999
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Type of Air Pollution Control Device:

<input checked="" type="checkbox"/> Baghouse/Fabric Filter	<input type="checkbox"/> Venturi Scrubber	<input type="checkbox"/> Multiclone
<input type="checkbox"/> Carbon Bed Adsorber	<input type="checkbox"/> Packed Tower Scrubber	<input type="checkbox"/> Single Cyclone
<input type="checkbox"/> Carbon Drum(s)	<input type="checkbox"/> Other Wet Scrubber	<input type="checkbox"/> Cyclone Bank
<input type="checkbox"/> Catalytic Incinerator	<input type="checkbox"/> Condenser	<input type="checkbox"/> Settling Chamber
<input type="checkbox"/> Thermal Incinerator	<input type="checkbox"/> Flare	<input type="checkbox"/> Other (describe) _____
<input type="checkbox"/> Wet Plate Electrostatic Precipitator	<input type="checkbox"/> Dry Plate Electrostatic Precipitator	

List the pollutants for which this device is intended to control and the capture and control efficiencies.

Pollutant	Capture Efficiency	Control Efficiency
PM	100%	99.9%

Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).
 Gas Gas Flow Rate 7,200 acfm
 Pressure Drop 5.0" water
 Air to Cloth Ratio 8.5:1
 Total Cloth Area 850 sq. ft.
 Number of Bags 64
 Ambient Temperature

Is this device subject to the CAM requirements of 40 C.F.R. 64? Yes No

If Yes, **Complete ATTACHMENT H**

If No, **Provide justification.** The baghouse collects the material generated from the dedust operation in the screening building and is considered inherent process equipment since it is required for the process to operate safely. As such, it is not subject to CAM requirements.

Describe the parameters monitored and/or methods used to indicate performance of this control device.
 Differential Pressure
 Method 22

Georgia-Pacific Wood Products LLC
Mt. Hope OSB Plant

Unit Name: Screening Building Dedust
Emission Unit ID: 8970
Control Device ID: FF7

Unit Description: This baghouse is a materials handling unit which collects material from the screening dedust operation. The collected material is deposited in the Dry Fuel Silo.

Actual Operating Parameters	2009	Calendar Year	Potential Operating Parameters		
Hours:	5,355	hours/year	Hours:	8,760	hours/year
Exhaust Air Flow:	7,200	dscfm	Exhaust Air Flow:	7,200	dscfm
Facility OSB Production:	40.4	Msf/hour (3/8" Basis)	Facility OSB Production:	57.7	Msf/hour (3/8" Basis)
Facility OSB Production:	216.3	MMsf/year (3/8" Basis)	Facility OSB Production:	438	MMsf/yr (3/8" Basis)

<i>Criteria Air Pollutants</i>									
Pollutant	Emission Factor	Permit Limits		Control Efficiency	Reference	Calendar Year Actual Emissions		Potential Emissions	
		lbs/hr	tpy			lb/hr	tpy	lb/hr	tpy
		TSP	0.01 gr/dscf			0.62	2.72	99.9%	1
TPM10					3	0.62	1.65	0.62	2.70
TPM2.5					3	0.62	1.65	0.62	2.70
FPM10	0.01 gr/dscf			99.9%	2	0.62	1.65	0.62	2.70
FPM2.5	0.01 gr/dscf			99.9%	2	0.62	1.65	0.62	2.70
CPM									

References

- 1 The current permit limit reflects filterable particulate only.
- 2 Filterable PM10 and PM2.5 emissions assumed equal to TSP emissions.
- 3 Total PM10 = Filterable PM10 + Condensable PM. Total PM2.5 = Filterable PM2.5 + Condensable PM.

C.8 – BLENDERS

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: 6000	Emission unit name: Blenders	List any control devices associated with this emission unit: None
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Provide a description of the emission unit (type, method of operation, design parameters, etc.):

The dried flakes are transferred from the flake storage bins into blenders where they are mixed with resin and wax prior to being formed into a mat on the forming line.

Manufacturer: CAE	Model number:	Serial number:
-----------------------------	----------------------	-----------------------

Construction date:	Installation date: 04/01/1995	Modification date(s):
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Design Capacity (examples: furnaces - tons/hr, tanks - gallons):
46.5 OD tons/hr - OD is "oven dried"

Maximum Hourly Throughput: 46.5 OD tons/hr	Maximum Annual Throughput: 407,340 OD tons/yr	Maximum Operating Schedule: 8760 hours/yr
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? ___ Yes <u> X </u> No	If yes, is it? ___ Indirect Fired ___ Direct Fired
--	--

Maximum design heat input and/or maximum horsepower rating:	Type and Btu/hr rating of burners:
--	---

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

Emissions Data See attached spreadsheet entitled "Blenders_6000.xls"		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)		
Nitrogen Oxides (NO _x)		
Lead (Pb)		
Particulate Matter (PM _{2.5})	0.12	0.51
Particulate Matter (PM ₁₀)	0.12	0.51
Total Particulate Matter (TSP)		
Sulfur Dioxide (SO ₂)		
Volatile Organic Compounds (VOC)	9.23	35.0
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Formaldehyde	0.21	0.79
Methanol	3.64	13.8
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

U.S. EPA, AP-42 Compilation of Air Emission Factors (5th Ed.). Section 10.6.1, Waferboard/Oriented Strandboard Manufacturing (revised March 2002). Table 10.6.1-7, "Emission Factors for OSB Miscellaneous Sources."
Blender, uncontrolled, VOC as propane.

NCASI Wood Products Emission Factor Database, January 2010. Median emission factor, plus 20% compliance margin, for condensable PM emissions from OSB blenders with any PM control option.

Total PM10 = Filterable PM10 + Condensable PM. Total PM2.5 = Filterable PM2.5 + Condensable PM.

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

45 CSR 7-4.1 - 32.7 lbs/hr

40 CFR 63 Subpart DDDD – Included as part of the source category but no applicable requirements.

Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

PM – R30-01900034-2006 SM01 - Condition 7.2.3. (45 CSR 30-5.1.c)

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the **Schedule of Compliance Form** as ATTACHMENT F.

Georgia-Pacific Wood Products LLC
Mt. Hope OSB Plant

Unit Name: Blenders
Emission Unit ID: 6000
Control Device ID: None
Unit Description: Flakes from the dryers are conveyed to the blenders where the resin and wax are added prior to the flakes being formed into a mat.

Actual Operating Parameters	2009	Calendar Year	Potential Operating Parameters		
Hours:	4,520	hours/year	Hours:	8,760	hours/year
Facility OSB Production:	216.3	MMSf/year (3/8" Basis)	Facility OSB Production:	57.7	Msf/hour (3/8" Basis)
Facility OSB Production:	34.8	ODT/hour	Facility OSB Production:	438.0	MMSf/year (3/8" Basis)
Facility OSB Production:	157,106	ODT/year	Facility OSB Production:	46.5	ODT/hour
			Facility OSB Production:	407,340	ODT/year

<i>Criteria Air Pollutants</i>									
Pollutant	Emission Factor	Permit Limits		Control Efficiency	Reference	Calendar Year 2009 Actual Emissions		Potential Emissions	
		lb/hr	tpy			lb/hr	tpy	lb/hr	tpy
TSP	--								
TPM10	0.00248 lb/ODT				4	0.086	0.19	0.12	0.51
TPM2.5	0.00248 lb/ODT				4	0.086	0.19	0.12	0.51
FPM10	--								
FPM2.5	--								
CPM	0.00248 lb/ODT				3	0.086	0.19	0.12	0.51
VOC	0.16 lb/Msf				1	7.66	17.30	9.23	35.04
Total HAP					2	3.19	7.20	3.84	14.59
<i>Organic Hazardous Air Pollutants</i>									
Pollutant	Emission Factor	Permit Limits		Control Efficiency	Reference	Calendar Year 2009 Actual Emissions		Potential Emissions	
		lb/Msf	lb/hr			tpy	lb/hr	tpy	lb/hr
Formaldehyde	0.0036				1	0.17	0.39	0.21	0.79
Methanol	0.063				1	3.01	6.81	3.64	13.80
<i>Non-Criteria/Non-Hazardous Air Pollutants</i>									
Pollutant	Emission Factor	Permit Limits		Control Efficiency	Reference	Calendar Year 2009 Actual Emissions		Potential Emissions	
		lb/Msf	lb/hr			tpy	lb/hr	tpy	lb/hr
Acetone	0.0018				1	0.09	0.19	0.10	0.39
alpha-Pinene	0.064				1	3.06	6.92	3.69	14.02
beta-Pinene	0.019				1	0.91	2.05	1.10	4.16

References

- 1 U.S. EPA, *AP-42 Compilation of Air Emission Factors* (5th Ed.). Section 10.6.1, *Waferboard/Oriented Strandboard Manufacturing* (revised March 2002). Table 10.6.1-7, "Emission Factors for OSB Miscellaneous Sources." Blender, uncontrolled, VOC as propane
- 2 Total Hazardous air pollutant (HAP) emissions derived as the sum of individual pollutants.
- 3 NCASI Wood Products Emission Factor Database, January 2010. Median emission factor, plus 20% compliance margin, for condensable PM emissions from OSB blenders with any PM control option.
- 4 Total PM10 = Filterable PM10 + Condensable PM. Total PM2.5 = Filterable PM2.5 + Condensable PM.

C.9 – FORMING LINE DEDUST

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: 6800	Emission unit name: Forming Line Dedust	List any control devices associated with this emission unit: FF2
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Provide a description of the emission unit (type, method of operation, design parameters, etc.):

Material and dust generated during the forming process is collected in a process cyclone whose exhaust is controlled by a baghouse. The material collected in the baghouse and cyclone are pneumatically conveyed to the dry fuel silo for use as fuel in the Wellons Energy System.

Manufacturer:	Model number:	Serial number:
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Construction date:	Installation date: 04/01/1995	Modification date(s):
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Design Capacity (examples: furnaces - tons/hr, tanks - gallons):
57.7 MSF/hr

Maximum Hourly Throughput: 57.7 MSF/hr	Maximum Annual Throughput: 438 MMSF/hr	Maximum Operating Schedule: 8760 hours/yr
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? ___ Yes <u> X </u> No	If yes, is it? ___ Indirect Fired ___ Direct Fired
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Maximum design heat input and/or maximum horsepower rating:	Type and Btu/hr rating of burners:
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List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

Emissions Data See attached spreadsheet entitled "Forming_Line_Dedust_FF2.xls"		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)		
Nitrogen Oxides (NO _x)		
Lead (Pb)		
Particulate Matter (PM _{2.5})	1.23	5.38
Particulate Matter (PM ₁₀)	1.23	5.38
Total Particulate Matter (TSP)	1.03	4.51
Sulfur Dioxide (SO ₂)		
Volatile Organic Compounds (VOC)		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

TSP is based on current permit limit that reflects filterable particulate only.

Filterable PM10 and PM2.5 emissions assumed equal to TSP emissions.

NCASI Wood Products Emission Factor Database, January 2010. Median emission factor, plus 20% compliance margin, for condensable PM emissions from OSB saws.

Total PM10 = Filterable PM10 + Condensable PM. Total PM2.5 = Filterable PM2.5 + Condensable PM.

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

PM – R30-01900034-2006 SM01 – Condition 7.1.1 – 31.8 lbs/hr (45 CSR 7-4.1); 1.03 lbs/hr (Permit No. R13-1622, Condition 4.1.1)
Malfunction - R30-01900034-2006 SM01 – Condition 7.1.4 (45 CSR 7-9)
40 CFR 63 Subpart DDDD – Included as part of the source category but no applicable requirements.

Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

PM – R30-01900034-2006 SM01 – Condition 7.2.1 (45 CSR 30-5.1.c.); Condition 7.3.1 (45 CSR 13)
Malfunction - R30-01900034-2006 SM01 – Condition 7.2.1 (45 CSR 30-5.1.c.)

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the **Schedule of Compliance Form** as ATTACHMENT F.

ATTACHMENT G - Air Pollution Control Device Form

Control device ID number: FF2	List all emission units associated with this control device. Forming Line Dedust (Emission Unit ID 6800)
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Manufacturer: MAC	Model number: 93-FMCF-11-008	Installation date: 06/01/1995
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Type of Air Pollution Control Device:

<input checked="" type="checkbox"/> Baghouse/Fabric Filter	<input type="checkbox"/> Venturi Scrubber	<input type="checkbox"/> Multiclone
<input type="checkbox"/> Carbon Bed Adsorber	<input type="checkbox"/> Packed Tower Scrubber	<input type="checkbox"/> Single Cyclone
<input type="checkbox"/> Carbon Drum(s)	<input type="checkbox"/> Other Wet Scrubber	<input type="checkbox"/> Cyclone Bank
<input type="checkbox"/> Catalytic Incinerator	<input type="checkbox"/> Condenser	<input type="checkbox"/> Settling Chamber
<input type="checkbox"/> Thermal Incinerator	<input type="checkbox"/> Flare	<input type="checkbox"/> Other (describe) _____
<input type="checkbox"/> Wet Plate Electrostatic Precipitator	<input type="checkbox"/> Dry Plate Electrostatic Precipitator	

List the pollutants for which this device is intended to control and the capture and control efficiencies.

Pollutant	Capture Efficiency	Control Efficiency
PM	100%	99.9%

Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).
 Gas Flow Rate 24,000 acfm
 Pressure Drop 4.0" water
 Total Cloth Area 5577 sq. ft.
 Number of Bags 419
 Ambient Temperature

Is this device subject to the CAM requirements of 40 C.F.R. 64? Yes No

If Yes, **Complete ATTACHMENT H**

If No, **Provide justification.** The baghouse controls emissions from the material collection cyclone which is considered inherent process equipment since it is required for the process to operate properly. As such, the potential to emit would be those emissions resulting from the cyclone. Cyclone emissions are estimated based on the highest exit loading contained in AP-42 for any material handling cyclone (0.055gr/scf). At a flow rate of 24,000 acfm, emission exiting the cyclone exhaust would be 11.3 lbs/hr or 49.5 tons/yr which is less than the CAM threshold.

Describe the parameters monitored and/or methods used to indicate performance of this control device.
 Differential Pressure
 Method 22

Georgia-Pacific Wood Products LLC
Mt. Hope OSB Plant

Unit Name: Forming Area Baghouse

Emission Unit ID: 6800

Control Device ID: FF2

Unit Description: This baghouse is a materials handling unit which collects the light fraction from the dedust cyclone in the forming area, and sends the collected material to the Dry Fuel Cyclone (Emission Unit ID 8950) for deposition into the dry fuel storage bin.

Actual Operating Parameters

	2009	Calendar Year
Hours:	4,520	hours/year
Exhaust Air Flow:	24,000	dscfm
Facility OSB Production:	47.9	Msf/hour (3/8" Basis)
Facility OSB Production:	216.3	MMSf/year (3/8" Basis)

Potential Operating Parameters

Hours:	8,760	hours/year
Exhaust Air Flow:	24,000	dscfm
Facility OSB Production:	57.7	Msf/hour (3/8" Basis)
Facility OSB Production:	438	MMSf/yr (3/8" Basis)

<i>Criteria Air Pollutants</i>									
Pollutant	Emission Factor	Permit Limits		Control Efficiency	Reference	Calendar Year 2009		Potential Emissions	
		lbs/hr	tpy			Actual Emissions		lb/hr	tpy
						lb/hr	tpy		
TSP	0.005 gr/dscf	1.03		99.9%	1	1.03	2.32	1.03	4.51
TPM10					4	1.20	2.70	1.23	5.38
TPM2.5					4	1.20	2.70	1.23	5.38
FPM10	0.005 gr/dscf			99.9%	2	1.03	2.32	1.03	4.51
FPM2.5	0.005 gr/dscf			99.9%	2	1.03	2.32	1.03	4.51
CPM	0.00348 lb/Msf				3	0.17	0.38	0.20	0.88

References

- 1 The current permit limit reflects filterable particulate only.
- 2 Filterable PM10 and PM2.5 emissions assumed equal to TSP emissions.
- 3 NCASI Wood Products Emission Factor Database, January 2010. Median emission factor, plus 20% compliance margin, for condensable PM emissions from OSB former with any PM control option.
- 4 Total PM10 = Filterable PM10 + Condensable PM. Total PM2.5 = Filterable PM2.5 + Condensable PM.

C.10 – MAT TRIM

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: 6900	Emission unit name: Mat Trim System	List any control devices associated with this emission unit: FF3
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Provide a description of the emission unit (type, method of operation, design parameters, etc.):

Material generated during the mat cross cut process is collected in a process cyclone whose exhaust is controlled by a baghouse. The material collected in the baghouse and cyclone is returned to the process for reuse.

Manufacturer:	Model number:	Serial number:
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Construction date:	Installation date: 04/01/1995	Modification date(s):
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Design Capacity (examples: furnaces - tons/hr, tanks - gallons):
57.7 MSF/hr

Maximum Hourly Throughput: 57.7 MSF/hr	Maximum Annual Throughput: 438 MMSF/hr	Maximum Operating Schedule: 8760 hours/yr
--	--	---

Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? ___ Yes <u> X </u> No	If yes, is it? ___ Indirect Fired ___ Direct Fired
--	--

Maximum design heat input and/or maximum horsepower rating:	Type and Btu/hr rating of burners:
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List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

Emissions Data See attached spreadsheet entitled "Mat_Trim_FF3.xls"		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)		
Nitrogen Oxides (NO _x)		
Lead (Pb)		
Particulate Matter (PM _{2.5})	0.59	2.57
Particulate Matter (PM ₁₀)	0.59	2.57
Total Particulate Matter (TSP)	0.59	2.57
Sulfur Dioxide (SO ₂)		
Volatile Organic Compounds (VOC)		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

TSP is based on current permit limit that reflects filterable particulate only.

Filterable PM10 and PM2.5 emissions assumed equal to TSP emissions.

Total PM10 = Filterable PM10 + Condensable PM. Total PM2.5 = Filterable PM2.5 + Condensable PM.

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

PM – R30-01900034-2006 SM01 – Condition 7.1.1 – 31.8 lbs/hr (45 CSR 7-4.1); 0.59 lbs/hr (Permit No. R13-1622, Condition 4.1.1)
Malfunction - R30-01900034-2006 SM01 – Condition 7.1.4 (45 CSR 7-9)
40 CFR 63 Subpart DDDD – Included as part of the source category but no applicable requirements.

Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

PM – R30-01900034-2006 SM01 – Condition 7.2.1 (45 CSR 30-5.1.c.); Condition 7.3.1 (45 CSR 13)
Malfunction - R30-01900034-2006 SM01 – Condition 7.2.1 (45 CSR 30-5.1.c.)

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the **Schedule of Compliance Form** as ATTACHMENT F.

ATTACHMENT G - Air Pollution Control Device Form

Control device ID number: FF3	List all emission units associated with this control device. Mat Trim System (Emission Unit ID 6900)
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Manufacturer: MAC	Model number: 93-FMCF-11-009	Installation date: 06/01/1995
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Type of Air Pollution Control Device:

<input checked="" type="checkbox"/> Baghouse/Fabric Filter	<input type="checkbox"/> Venturi Scrubber	<input type="checkbox"/> Multiclone
<input type="checkbox"/> Carbon Bed Adsorber	<input type="checkbox"/> Packed Tower Scrubber	<input type="checkbox"/> Single Cyclone
<input type="checkbox"/> Carbon Drum(s)	<input type="checkbox"/> Other Wet Scrubber	<input type="checkbox"/> Cyclone Bank
<input type="checkbox"/> Catalytic Incinerator	<input type="checkbox"/> Condenser	<input type="checkbox"/> Settling Chamber
<input type="checkbox"/> Thermal Incinerator	<input type="checkbox"/> Flare	<input type="checkbox"/> Other (describe) _____
<input type="checkbox"/> Wet Plate Electrostatic Precipitator	<input type="checkbox"/> Dry Plate Electrostatic Precipitator	

List the pollutants for which this device is intended to control and the capture and control efficiencies.

Pollutant	Capture Efficiency	Control Efficiency
PM	100%	99.9%

Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).
 Gas Flow Rate 13,700 acfm
 Pressure Drop 4.0" water
 Total Cloth Area 1597 sq. ft.
 Number of Bags 120
 Ambient Temperature

Is this device subject to the CAM requirements of 40 C.F.R. 64? Yes No

If Yes, **Complete ATTACHMENT H**

If No, **Provide justification.** The baghouse controls emissions from the material collection cyclone which is considered inherent process equipment since it is required for the process to operate properly. As such, the potential to emit would be those emissions resulting from the cyclone. Cyclone emissions are estimated based on the highest exit loading contained in AP-42 for any material handling cyclone (0.055gr/scf). At a flow rate of 13,700 acfm, emissions exiting the cyclone exhaust would be 6.5 lbs/hr or 28.5 tons/yr which is less than the CAM threshold.

Describe the parameters monitored and/or methods used to indicate performance of this control device.
 Differential Pressure
 Method 22

Georgia-Pacific Wood Products LLC
Mt. Hope OSB Plant

Unit Name: Mat Trim Baghouse

Emission Unit ID: 6900

Control Device ID: FF3

Unit Description: This baghouse is a materials handling unit which collects the exhaust material from the mat trim cyclone in the forming area. The collected material from the cyclone and baghouse is returned to the process (core former).

Actual Operating Parameters

	2009	Calendar Year
Hours:	4,520	hours/year
Exhaust Air Flow:	13,700	dscfm
Facility OSB Production:	47.9	Msf/hour (3/8" Basis)
Facility OSB Production:	216.3	MMsf/year (3/8" Basis)

Potential Operating Parameters

Hours:	8,760	hours/year
Exhaust Air Flow:	13,700	dscfm
Facility OSB Production:	57.7	Msf/hour (3/8" Basis)
Facility OSB Production:	438	MMsf/yr (3/8" Basis)

<i>Criteria Air Pollutants</i>									
Pollutant	Emission Factor	Permit Limits		Control Efficiency	Reference	Calendar Year Actual Emissions		Potential Emissions	
		lbs/hr	tpy			lb/hr	tpy	lb/hr	tpy
		TSP	0.005 gr/dscf			1.03		99.9%	1
TPM10					3	0.59	1.33	0.59	2.57
TPM2.5					3	0.59	1.33	0.59	2.57
FPM10	0.005 gr/dscf			99.9%	2	0.59	1.33	0.59	2.57
FPM2.5	0.005 gr/dscf			99.9%	2	0.59	1.33	0.59	2.57
CPM									

References

- 1 The current permit limit reflects filterable particulate only.
- 2 Filterable PM10 and PM2.5 emissions assumed equal to TSP emissions.
- 3 Total PM10 = Filterable PM10 + Condensable PM. Total PM2.5 = Filterable PM2.5 + Condensable PM.

C.11 – BOARD PRESS

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: 7890	Emission unit name: OSB Press	List any control devices associated with this emission unit: None Regenerative Thermal Oxidizer/Regenerative Catalytic Oxidizer (RTO/RCO)
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Provide a description of the emission unit (type, method of operation, design parameters, etc.):

The forming line produces an 8' wide mat by depositing the flakes in layers that are oriented at right angles. Once the proper thickness of mat is created, it is cut into 24' lengths and conveyed to the pressing operation (Emissions Unit ID 7890) where under heat and pressure the mat is compressed into a board. Pollutants (PM, VOC, HAPs) generated from the pressing operation will be controlled by a Regenerative Thermal Oxidizer/Regenerative Catalytic Oxidizer (RTO/RCO).

Manufacturer: Washington Iron Works	Model number:	Serial number:
Construction date:	Installation date: 04/01/1995	Modification date(s):

Design Capacity (examples: furnaces - tons/hr, tanks - gallons):

57.7 MSF/hr (3/8" Basis)

Maximum Hourly Throughput: 57.7 MSF/hr (3/8" Basis)	Maximum Annual Throughput: 438 MMSF/hr (3/8" Basis)	Maximum Operating Schedule: 8760 hours
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If yes, is it? <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired
Maximum design heat input and/or maximum horsepower rating:	Type and Btu/hr rating of burners:

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

Emissions Data See attached spreadsheet entitled "Board_Press_7890.xls"		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)	24.80	94.2
Nitrogen Oxides (NO _x)	7.50	28.5
Lead (Pb)	0.0000044	0.000019
Particulate Matter (PM _{2.5})	13.3	50.4
Particulate Matter (PM ₁₀)	13.3	50.4
Total Particulate Matter (TSP)	12.1	46.0
Sulfur Dioxide (SO ₂)	0.0053	0.023
Volatile Organic Compounds (VOC)	3.7	14.2
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
See attached spreadsheet		
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
<p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>See attached spreadsheet (Board_Press_7890.xls) for the references to the various sources used to calculate emissions from this source.</p>		

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

40 CFR 63 Subpart DDDD – R30-01900034-2006 SM01 – Condition 3.1.19 (40 CFR 62.2250(a) and (b), Permit No. R13-1622, Condition 4.1.12); Condition 3.1.20 (40 CFR 62.2250(c), Permit No. R13-1622, Condition 4.1.12); Condition 3.4.7 (40 CFR 63.2282(a), (b), and (e); 45CSR34; 45CSR13, Permit No. R13-1622 (Condition 4.1.12.); Condition – 3.4.8 (40 CFR 63.2283(a), (b), and (c); 45CSR34; 45CSR13, Permit No. R13-1622 (Condition 4.1.12.); Condition 3.5.10 (40 CFR 63.2280(g)(1) and (g)(3); 45CSR34; 45CSR13, Permit No. R13-1622 (Condition 4.1.12.); Condition 3.5.11 (40 CFR 63.2281(a), (c), (d), (e), and (g), and §63.2271(b); 45CSR34; 45CSR13, Permit No. R13-1622 (Condition 4.1.12.); Condition 3.5.12 (40 CFR 63.2281(b); 45CSR34; 45CSR13, Permit No. R13-1622 (Condition 4.1.12.); Condition 3.5.13 (40 CFR 63.2281(a); 45CSR34; 45CSR13, Permit No. R13-1622 (Condition 4.1.12.); Condition 6.1.6 (40 CFR 63.2240(b) and 63.2262(l)(2); 45CSR34; 45CSR13, Permit No. R13-1622 (Condition 4.1.12. and 4.1.14); Condition 6.1.8 (40 CFR 63.2251(a),(b)(2), (c), (d), and (e); 45CSR34; 45CSR13, Permit No. R13-1622 (Condition 4.1.12.);

PM – R30-01900034-2006 SM01– Condition 6.1.1 (45CSR7-4.1)

Limit of Operation - R30-01900034-2006 SM01 – Condition 6.1.3 (45CSR13, Permit No. R13-1622 (Condition 4.1.2. and 4.1.2.1); Condition 6.1.4 (45CSR13, Permit No. R13-1622 (Condition 4.1.8.); Condition 6.1.5 (45CSR13, Permit No. R13-1622 (Condition 4.1.9); Condition 6.1.7 (45CSR13, Permit No. R13-1622 (Condition 4.1.13.);

40 CFR 64 - R30-01900034-2006 SM01 – Condition 3.4.9 (40 CFR 64.9(b); 45CSR§30-5.1.c.); Condition 3.5.14 (40 CFR 64.9(a); 45CSR§30-5.1.c.);

X Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

40 CFR 63 Subpart DDDD – R30-01900034-2006 SM01 – Condition 3.2.2 (40 CFR 63.2269(a) and (b); 45CSR34; 40 CFR 64.3(b)(1), 64.3(b)(3), 64.3(b)(4), 64.7(b); 45CSR30-5.1.c.; 45CSR13, Permit No. R13-1622 (Condition 4.1.12); Condition 3.2.3 (40 CFR 63.2270(a), (b), (c), (d) and (f); 45CSR34; 40 CFR 64.3(b)(4), 64.7(c); 45CSR30-5.1.c.; 45CSR13, Permit No. R13-1622 (Condition 4.1.12.); Condition 6.2.3 (40 CFR 63.2271(a); 45CSR34; 45CSR13, Permit No. R13-1622 (Condition 4.1.12.), 40 CFR 64.3(a), 45 CSR 30-5.1.c)

40 CFR 64 - R30-01900034-2006 SM01 – Condition 3.2.2 (40 CFR 63.2269(a) and (b); 45CSR34; 40 CFR 64.3(b)(1), 64.3(b)(3), 64.3(b)(4), 64.7(b); 45CSR30-5.1.c.; 45CSR13, Permit No. R13-1622 (Condition 4.1.12); Condition 3.2.3 (40 CFR 63.2270(a), (b), (c), (d) and (f); 45CSR34; 40 CFR 64.3(b)(4), 64.7(c); Condition 3.2.4, (40 C.F.R. §64.7(a); 45CSR§30-5.1.c.); Condition 3.2.5, (40 C.F.R. §64.7(d); 45CSR§30-5.1.c.); Condition 3.2.6, (40 C.F.R. §64.7(e); 45CSR§30-5.1.c.); Condition 3.2.7 (40 C.F.R. §64.8; 45CSR§30-5.1.c.); Condition 5.3.4 (40 CFR 64.3(b)(3); 45CSR30-5.1.c.); Condition 5.4.1 (45CSR13, Permit No. R13-1622 (Conditions 4.3.4.2., 4.3.4.3., and 4.3.4.4.); Condition 5.4.2 (40 CFR 64.3(b)(4); 45CSR30-5.1.c.); Condition 5.4.3 (40 CFR 64.7(d); 45CSR30-5.1.c.); Condition 6.2.3 (40 CFR 63.2271(a); 45CSR34; 45CSR13, Permit No. R13-1622 (Condition 4.1.12.), 40 CFR 64.3(a), 45 CSR 30-5.1.c)

PM, Opacity – R30-01900034-2006 SM01 – Condition 6.2.1 (40CSR30-5.1.c)

Limit of Operation - R30-01900034-2006 SM01 – Condition 6.2.2 (45CSR13, Permit No. R13-1622 (Condition 4.3.6); Condition 5.2.4 (45CSR30-5.1.c and 40 CFR 64.3(d)(1)); Condition 6.4.1 (45CSR30-5.1.c and 45 CSR 13, Permit No. R13-1622 (Condition 4.3.6); Condition 6.4.2 (45CSR30-5.1.c)

Testing - R30-01900034-2006 SM01 - Condition 6.3.3 (45 CSR 30-5.1.c); Condition 6.3.4 (45CSR13, Permit No. R13-1622 (Conditions 4.2.3);

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT G - Air Pollution Control Device Form

Control device ID number: RTO/RCO	List all emission units associated with this control device. OSB Press (Emission Unit ID 7890)
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Manufacturer: Pro-Environmental	Model number: NA	Installation date: 10/1/2008
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Type of Air Pollution Control Device:

<input type="checkbox"/> Baghouse/Fabric Filter	<input type="checkbox"/> Venturi Scrubber	<input type="checkbox"/> Multiclone
<input type="checkbox"/> Carbon Bed Adsorber	<input type="checkbox"/> Packed Tower Scrubber	<input type="checkbox"/> Single Cyclone
<input type="checkbox"/> Carbon Drum(s)	<input type="checkbox"/> Other Wet Scrubber	<input type="checkbox"/> Cyclone Bank
<input checked="" type="checkbox"/> Catalytic Incinerator	<input type="checkbox"/> Condenser	<input type="checkbox"/> Settling Chamber
<input checked="" type="checkbox"/> Thermal Incinerator	<input type="checkbox"/> Flare	<input type="checkbox"/> Other (describe) _____
<input type="checkbox"/> Wet Plate Electrostatic Precipitator	<input type="checkbox"/> Dry Plate Electrostatic Precipitator	

List the pollutants for which this device is intended to control and the capture and control efficiencies.

Pollutant	Capture Efficiency	Control Efficiency
VOC, Organic HAPs	100%	90%

Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).

The RCO/RTO serves as the control device for emissions generated during the board pressing operation. Thermal incineration occurs given sufficient temperature and residence time. Catalytic incineration occurs given sufficient catalytic activity, temperature, and residence time. Since residence time is fixed by the physical size of the equipment involved and the flow rate of exhaust gases, temperature (during thermal operation) and temperature plus catalyst activity (during catalytic operation) would be the appropriate indicator parameters to monitor.

Is this device subject to the CAM requirements of 40 C.F.R. 64? Yes No

If Yes, **Complete ATTACHMENT H:** CAM requirements already included in Title V permit from previous Title V significant modification. No additional requirements. As such, No CAM plan is included.

If No, **Provide justification.**

Describe the parameters monitored and/or methods used to indicate performance of this control device.

Minimum Firebox (Combustion Chamber) Temperature and catalytic activity (when the unit is being operated in catalytic mode).

Georgia-Pacific Wood Products LLC
Mt. Hope OSB Plant

Unit Name: OSB Press
Emission Unit ID: 7890
Control Device ID: RTO/RCO
Unit Description: The panel press uses heated platens to press the resin and wax blended flakes (mat) to solidify the resulting panel.

<u>Actual Operating Parameters</u>		2009	Calendar Year	<u>Potential Operating Parameters</u>	
Hours:	4,520	hours/year		Hours:	8,760 hours/year
Natural Gas Consumption:	33.6	MMscf/year		RTO Burner Heat Input:	9 MMBtu/hr
Facility OSB Production:	216.3	MMsf/year (3/8" Basis)		Natural Gas Heating Value:	1,020 Btu/scf
				Natural Gas Consumption:	77.3 MMscf/year
				Facility OSB Production:	57.7 Msf/hour (3/8" Basis)
				Facility OSB Production:	438.0 MMsf/year (3/8" Basis)

<i>Criteria Air Pollutants</i>										
Pollutant	Emission Factors		Calendar Year 2009				Actual Emissions		Potential Emissions	
	Natural Gas	Process	Permit Limits		Control Efficiency	Reference	lb/hr	tpy	lb/hr	tpy
	lb/MMscf	lb/Msf	lb/hr	tpy						
TSP		0.030	12.1	46.0		2	1.44	3.24	12.1	46.0
TPM10						8	2.40	5.42	13.3	50.4
TPM2.5						8	2.40	5.42	13.3	50.4
FPM10		0.030				6	1.44	3.24	12.1	46.0
FPM2.5		0.030				6	1.44	3.24	12.1	46.0
CPM		0.056			64%	7	0.96	2.18	1.16	4.4
CO		0.049	24.8	94.2		2	2.34	5.30	24.80	94.2
NOX		0.064	7.5	28.5		2	3.06	6.92	7.50	28.5
SO2	0.6					1	0.0045	0.010	0.0053	0.023
VOC (as carbon)		0.039	3.7	14.2		2	1.87	4.22	3.7	14.2
Total HAP (THC as carbon)			3.7	14.2		3	1.87	4.22	3.7	14.2

<i>Organic/Inorganic Hazardous Air Pollutants</i>										
Pollutant	Emission Factors		Calendar Year 2009				Actual Emissions		Potential Emissions	
	Natural Gas	Process	Permit Limits		Control Efficiency	Reference	lb/hr	tpy	lb/hr	tpy
	lb/MMscf	lb/Msf	lb/hr	tpy						
Acetaldehyde		0.012	0.21	0.8	80%	5	0.11	0.25	0.21	0.8
Acrolein		0.0029			80%	5	0.028	0.063	0.033	0.13
Benzene	0.00210					1	1.56E-05	3.52E-05	1.85E-05	8.12E-05
Dichlorobenzene	0.00120					1	8.91E-06	2.01E-05	1.06E-05	4.64E-05
Formaldehyde		0.066	5.4	20.4		2	3.16	7.14	5.4	20.4
Hexane	1.80					1	0.013	0.030	0.016	0.070
Methanol		0.022	5.8	21.9		2	1.05	2.38	5.8	21.9
Naphthalene	0.000610					1	4.53E-06	1.02E-05	5.38E-06	2.36E-05
Phenol		0.018	0.4	1.4	80%	5	0.17	0.39	0.40	1.40
Propionaldehyde		0.0032			80%	5	0.031	0.069	0.037	0.14
Toluene	0.00340					1	2.53E-05	5.71E-05	3.00E-05	1.31E-04

<i>Trace Metal Hazardous Air Pollutants</i>										
Pollutant	Emission Factors		Calendar Year 2009				Actual Emissions		Potential Emissions	
	Natural Gas	Process	Permit Limits		Control Efficiency	Reference	lb/hr	tpy	lb/hr	tpy
	lb/MMscf	lb/Msf	lb/hr	tpy						
Arsenic	0.000200					1	1.49E-06	3.36E-06	1.76E-06	7.73E-06
Cadmium	0.00110					1	8.17E-06	1.85E-05	9.71E-06	4.25E-05
Chromium	0.00140					1	1.04E-05	2.35E-05	1.24E-05	5.41E-05
Cobalt	0.0000840					1	6.24E-07	1.41E-06	7.41E-07	3.25E-06
Lead	0.000500					1	3.71E-06	8.39E-06	4.41E-06	1.93E-05
Manganese	0.000380					1	2.82E-06	6.38E-06	3.35E-06	1.47E-05
Mercury	0.000260					1	1.93E-06	4.36E-06	2.29E-06	1.00E-05
Nickel	0.00210					1	1.56E-05	3.52E-05	1.85E-05	8.12E-05

Georgia-Pacific Wood Products LLC
Mt. Hope OSB Plant

<i>Non-Hazardous/Non-Criteria Pollutants</i>										
Pollutant	Emission Factors				Control Efficiency	Calendar Year 2009				
	Natural Gas	Process	Permit Limits			Actual Emissions				
	lb/MMscf	lb/Msf	lb/hr	tpy		Reference	lb/hr	tpy	lb/hr	tpy
Acetone		0.0035				4	0.17	0.38	0.20	0.77

References

- 1 U.S. EPA, *AP-42 Compilation of Air Emission Factors (5th Ed.)* . Section 1.4, Natural Gas Combustion (Revised September 1998). Tables 1.4-1, 1.4-2, 1.4-3, and 1.4-4.
- 2 Site-specific stack testing was conducted at the Mt. Hope OSB Plant to determine controlled PM, CO, NOx, and VOC (as carbon) emission rates in October 2009. Emission factors were developed based on this test.
- 3 Total Hazardous air pollutant (HAP) emissions is same as VOC since it is expressed as THC as carbon and measured using EPA Method 25A.
- 4 U.S. EPA, *AP-42 Compilation of Air Emission Factors (5th Ed.)*. Section 10.6.1, Waferboard/Oriented Strandboard Manufacturing (revised March 2002). Table 10.6.1-6, "Emission Factors for OSB Presses - Organics." Hot Press (liquid PF resin), uncontrolled.
- 5 Process emission factors based on median value from NCASI Wood Products Database 1-13-2010. Control efficiency only applied to the emisisions associated with the process contribution not the combustion related emissions.
- 6 Filterable PM10 assumed equal to PM2.5 emissions.
- 7 Condensable PM emissions calculated based on results of stack tests conducted at the Brookneal, VA OSB plant using EPA Method 202, 1996. Control efficiency estimated based on stack testing at GP's Emporia Plant using Method 202.
- 8 Total PM10 = Filterable PM10 + Condensable PM. Total PM2.5 = Filterable PM2.5 + Condensable PM.

C.12 – FINISHING AREA

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: 8900	Emission unit name: Finishing Area	List any control devices associated with this emission unit: FF5
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Provide a description of the emission unit (type, method of operation, design parameters, etc.):

Material generated during the board trimming and tongue and groove operation is collected in a process cyclone whose exhaust is controlled by a baghouse. The material collected in the baghouse and cyclone are sent to the dry fuel silo for use as fuel in the Wellons Energy System.

Manufacturer:	Model number:	Serial number:
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Construction date:	Installation date: 04/01/1995	Modification date(s):
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Design Capacity (examples: furnaces - tons/hr, tanks - gallons):
57.7 MSF/hr

Maximum Hourly Throughput: 57.7 MSF/hr	Maximum Annual Throughput: 438 MMSF/hr	Maximum Operating Schedule: 8760 hours/yr
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? ___ Yes <u> X </u> No	If yes, is it? ___ Indirect Fired ___ Direct Fired
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Maximum design heat input and/or maximum horsepower rating:	Type and Btu/hr rating of burners:
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List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

Emissions Data See attached spreadsheet entitled "Finishing_Area_FF5.xls"		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)		
Nitrogen Oxides (NO _x)		
Lead (Pb)		
Particulate Matter (PM _{2.5})	1.10	4.73
Particulate Matter (PM ₁₀)	1.10	4.73
Total Particulate Matter (TSP)	0.98	4.30
Sulfur Dioxide (SO ₂)		
Volatile Organic Compounds (VOC)	4.96	18.83
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Acetaldehyde	0.053	0.20
Formaldehyde	0.020	0.074
Methanol	0.69	2.63
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

TSP is based on current permit limit that reflects filterable particulate only.

Filterable PM10 and PM2.5 emissions assumed equal to TSP emissions.

NCASI Wood Products Emission Factor Database, January 2010. Median emission factor, plus 20% compliance margin, for condensable PM emissions from OSB saws.

Total PM10 = Filterable PM10 + Condensable PM. Total PM2.5 = Filterable PM2.5 + Condensable PM.

U.S. EPA, AP-42 Compilation of Air Emission Factors (5th Ed.). Section 10.5, Plywood Manufacturing (revised March 2002). Table 10.5-7, "Emission Factors for Plywood Miscellaneous Sources." Softwood plywood saws (includes 3 saws, hog, and sander) are as assumed to apply for OSB finishing operations for VOC, acetaldehyde, formaldehyde, and methanol. VOC emissions as propane.

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

PM – R30-01900034-2006 SM01 – Condition 7.1.1 – 31.8 lbs/hr (45 CSR 7-4.1); 0.98 lbs/hr (Permit No. R13-1622, Condition 4.1.1)
Malfunction - R30-01900034-2006 SM01 – Condition 7.1.4 (45 CSR 7-9)
40 CFR 63 Subpart DDDD – Included as part of the source category but no applicable requirements.

Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

PM – R30-01900034-2006 SM01 – Condition 7.2.1 (45 CSR 30-5.1.c.); Condition 7.3.1 (45 CSR 13)
Malfunction - R30-01900034-2006 SM01 – Condition 7.2.1 (45 CSR 30-5.1.c.)

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT G - Air Pollution Control Device Form

Control device ID number: FF5	List all emission units associated with this control device. Finishing Area (Emission Unit ID 8900)
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Manufacturer: MAC	Model number: 93-FMCF-11-010	Installation date: 06/01/1995
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Type of Air Pollution Control Device:

<input checked="" type="checkbox"/> Baghouse/Fabric Filter	<input type="checkbox"/> Venturi Scrubber	<input type="checkbox"/> Multiclone
<input type="checkbox"/> Carbon Bed Adsorber	<input type="checkbox"/> Packed Tower Scrubber	<input type="checkbox"/> Single Cyclone
<input type="checkbox"/> Carbon Drum(s)	<input type="checkbox"/> Other Wet Scrubber	<input type="checkbox"/> Cyclone Bank
<input type="checkbox"/> Catalytic Incinerator	<input type="checkbox"/> Condenser	<input type="checkbox"/> Settling Chamber
<input type="checkbox"/> Thermal Incinerator	<input type="checkbox"/> Flare	<input type="checkbox"/> Other (describe) _____
<input type="checkbox"/> Wet Plate Electrostatic Precipitator	<input type="checkbox"/> Dry Plate Electrostatic Precipitator	

List the pollutants for which this device is intended to control and the capture and control efficiencies.

Pollutant	Capture Efficiency	Control Efficiency
PM	100%	99.9%

Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).
 Gas Flow Rate 22,900 acfm
 Pressure Drop 4.0" water
 Total Cloth Area 4072 sq. ft.
 Number of Bags 306
 Ambient Temperature

Is this device subject to the CAM requirements of 40 C.F.R. 64? Yes No

If Yes, **Complete ATTACHMENT H**

If No, **Provide justification.** The baghouse controls emissions from the material collection cyclone which is considered inherent process equipment since it is required for the process to operate properly. As such, the potential to emit would be those emissions resulting from the cyclone. Cyclone emissions are estimated based on the highest exit loading contained in AP-42 for any material handling cyclone (0.055gr/scf). At a flow rate of 22,900 acfm, emissions exiting the cyclone exhaust would be 10.8 lbs/hr or 47.3 tons/yr which is less than the CAM threshold.

Describe the parameters monitored and/or methods used to indicate performance of this control device.
 Differential Pressure
 Method 22

Georgia-Pacific Wood Products LLC
Mt. Hope OSB Plant

Unit Name: Finishing Area Baghouse

Emission Unit ID: 8900

Control Device ID: FF5

Unit Description:

This baghouse is a materials handling unit which collects the exhaust material from the finishing area cyclone. The collected material from the cyclone and baghouse is sent to the dry fuel silo for use as fuel.

Actual Operating Parameters

	2009	Calendar Year
Hours:	4,520	hours/year
Exhaust Air Flow:	22,900	dscfm
Facility OSB Production:	47.9	Msf/hour (3/8" Basis)
Facility OSB Production:	216.3	MMsf/year (3/8" Basis)

Potential Operating Parameters

Hours:	8,760	hours/year
Exhaust Air Flow:	22,900	dscfm
Facility OSB Production:	57.7	Msf/hour (3/8" Basis)
Facility OSB Production:	438.0	MMsf/year (3/8" Basis)

<i>Criteria Air Pollutants</i>									
Pollutant	Emission Factor	Permit Limits		Control Efficiency	Reference	Calendar Year 2009		Potential Emissions	
		lbs/hr	tpy			Actual Emissions		lb/hr	tpy
						lb/hr	tpy		
TSP	0.005 gr/dscf	0.98		99.9%	1	0.98	2.22	0.98	4.30
TPM10					6	1.08	2.43	1.10	4.73
TPM2.5					6	1.08	2.43	1.10	4.73
FPM10	0.005 gr/dscf			99.9%	4	0.98	2.22	0.98	4.30
FPM2.5	0.005 gr/dscf			99.9%	4	0.98	2.22	0.98	4.30
CPM	0.00197 lb/Msf				5	0.09	0.21	0.11	0.43
VOC	0.086 lb/Msf				2	4.12	9.30	4.96	18.83
Total HAP	0.013 lb/Msf				3	0.63	1.43	0.77	2.90
<i>Hazardous Air Pollutants</i>									
Pollutant	Emission Factor	Permit Limits		Control Efficiency	Reference	Calendar Year 2009		Potential Emissions	
		lbs/hr	tpy			Actual Emissions		lb/hr	tpy
						lb/hr	tpy		
Acetaldehyde	0.00092 lb/Msf				2	0.044	0.10	0.053	0.20
Formaldehyde	0.00034 lb/Msf				2	0.016	0.037	0.020	0.074
Methanol	0.012 lb/Msf				2	0.57	1.30	0.69	2.63
<i>Non-Criteria/Non-Hazardous Air Pollutants</i>									
Pollutant	Emission Factor	Permit Limits		Control Efficiency	Reference	Calendar Year 2009		Potential Emissions	
		lbs/hr	tpy			Actual Emissions		lb/hr	tpy
						lb/hr	tpy		
Acetone	0.0019 lb/Msf				2	0.091	0.21	0.11	0.42
alpha-Pinene	0.027 lb/Msf				2	1.29	2.92	1.56	5.91

References

- 1 The current permit limit reflects filterable particulate only.
- 2 U.S. EPA, *AP-42 Compilation of Air Emission Factors* (5th Ed.). Section 10.5, Plywood Manufacturing (revised March 2002). Table 10.5-7, "Emission Factors for Plywood Miscellaneous Sources." Softwood plywood saws (includes 3 saws, hog, and sander) are as assumed to apply for OSB finishing operations. VOC emissions as propane.
- 3 Total Hazardous air pollutant (HAP) emissions derived as the sum of individual pollutants.
- 4 Filterable PM10 and PM2.5 emissions assumed equal to TSP emissions.
- 5 NCASI Wood Products Emission Factor Database, January 2010. Median emission factor, plus 20% compliance margin, for condensable PM emissions from OSB saws.
- 6 Total PM10 = Filterable PM10 + Condensable PM. Total PM2.5 = Filterable PM2.5 + Condensable PM.

C.13 – TRIM WASTE TRANSFER

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: 8950	Emission unit name: Mat Trim Transfer System	List any control devices associated with this emission unit: HEC1 (material collection device)
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Provide a description of the emission unit (type, method of operation, design parameters, etc.):

Material collected during the board trimming operations is pneumatically transferred to a high efficiency cyclone for deposition into the dry fuel silo for use as fuel in the Wellons Energy System.

Manufacturer:	Model number:	Serial number:
Construction date:	Installation date: 04/01/1995	Modification date(s):

Design Capacity (examples: furnaces - tons/hr, tanks - gallons):
57.7 MSF/hr

Maximum Hourly Throughput: 57.7 MSF/hr	Maximum Annual Throughput: 438 MMSF/hr	Maximum Operating Schedule: 8760 hours/yr
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? ___ Yes <u> X </u> No	If yes, is it? ___ Indirect Fired ___ Direct Fired
--	---

Maximum design heat input and/or maximum horsepower rating:	Type and Btu/hr rating of burners:
--	---

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

Emissions Data See attached spreadsheet entitled "Mat_Trim_Transfer_HEC1.xls"		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)		
Nitrogen Oxides (NO _x)		
Lead (Pb)		
Particulate Matter (PM _{2.5})	0.44	1.91
Particulate Matter (PM ₁₀)	0.44	1.91
Total Particulate Matter (TSP)	0.44	1.91
Sulfur Dioxide (SO ₂)		
Volatile Organic Compounds (VOC)	3.5	13.1
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Formaldehyde	0.017	0.066
Methanol	0.087	0.33
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

TSP is based on current permit limit that reflects filterable particulate only.

Filterable PM10 and PM2.5 emissions assumed equal to TSP emissions.

Total PM10 = Filterable PM10 + Condensable PM. Total PM2.5 = Filterable PM2.5 + Condensable PM.

U.S. EPA, AP-42 Compilation of Air Emission Factors (5th Ed.). Section 10.6.1, Waferboard/Oriented Strandboard Manufacturing (revised March 2002). Table 10.6.1-7, "Emission Factors for OSB Miscellaneous Sources." Sanderdust metering bin for VOC, formaldehyde, and methanol emissions. VOC emissions as propane.

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

PM – R30-01900034-2006 SM01 – Condition 7.1.1 – 31.8 lbs/hr (45 CSR 7-4.1); 0.3 lbs/hr (Permit No. R13-1622, Condition 4.1.1)
PM – R30-01900034-2006 SM01 – Condition 7.1.3 – (45 CSR 7-3.7, Permit No. R13-2261, Condition B.3)
Malfunction - R30-01900034-2006 SM01 – Condition 7.1.4 (45 CSR 7-9)
40 CFR 63 Subpart DDDD – Included as part of the source category but no applicable requirements.

Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

PM – R30-01900034-2006 SM01 – Condition 7.2.1 (45 CSR 30-5.1.c.); Condition 7.3.1 (45 CSR 13)
Malfunction - R30-01900034-2006 SM01 – Condition 7.2.1 (45 CSR 30-5.1.c.)

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the **Schedule of Compliance Form** as ATTACHMENT F.

ATTACHMENT G - Air Pollution Control Device Form

Control device ID number: HEC1	List all emission units associated with this control device. Mat Trim Transfer System (Emission Unit ID 8950)
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Manufacturer: Fisher-Klosterman	Model number: XQ030-15	Installation date: 06/01/1995
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Type of Air Pollution Control Device:

<input type="checkbox"/> Baghouse/Fabric Filter	<input type="checkbox"/> Venturi Scrubber	<input type="checkbox"/> Multiclone
<input type="checkbox"/> Carbon Bed Adsorber	<input type="checkbox"/> Packed Tower Scrubber	<input checked="" type="checkbox"/> Single Cyclone
<input type="checkbox"/> Carbon Drum(s)	<input type="checkbox"/> Other Wet Scrubber	<input type="checkbox"/> Cyclone Bank
<input type="checkbox"/> Catalytic Incinerator	<input type="checkbox"/> Condenser	<input type="checkbox"/> Settling Chamber
<input type="checkbox"/> Thermal Incinerator	<input type="checkbox"/> Flare	<input type="checkbox"/> Other (describe) _____
<input type="checkbox"/> Wet Plate Electrostatic Precipitator	<input type="checkbox"/> Dry Plate Electrostatic Precipitator	

List the pollutants for which this device is intended to control and the capture and control efficiencies.

Pollutant	Capture Efficiency	Control Efficiency
PM	100%	99.9%

Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).
 Gas Flow Rate 5,100 acfm
 Pressure Drop 9.0" water

Is this device subject to the CAM requirements of 40 C.F.R. 64? Yes No

If Yes, **Complete ATTACHMENT H**

If No, **Provide justification.** Material collected during the OSB trimming operations is pneumatically conveyed to this cyclone for deposition into the dry fuel silo. This cyclone is considered inherent process equipment since it is required for the process to operate properly. As such, it is not subject to CAM requirements.

Describe the parameters monitored and/or methods used to indicate performance of this control device.
 Method 22

Georgia-Pacific Wood Products LLC
Mt. Hope OSB Plant

Unit Name: Mat Trim Transfer

Emission Unit ID: 8950

Control Device ID: HEC1

Unit Description:

Material collected during the board trimming operations is pneumatically transferred to a high efficiency cyclone for deposition into the dry fuel silo for use as fuel in the Wellons Energy System.

Actual Operating Parameters

	2009	Calendar Year
Hours:	5,355	hours/year
Exhaust Air Flow:	5,100	dscfm
Facility OSB Production:	40.4	Msf/hour (3/8" Basis)
Facility OSB Production:	216.3	MMsf/year (3/8" Basis)

Potential Operating Parameters

Hours:	8,760	hours/year
Exhaust Air Flow:	5,100	dscfm
Facility OSB Production:	57.7	Msf/hour (3/8" Basis)
Facility OSB Production:	438.0	MMsf/year (3/8" Basis)

<i>Criteria Air Pollutants</i>									
Pollutant	Emission Factor	Permit Limits		Control Efficiency	Reference	Calendar Year 2009 Actual Emissions		Potential Emissions	
		lbs/hr	tpy			lb/hr	tpy	lb/hr	tpy
		TSP	0.01 gr/dscf			0.44		99.9%	1
TPM10					5	0.44	1.17	0.44	1.91
TPM2.5					5	0.44	1.17	0.44	1.91
FPM10	0.01 gr/dscf			99.9%	4	0.44	1.17	0.44	1.91
FPM2.5	0.01 gr/dscf			99.9%	4	0.44	1.17	0.44	1.91
CPM									
VOC	0.060 lb/Msf				2	0.45	1.21	3.5	13.1
Total HAP	0.002 lb/Msf				3	0.073	0.195	0.10	0.39
<i>Hazardous Air Pollutants</i>									
Pollutant	Emission Factor	Permit Limits		Control Efficiency	Reference	Calendar Year 2009 Actual Emissions		Potential Emissions	
		lbs/hr	tpy			lb/hr	tpy	lb/hr	tpy
		Formaldehyde	0.00030 lb/Msf						2
Methanol	0.0015 lb/Msf				2	0.061	0.16	0.087	0.33
<i>Non-Criteria/Non-Hazardous Air Pollutants</i>									
Pollutant	Emission Factor	Permit Limits		Control Efficiency	Reference	Calendar Year 2009 Actual Emissions		Potential Emissions	
		lbs/hr	tpy			lb/hr	tpy	lb/hr	tpy
		Acetone	0.0015 lb/Msf						2
alpha-Pinene	0.032 lb/Msf				2	1.29	3.46	1.85	7.01

References

- 1 The current permit limit reflects filterable particulate only.
- 2 U.S. EPA, *AP-42 Compilation of Air Emission Factors* (5th Ed.). Section 10.6.1, Waferboard/Oriented Strandboard Manufacturing (revised March 2002). Table 10.6.1-7, "Emission Factors for OSB Miscellaneous Sources." Raw fuel bin. VOC emissions as propane.
- 3 Total Hazardous air pollutant (HAP) emissions derived as the sum of individual pollutants.
- 4 Filterable PM10 and PM2.5 emissions assumed equal to TSP emissions.
- 5 Total PM10 = Filterable PM10 + Condensable PM. Total PM2.5 = Filterable PM2.5 + Condensable PM.

C.14 – SANDING AREA

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: 9500	Emission unit name: Sanding Area	List any control devices associated with this emission unit: FF6
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Provide a description of the emission unit (type, method of operation, design parameters, etc.):
 Material generated during sanding process is collected in the baghouse prior to being sent to the sanderdust silo for use as fuel in the Wellons Energy System.

Manufacturer:	Model number:	Serial number:
Construction date:	Installation date: 04/01/1995	Modification date(s):

Design Capacity (examples: furnaces - tons/hr, tanks - gallons):
36 MSF/hr

Maximum Hourly Throughput: 36 MSF/hr	Maximum Annual Throughput: 315.4 MMSF/hr	Maximum Operating Schedule: 8760 hours/yr
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? ___ Yes <u> X </u> No	If yes, is it? ___ Indirect Fired ___ Direct Fired
--	--

Maximum design heat input and/or maximum horsepower rating:	Type and Btu/hr rating of burners:
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List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

Emissions Data See attached spreadsheet entitled "Sanding_Area_FF6.xls"		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)		
Nitrogen Oxides (NO _x)		
Lead (Pb)		
Particulate Matter (PM _{2.5})	1.03	4.52
Particulate Matter (PM ₁₀)	1.03	4.52
Total Particulate Matter (TSP)	1.03	4.52
Sulfur Dioxide (SO ₂)		
Volatile Organic Compounds (VOC)	6.48	28.39
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Acetaldehyde	0.11	0.49
Formaldehyde	0.15	0.66
Methanol	0.43	1.89
Phenol	0.54	2.37
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

TSP is based on current permit limit that reflects filterable particulate only.

Filterable PM10 and PM2.5 emissions assumed equal to TSP emissions.

Total PM10 = Filterable PM10 + Condensable PM. Total PM2.5 = Filterable PM2.5 + Condensable PM.

U.S. EPA, AP-42 Compilation of Air Emission Factors (5th Ed.). Section 10.5, Plywood Manufacturing (revised March 2002). Table 10.5-7, "Emission Factors for Plywood Miscellaneous Sources." Softwood plywood sander (includes sanders and specialty saw) are assumed to apply for OSB finishing operations for VOC and methanol emissions. VOC emissions as propane.

40 CFR Part 63, Subpart DDDD - National Emissions Standards for Hazardous Air Pollutants: Plywood and Composite Wood Products. Table 2A to Appendix B to Subpart DDDD of 40 CFR Part 63.—Testing and Emissions Estimation Specifications for Process Units, Finishing Sanders for acetaldehyde, formaldehyde, and phenol Emissions.

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

PM – R30-01900034-2006 SM01 – Condition 7.1.1 – 12.5 lbs/hr (45 CSR 7-4.1); 1.03 lbs/hr (Permit No. R13-1622, Condition 4.1.1)
Malfunction - R30-01900034-2006 SM01 – Condition 7.1.4 (45 CSR 7-9)
40 CFR 63 Subpart DDDD – Included as part of the source category but no applicable requirements.

Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

PM – R30-01900034-2006 SM01 – Condition 7.2.1 (45 CSR 30-5.1.c.); Condition 7.3.1 (45 CSR 13)
Malfunction - R30-01900034-2006 SM01 – Condition 7.2.1 (45 CSR 30-5.1.c.)

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the **Schedule of Compliance Form** as ATTACHMENT F.

ATTACHMENT G - Air Pollution Control Device Form

Control device ID number: FF6	List all emission units associated with this control device. Sanding Area (Emission Unit ID 9500)
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Manufacturer: MAC	Model number: 93-FMCF-11-011	Installation date: 06/01/1995
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Type of Air Pollution Control Device:

<input checked="" type="checkbox"/> Baghouse/Fabric Filter	<input type="checkbox"/> Venturi Scrubber	<input type="checkbox"/> Multiclone
<input type="checkbox"/> Carbon Bed Adsorber	<input type="checkbox"/> Packed Tower Scrubber	<input type="checkbox"/> Single Cyclone
<input type="checkbox"/> Carbon Drum(s)	<input type="checkbox"/> Other Wet Scrubber	<input type="checkbox"/> Cyclone Bank
<input type="checkbox"/> Catalytic Incinerator	<input type="checkbox"/> Condenser	<input type="checkbox"/> Settling Chamber
<input type="checkbox"/> Thermal Incinerator	<input type="checkbox"/> Flare	<input type="checkbox"/> Other (describe) _____
<input type="checkbox"/> Wet Plate Electrostatic Precipitator	<input type="checkbox"/> Dry Plate Electrostatic Precipitator	

List the pollutants for which this device is intended to control and the capture and control efficiencies.

Pollutant	Capture Efficiency	Control Efficiency
PM	100%	99.9%

Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).
 Gas Flow Rate 24,100 acfm
 Pressure Drop 4.0" water
 Total Cloth Area 4072 sq. ft.
 Number of Bags 306
 Ambient Temperature

Is this device subject to the CAM requirements of 40 C.F.R. 64? Yes No

If Yes, **Complete ATTACHMENT H**

If No, **Provide justification.** The baghouse collects the material generated from the sanding operation and is considered inherent process equipment since it is required for the process to operate properly. As such, it is not subject to CAM requirements.

Describe the parameters monitored and/or methods used to indicate performance of this control device.
 Differential Pressure
 Method 22

Georgia-Pacific Wood Products LLC
Mt. Hope OSB Plant

Unit Name: Sander Baghouse
Emission Unit ID: 9500
Control Device ID: FF6

Unit Description:

This baghouse is a materials handling device which collects sanderdust from the tongue-and-groove and sander equipment and transports it to the sanderdust cyclone for deposition in the sanderdust silo.

Actual Operating Parameters
2009 Calendar Year
Hours: 2,400 hours/year
Exhaust Air Flow: 24,100 dscfm
Facility OSB Production: 25.0 Msf/hour (3/8" Basis)
Facility OSB Production: 60.0 MMsf/year (3/8" Basis)

Potential Operating Parameters
Hours: 8,760 hours/year
Exhaust Air Flow: 24,100 dscfm
Facility OSB Production: 36.0 Msf/hour (3/8" Basis)
Facility OSB Production: 315.4 MMsf/year (3/8" Basis)

<i>Criteria Air Pollutants</i>									
Pollutant	Emission Factor	Permit Limits		Control Efficiency	Reference	Calendar Year 2009 Actual Emissions		Potential Emissions	
		lbs/hr	tpy			lb/hr	tpy	lb/hr	tpy
TSP	0.005 gr/dscf	1.03		99.9%	1	1.03	1.24	1.03	4.52
TPM10					6	1.03	1.24	1.03	4.52
TPM2.5					6	1.03	1.24	1.03	4.52
FPM10	0.005 gr/dscf			99.9%	5	1.03	1.24	1.03	4.52
FPM2.5	0.005 gr/dscf			99.9%	5	1.03	1.24	1.03	4.52
CPM									
VOC	0.18 lb/Msf				2	4.50	5.40	6.48	28.39
Total HAP	0.019 lb/Msf				4	0.86	1.03	1.23	5.41
<i>Hazardous Air Pollutants</i>									
Pollutant	Emission Factor	Permit Limits		Control Efficiency	Reference	Calendar Year 2009 Actual Emissions		Potential Emissions	
		lbs/hr	tpy			lb/hr	tpy	lb/hr	tpy
Acetaldehyde	0.0031 lb/Msf				3	0.08	0.09	0.11	0.49
Formaldehyde	0.0042 lb/Msf				3	0.11	0.13	0.15	0.66
Methanol	0.012 lb/Msf				2	0.30	0.36	0.43	1.89
Phenol	0.015 lb/Msf				3	0.38	0.45	0.54	2.37
<i>Non-Criteria/Non-Hazardous Air Pollutants</i>									
Pollutant	Emission Factor	Permit Limits		Control Efficiency	Reference	Calendar Year 2009 Actual Emissions		Potential Emissions	
		lbs/hr	tpy			lb/hr	tpy	lb/hr	tpy
Acetone	0.0019 lb/Msf				2	0.048	0.057	0.068	0.30
alpha-Pinene	0.027 lb/Msf				2	0.68	0.81	0.97	4.26

References

- The current permit limit reflects filterable particulate only.
- U.S. EPA, *AP-42 Compilation of Air Emission Factors* (5th Ed.). Section 10.5, *Plywood Manufacturing* (revised March 2002). Table 10.5-7, "Emission Factors for Plywood Miscellaneous Sources." Softwood plywood sander (includes sanders and specialty saw) are assumed to apply for OSB finishing operations. VOC emissions as propane.
- 40 CFR Part 63, Subpart DDDD - National Emissions Standards for Hazardous Air Pollutants: Plywood and Composite Wood Products. Table 2A to Appendix B to Subpart DDDD of 40 CFR Part 63.—Testing and Emissions Estimation Specifications for Process Units, Finishing Sanders.
- Total Hazardous air pollutant (HAP) emissions derived as the sum of individual pollutants.
- Filterable PM10 and PM2.5 emissions assumed equal to TSP emissions.
- Total PM10 = Filterable PM10 + Condensable PM. Total PM2.5 = Filterable PM2.5 + Condensable PM.

C.15 – SANDERDUST TRANSFER

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: 9600	Emission unit name: Sanderdust Transfer System	List any control devices associated with this emission unit: HEC2 (material collection device)
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Provide a description of the emission unit (type, method of operation, design parameters, etc.):

Material collected during the OSB sanding operations is pneumatically transferred to a high efficiency cyclone for deposition into the sanderdust fuel silo for use as fuel in the Wellons Energy System.

Manufacturer:	Model number:	Serial number:
Construction date:	Installation date: 04/01/1995	Modification date(s):

Design Capacity (examples: furnaces - tons/hr, tanks - gallons):
36 MSF/hr

Maximum Hourly Throughput: 36 MSF/hr	Maximum Annual Throughput: 315.4 MMSF/hr	Maximum Operating Schedule: 8760 hours/yr
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? ___ Yes <u> X </u> No	If yes, is it? ___ Indirect Fired ___ Direct Fired
--	--

Maximum design heat input and/or maximum horsepower rating:	Type and Btu/hr rating of burners:
--	---

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

Emissions Data See attached spreadsheet entitled "Sanderdust_Transfer_System_HEC2.xls"		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)		
Nitrogen Oxides (NO _x)		
Lead (Pb)		
Particulate Matter (PM _{2.5})	0.30	1.33
Particulate Matter (PM ₁₀)	0.30	1.33
Total Particulate Matter (TSP)	0.30	1.33
Sulfur Dioxide (SO ₂)		
Volatile Organic Compounds (VOC)	4.32	18.92
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Methanol	0.026	0.12
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

TSP is based on current permit limit that reflects filterable particulate only.

Filterable PM10 and PM2.5 emissions assumed equal to TSP emissions.

Total PM10 = Filterable PM10 + Condensable PM. Total PM2.5 = Filterable PM2.5 + Condensable PM.

U.S. EPA, AP-42 Compilation of Air Emission Factors (5th Ed.). Section 10.6.1, Waferboard/Oriented Strandboard Manufacturing (revised March 2002). Table 10.6.1-7, "Emission Factors for OSB Miscellaneous Sources."
Sanderdust metering bin for VOC and methanol emissions. VOC emissions as propane.

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

PM – R30-01900034-2006 SM01 – Condition 7.1.1 – 12.5 lbs/hr (45 CSR 7-4.1); 0.3 lbs/hr (Permit No. R13-1622, Condition 4.1.1)
PM – R30-01900034-2006 SM01 – Condition 7.1.3 – (45 CSR 7-3.7, Permit No. R13-2261, Condition B.3)
Malfunction - R30-01900034-2006 SM01 – Condition 7.1.4 (45 CSR 7-9)
40 CFR 63 Subpart DDDD – Included as part of the source category but no applicable requirements.

Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

PM – R30-01900034-2006 SM01 – Condition 7.2.1 (45 CSR 30-5.1.c.); Condition 7.3.1 (45 CSR 13)
Malfunction - R30-01900034-2006 SM01 – Condition 7.2.1 (45 CSR 30-5.1.c.)

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the **Schedule of Compliance Form** as ATTACHMENT F.

ATTACHMENT G - Air Pollution Control Device Form

Control device ID number: HEC2	List all emission units associated with this control device. Sanderdust Transfer System (Emission Unit ID 9600)
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Manufacturer: Fisher-Klosterman	Model number: XQ030-15	Installation date: 06/01/1995
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Type of Air Pollution Control Device:

<input type="checkbox"/> Baghouse/Fabric Filter	<input type="checkbox"/> Venturi Scrubber	<input type="checkbox"/> Multiclone
<input type="checkbox"/> Carbon Bed Adsorber	<input type="checkbox"/> Packed Tower Scrubber	<input checked="" type="checkbox"/> Single Cyclone
<input type="checkbox"/> Carbon Drum(s)	<input type="checkbox"/> Other Wet Scrubber	<input type="checkbox"/> Cyclone Bank
<input type="checkbox"/> Catalytic Incinerator	<input type="checkbox"/> Condenser	<input type="checkbox"/> Settling Chamber
<input type="checkbox"/> Thermal Incinerator	<input type="checkbox"/> Flare	<input type="checkbox"/> Other (describe) _____
<input type="checkbox"/> Wet Plate Electrostatic Precipitator	<input type="checkbox"/> Dry Plate Electrostatic Precipitator	

List the pollutants for which this device is intended to control and the capture and control efficiencies.

Pollutant	Capture Efficiency	Control Efficiency
PM	100%	99.9%

Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).
 Gas Flow Rate 3,550 acfm
 Pressure Drop 9.0" water

Is this device subject to the CAM requirements of 40 C.F.R. 64? Yes No

If Yes, **Complete ATTACHMENT H**

If No, **Provide justification.** Material collected during the sanding operations is pneumatically conveyed to this cyclone for deposition into the sanderdust fuel silo. This cyclone is considered inherent process equipment since it is required for the process to operate properly. As such, it is not subject to CAM requirements.

Describe the parameters monitored and/or methods used to indicate performance of this control device.
 Method 22

Georgia-Pacific Wood Products LLC
Mt. Hope OSB Plant

Unit Name: Sanderdust Cyclone
Emission Unit ID: 9600
Control Device ID: HEC2

Unit Description: Material collected during the sanding operations is pneumatically transferred to a high efficiency cyclone for deposition into the sanderdust silo for use as fuel in the Wellons Energy System.

<u>Actual Operating Parameters</u>		2009	Calendar Year	<u>Potential Operating Parameters</u>		
Hours:	2,400	hours/year		Hours:	8,760	hours/year
Exhaust Air Flow:	3,550	dscfm		Exhaust Air Flow:	3,550	dscfm
Facility OSB Production:	25.0	Msf/hour (3/8" Basis)		Facility OSB Production:	36.0	Msf/hour (3/8" Basis)
Facility OSB Production:	60.0	MMsf/year (3/8" Basis)		Facility OSB Production:	315.4	MMsf/year (3/8" Basis)

<i>Criteria Air Pollutants</i>									
Pollutant	Emission Factor	Permit Limits		Control Efficiency	Reference	Calendar Year 2009 Actual Emissions		Potential Emissions	
		lbs/hr	tpy			lb/hr	tpy	lb/hr	tpy
TSP/PM ₁₀ /PM _{2.5}	0.01 gr/dscf	0.30		99.9%	1	0.30	0.37	0.30	1.33
TPM10					5	0.30	0.37	0.30	1.33
TPM2.5					5	0.30	0.37	0.30	1.33
FPM10	0.010 gr/dscf			99.9%	4	0.30	0.37	0.30	1.33
FPM2.5	0.010 gr/dscf			99.9%	4	0.30	0.37	0.30	1.33
CPM									
VOC	0.12 lb/Msf	-	-		2	3.00	3.60	4.32	18.92
Total HAP	0.00073 lb/Msf	-	-		3	0.018	0.022	0.026	0.12
<i>Hazardous Air Pollutants</i>									
Pollutant	Emission Factor	Permit Limits		Control Efficiency	Reference	Calendar Year 2009 Actual Emissions		Potential Emissions	
		lbs/hr	tpy			lb/hr	tpy	lb/hr	tpy
Methanol	0.00073 lb/Msf	-	-		2	0.018	0.022	0.026	0.12
<i>Non-Criteria/Non-Hazardous Air Pollutants</i>									
Pollutant	Emission Factor	Permit Limits		Control Efficiency	Reference	Calendar Year 2009 Actual Emissions		Potential Emissions	
		lbs/hr	tpy			lb/hr	tpy	lb/hr	tpy
alpha-Pinene	0.046 lb/Msf	-	-		2	1.15	1.38	1.66	7.25
beta-Pinene	0.013 lb/Msf	-	-		2	0.33	0.39	0.47	2.05

References

- 1 The current permit limit reflects filterable particulate only.
- 2 U.S. EPA, *AP-42 Compilation of Air Emission Factors* (5th Ed.). Section 10.6.1, Waferboard/Oriented Strandboard Manufacturing (revised March 2002). Table 10.6.1-7, "Emission Factors for OSB Miscellaneous Sources." Sanderdust metering bin. VOC emissions as propane.
- 3 Total Hazardous air pollutant (HAP) emissions derived as the sum of individual pollutants.
- 4 Filterable PM10 and PM2.5 emissions assumed equal to TSP emissions.
- 5 Total PM10 = Filterable PM10 + Condensable PM. Total PM2.5 = Filterable PM2.5 + Condensable PM.

C.16 – EDGE SEAL PAINT BOOTH

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: 8830/8835	Emission unit name: Edge Seal Paint Booth	List any control devices associated with this emission unit: FF4
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Provide a description of the emission unit (type, method of operation, design parameters, etc.):

Trimmed OSB is edge sealed with a water based coating prior to being shipped off-site. The spray booth is equipped with integral filters to collect overspray.

Manufacturer: Binks	Model number:	Serial number:
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Construction date:	Installation date: 04/01/1995	Modification date(s):
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Design Capacity (examples: furnaces - tons/hr, tanks - gallons):
15 gallons/hr

Maximum Hourly Throughput: 15 gallons/hr	Maximum Annual Throughput: 131,400 gallons/yr	Maximum Operating Schedule: 8760 hours/yr
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? ___ Yes <u> X </u> No	If yes, is it? ___ Indirect Fired ___ Direct Fired
--	--

Maximum design heat input and/or maximum horsepower rating:	Type and Btu/hr rating of burners:
--	---

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

Emissions Data See attached spreadsheet entitled "Edge_Seal_Spray_Booth_8830.xls"		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)		
Nitrogen Oxides (NO _x)		
Lead (Pb)		
Particulate Matter (PM _{2.5})	0.22	0.9
Particulate Matter (PM ₁₀)	0.22	0.9
Total Particulate Matter (TSP)	0.22	0.9
Sulfur Dioxide (SO ₂)		
Volatile Organic Compounds (VOC)	0.24	1.1
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

Particulate emissions from a paint spray booth are a function of the following variables: 1) percent solids in the coating; 2) transfer efficiency of the spraying operation; and 3) control device efficiency, if applicable. The transfer efficiency is a measure of the percent of solids that are transferred to the object being painted. The remaining solids that are "oversprayed" are entrained in the exhaust air and emitted to the atmosphere. It is conservatively assumed that 100% of the PM emitted is PM10/PM2.5.

VOC Emissions based on VOC content contained in Certified Product Data Sheet.

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or **construction permit** with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

PM – R30-01900034-2006 SM01 – Condition 7.1.1 – 31.8 lbs/hr (45 CSR 7-4.1); 0.2 lbs/hr (Permit No. R13-1622, Condition 4.1.1)
Malfunction - R30-01900034-2006 SM01 – Condition 7.1.4 (45 CSR 7-9)
40 CFR 63 Subpart DDDD – R30-01900034-2006 SM01 – Condition 3.1.19 (40 CFR 62.2250(a) and (b), Permit No. R13-1622, Condition 4.1.12)
40 CFR 63 Subpart DDDD – R30-01900034-2006 SM01 – Condition 3.1.20 (40 CFR 62.2250(c), Permit No. R13-1622, Condition 4.1.12)
40 CFR 63 Subpart DDDD – R30-01900034-2006 SM01 – Condition 3.4.8 (40 CFR 62.2283(a), (b), and (c), Permit No. R13-1622, Condition 4.1.12)
40 CFR 63 Subpart DDDD – R30-01900034-2006 SM01 – Condition 3.5.11.b. (40 CFR 62.2281(c) and (d), Permit No. R13-1622, Condition 4.1.12)
40 CFR 63 Subpart DDDD – R30-01900034-2006 SM01 – Condition 3.5.12. (40 CFR 62.2281(b), Permit No. R13-1622, Condition 4.1.12)
40 CFR 63 Subpart DDDD – R30-01900034-2006 SM01 – Condition 3.5.13. (40 CFR 62.2281(a), Permit No. R13-1622, Condition 4.1.12)

Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

PM – R30-01900034-2006 SM01 – Condition 7.2.2 (45 CSR 30-5.1.c.)
Malfunction - R30-01900034-2006 SM01 – Condition 7.2.2 (45 CSR 30-5.1.c.)
40 CFR 63 Subpart DDDD - Condition 7.3.2 (40 CFR 63.2271(a); Permit No. R13-1622, Condition 4.1.12)

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT G - Air Pollution Control Device Form

Control device ID number: FF4	List all emission units associated with this control device. Edge Seal Spray Booth
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Manufacturer: Binks	Model number: NA	Installation date: 06/01/1995
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Type of Air Pollution Control Device:

<input type="checkbox"/> Baghouse/Fabric Filter	<input type="checkbox"/> Venturi Scrubber	<input type="checkbox"/> Multiclone
<input type="checkbox"/> Carbon Bed Adsorber	<input type="checkbox"/> Packed Tower Scrubber	<input type="checkbox"/> Single Cyclone
<input type="checkbox"/> Carbon Drum(s)	<input type="checkbox"/> Other Wet Scrubber	<input type="checkbox"/> Cyclone Bank
<input type="checkbox"/> Catalytic Incinerator	<input type="checkbox"/> Condenser	<input type="checkbox"/> Settling Chamber
<input type="checkbox"/> Thermal Incinerator	<input type="checkbox"/> Flare	<input checked="" type="checkbox"/> Other (describe) <u>Dry Filters</u>
<input type="checkbox"/> Wet Plate Electrostatic Precipitator	<input type="checkbox"/> Dry Plate Electrostatic Precipitator	

List the pollutants for which this device is intended to control and the capture and control efficiencies.

Pollutant	Capture Efficiency	Control Efficiency
PM	100%	99.9%

Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).
 Gas Flow Rate 31,200 acfm
 Pressure Drop 8.0" water
 Ambient Temperature

Is this device subject to the CAM requirements of 40 C.F.R. 64? Yes No

If Yes, **Complete ATTACHMENT H**

If No, **Provide justification.** Emissions less than threshold levels prior to application of controls.

Describe the parameters monitored and/or methods used to indicate performance of this control device.
 Differential Pressure
 Method 22

Georgia-Pacific Wood Products LLC
Mt. Hope OSB Plant

Unit Name: Paint Booth

Emission Unit ID: 8830/8835

Control Device ID: FF4

Unit Description:

This is an in-line automated paint booth which applies an edge seal coating to the finished boards. Emissions exhaust through a dry filter prior to exhausting to the stacks.

Actual Operating Parameters

	2009	Calendar Year
Hours:	4,520	hours/year
Actual Paint Consumption:	31,270	gallons
Paint Density:	8.99	lb/gallon
VOC Content %:	0.18	%
% Solids:	53.2%	
Transfer efficiency:	85%	

Potential Operating Parameters

Hours:	8,760	hours/year
Maximum Paint Consumption:	15	gallons/hour
Actual Paint Consumption:	131,400	gallons

<i>Criteria Air Pollutants</i>						
Pollutant	Control Efficiency	Reference	Calendar Year 2009		Potential Emissions	
			Actual Emissions		Potential Emissions	
			lb/hr	tpy	lb/hr	tpy
TSP/PM ₁₀ /PM _{2.5}	98.0%	1	0.10	0.22	0.22	0.9
VOC		2	0.11	0.25	0.24	1.1

References

- 1 Particulate emissions from a paint spray booth are a function of the following variables: 1) percent solids in the coating; 2) transfer efficiency of the spraying operation; and 3) control device efficiency, if applicable. The transfer efficiency is a measure of the percent of solids that are transferred to the object being painted. The remaining solids that are "oversprayed" are entrained in the exhaust air and emitted to the atmosphere. It is conservatively assumed that 100% of the PM emitted is PM10/PM2.5.
- 2 Emissions based on VOC content contained in Certified Product Data Sheet.

C.17 – NAIL LINE APPLICATOR

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: 8010	Emission unit name: Nail Line Applicator	List any control devices associated with this emission unit: None
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Provide a description of the emission unit (type, method of operation, design parameters, etc.):

Nail lines are applied to the finished OSB boards to mark the 16" and 24" dimensions on the board

Manufacturer:	Model number:	Serial number:
Construction date:	Installation date: 02/2000	Modification date(s):
Design Capacity (examples: furnaces - tons/hr, tanks - gallons): 0.0023 gal/MSF		
Maximum Hourly Throughput: 0.15 gallons/hr	Maximum Annual Throughput: 1,300 gallons/yr	Maximum Operating Schedule: 8760 hours/yr

Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? ___Yes <u>X</u> No	If yes, is it? ___ Indirect Fired ___Direct Fired
Maximum design heat input and/or maximum horsepower rating:	Type and Btu/hr rating of burners:

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

Emissions Data See attached spreadsheet entitled "Nail_Line_8010.xls"		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)		
Nitrogen Oxides (NO _x)		
Lead (Pb)		
Particulate Matter (PM _{2.5})		
Particulate Matter (PM ₁₀)		
Total Particulate Matter (TSP)		
Sulfur Dioxide (SO ₂)		
Volatile Organic Compounds (VOC)	0.052	0.23
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

VOC Emissions based on VOC content of inks contained in Certified Product Data Sheet.

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or **construction permit** with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

- 40 CFR 63 Subpart DDDD – R30-01900034-2006 SM01 – Condition 3.1.19 (40 CFR 62.2250(a) and (b), Permit No. R13-1622, Condition 4.1.12)
- 40 CFR 63 Subpart DDDD – R30-01900034-2006 SM01 – Condition 3.1.20 (40 CFR 62.2250(c), Permit No. R13-1622, Condition 4.1.12)
- 40 CFR 63 Subpart DDDD – R30-01900034-2006 SM01 – Condition 3.4.8 (40 CFR 62.2283(a), (b), and (c), Permit No. R13-1622, Condition 4.1.12)
- 40 CFR 63 Subpart DDDD – R30-01900034-2006 SM01 – Condition 3.5.11.b. (40 CFR 62.2281(c) and (d), Permit No. R13-1622, Condition 4.1.12)
- 40 CFR 63 Subpart DDDD – R30-01900034-2006 SM01 – Condition 3.5.12. (40 CFR 62.2281(b), Permit No. R13-1622, Condition 4.1.12)
- 40 CFR 63 Subpart DDDD – R30-01900034-2006 SM01 – Condition 3.5.13. (40 CFR 62.2281(a), Permit No. R13-1622, Condition 4.1.12)

Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

40 CFR 63 Subpart DDDD - Condition 7.3.2 (40 CFR 63.2271(a); Permit No. R13-1622, Condition 4.1.12)

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the **Schedule of Compliance Form** as ATTACHMENT F.

Georgia-Pacific Wood Products LLC
Mt. Hope OSB Plant

Unit Name: Nail Line
Emission Unit ID: 8010
Control Device ID: None
Unit Description: Nail lines are applied to the finished OSB boards to mark the 16" and 24" dimensions on the board

<u>Actual Operating Parameters</u>	2009	Calendar Year	<u>Potential Operating Parameters</u>	
Hours:	4,520	hours/year	Hours:	8,760 hours/year
Actual Ink Usage:	275	gallons	Ink Consumption:	0.0040 gal/MSF
VOC Content %:	3.08	%	Maximum Ink Usage:	0.15 gal/hr
Product Density	8.44	lbs/gal	Maximum Ink Usage:	1,750 gal/yr
OSB Production:	216.3	MMSF/yr	OSB Production:	438 MMSF/yr

<i>Criteria Air Pollutants</i>						
Pollutant	Control Efficiency	Reference	<u>Calendar Year 2009</u>		Potential Emissions	
			Actual Emissions		lb/hr	tpy
			lb/hr	tpy		
VOC		1	0.016	0.036	0.052	0.23

References

- 1 Emissions based on VOC content contained in Certified Product Data Sheet.

C.18 – STORAGE TANKS

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: 3990	Emission unit name: Storage Tanks	List any control devices associated with this emission unit: None
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Provide a description of the emission unit (type, method of operation, design parameters, etc.):

The following storage tanks are located at the facility: 15,000 gallon Thermal Oil, 5,200 gallon Thermal Oil expansion, 6,000 gallon Hydraulic Oil, 1,000 gallon Hydraulic Oil, 3 – 550 gallon Hydraulic/Gear Oil, 330 gallon Hydraulic Oil, 120 gallon Hydraulic Oil, 2,000 gallon Diesel Fuel, 250 gallon Diesel Fuel, 2 – 1,000 gallon Kerosene, 100 gallon Kerosene, 550 gallon Gasoline, 2 – 10,000 gallon Wax.

Manufacturer:	Model number:	Serial number:
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Construction date:	Installation date: 04/01/1995	Modification date(s):
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Design Capacity (examples: furnaces - tons/hr, tanks - gallons):

Maximum Hourly Throughput:	Maximum Annual Throughput:	Maximum Operating Schedule: 8760 hours/yr
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? ___ Yes <u> X </u> No	If yes, is it? ___ Indirect Fired ___ Direct Fired
--	--

Maximum design heat input and/or maximum horsepower rating:	Type and Btu/hr rating of burners:
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List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)		
Nitrogen Oxides (NO _x)		
Lead (Pb)		
Particulate Matter (PM _{2.5})		
Particulate Matter (PM ₁₀)		
Total Particulate Matter (TSP)		
Sulfur Dioxide (SO ₂)		
Volatile Organic Compounds (VOC)	Negligible	Negligible
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

Emissions from these storage tanks are negligible due to the small tank size and limited throughputs and the low vapor pressures of the material being stored.

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or **construction permit** with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (*Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.*)

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the **Schedule of Compliance Form** as ATTACHMENT F.

C.19 – LOG DEICING

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: Fugitive	Emission unit name: Log Deicing	List any control devices associated with this emission unit: None
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Provide a description of the emission unit (type, method of operation, design parameters, etc.):

Logs are conveyed to the deicing system where hot water is sprayed over the logs (to deice during winter conditions) and to condition the logs prior to the flaking operation.

Manufacturer: Nicholson	Model number:	Serial number:
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Construction date:	Installation date: 04/01/1995	Modification date(s):
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Design Capacity (examples: furnaces - tons/hr, tanks - gallons):
90 tons/hr.

Maximum Hourly Throughput: 90 tons/hr	Maximum Annual Throughput: 788,400 tons	Maximum Operating Schedule: 8760 hours
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? ___ Yes <u> X </u> No	If yes, is it? ___ Indirect Fired ___ Direct Fired
--	--

Maximum design heat input and/or maximum horsepower rating:	Type and Btu/hr rating of burners:
--	---

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

Emissions Data See attached spreadsheet entitled "Log_Deicing.xls"		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)		
Nitrogen Oxides (NO _x)		
Lead (Pb)		
Particulate Matter (PM _{2.5})	No data available	No data available
Particulate Matter (PM ₁₀)		
Total Particulate Matter (TSP)		
Sulfur Dioxide (SO ₂)		
Volatile Organic Compounds (VOC)	5.14	22.49
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Acetaldehyde	0.32	1.42
Methanol	0.51	2.22
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

Emission factor for VOC derived from the sum of individual organic species reported in the 2008 NCASI Plywood Database plus a 20% margin.

Emission factor for acetaldehyde and methanol derived from mean value of stack tests reported in the 2008 NCASI Plywood Database plus a 20% margin.

No data available to estimate PM emissions.

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

X Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

Are you in compliance with all applicable requirements for this emission unit? X Yes No

If no, complete the **Schedule of Compliance Form** as ATTACHMENT F.

Georgia-Pacific Wood Products LLC
Mt. Hope OSB Plant

Unit Name: Log Deicing
Emission Unit ID: Fugitive
Control Device ID: None

Unit Description: Logs are conveyed to the deicing system where hot water is sprayed over the logs to condition the logs prior to the flaking operation.

Actual Operating Parameters	2009	Calendar Year	Potential Operating Parameters		
Hours:	5,355	hours/year	Hours:	8,760	hours/year
Log Throughput:	341,571	tons/year	Log Throughput:	90	tons/hour
OSB Production	216.3	MMSF/year	OSB Production	57.7	MSF/hr

<i>Criteria Air Pollutants</i>						
Pollutant	Emission Factor	Reference	Calendar Year 2009		Potential Emissions ¹	
			Actual Emissions		lb/hr	tpy
			lb/hr	tpy		
TSP/PM ₁₀ /PM _{2.5}	No Factor Available					
VOC	0.089 lb/Msf	2	3.59	9.63	5.14	22.49
Total HAP	0.014 lb/Msf	3	0.58	1.56	0.83	3.64
<i>Hazardous Air Pollutants</i>						
Pollutant	Emission Factor	Reference	Calendar Year 2009		Pre-Modification	
			Actual Emissions		Potential Emissions	
			lb/hr	tpy	lb/hr	tpy
Acetaldehyde	0.0056 lb/Msf	3	0.23	0.61	0.32	1.42
Methanol	0.0088 lb/Msf	3	0.36	0.95	0.51	2.22

Sample calculations:

Potential Emissions (lb/hr) = Emission Factor (lb/MSF) * Maximum Hourly Production (MSF/hr)
 Potential Emissions (tpy) = Emission Factor (lb/MSF) * Maximum Annual Production (MMSF/yr) * 1 ton/2,000 lb * 1,000 Msf/MMsf

References:

1. Potential Emissions are calculated using the best available emission factor plus a 20% margin at the maximum operational capacity.
2. Emission factor derived from the sum of individual organic species reported in the 2008 NCASI Plywood Database plus a 20% margin.
3. Emission factor derived from mean value of stack tests reported in the 2008 NCASI Plywood Database plus a 20% margin.

C.20 – MISCELLANEOUS COATINGS

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: Fugitive	Emission unit name: Miscellaneous Coating Operations	List any control devices associated with this emission unit: None
---	--	---

Provide a description of the emission unit (type, method of operation, design parameters, etc.):

This covers the Group 1 miscellaneous coating operations under the PCWP MACT that are not specifically listed in the permit (such as the Nail Line Applicator and the Edge Seal Paint Booth). Other miscellaneous coating operations occur at the facility (such as Logo application, addition of trademark and other identifying information). These are required to be non-HAP coating operations.

Manufacturer:	Model number:	Serial number:
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Construction date:	Installation date: 04/01/1995	Modification date(s):
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Design Capacity (examples: furnaces - tons/hr, tanks - gallons):
0.5 gallons/hr

Maximum Hourly Throughput: 0.5 gallons/hr	Maximum Annual Throughput: 4,400 gallons/yr	Maximum Operating Schedule: 8760 hours/yr
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? ___ Yes <u> X </u> No	If yes, is it? ___ Indirect Fired ___ Direct Fired
--	--

Maximum design heat input and/or maximum horsepower rating:	Type and Btu/hr rating of burners:
--	---

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

Emissions Data See attached spreadsheet entitled "Misc_Coatings.xls"		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)		
Nitrogen Oxides (NO _x)		
Lead (Pb)		
Particulate Matter (PM _{2.5})	0.60	2.17
Particulate Matter (PM ₁₀)	0.60	2.17
Total Particulate Matter (TSP)	0.60	2.17
Sulfur Dioxide (SO ₂)		
Volatile Organic Compounds (VOC)	0.021	0.090
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

Particulate emissions from the coating operation are a function of the following variables: 1) percent solids in the coating; 2) transfer efficiency of the spraying operation; and 3) control device efficiency, if applicable. The transfer efficiency is a measure of the percent of solids that are transferred to the object being painted. The remaining solids that are "oversprayed" are entrained in the exhaust air and emitted to the atmosphere. It is conservatively assumed that 100% of the PM emitted is PM10/PM2.5

Emissions based on VOC content contained in Certified Product Data Sheet for white stencil paint (highest VOC content coating).

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

- 40 CFR 63 Subpart DDDD – R30-01900034-2006 SM01 – Condition 3.1.19 (40 CFR 62.2250(a) and (b), Permit No. R13-1622, Condition 4.1.12)
- 40 CFR 63 Subpart DDDD – R30-01900034-2006 SM01 – Condition 3.1.20 (40 CFR 62.2250(c), Permit No. R13-1622, Condition 4.1.12)
- 40 CFR 63 Subpart DDDD – R30-01900034-2006 SM01 – Condition 3.4.8 (40 CFR 62.2283(a), (b), and (c), Permit No. R13-1622, Condition 4.1.12)
- 40 CFR 63 Subpart DDDD – R30-01900034-2006 SM01 – Condition 3.5.11.b. (40 CFR 62.2281(c) and (d), Permit No. R13-1622, Condition 4.1.12)
- 40 CFR 63 Subpart DDDD – R30-01900034-2006 SM01 – Condition 3.5.12. (40 CFR 62.2281(b), Permit No. R13-1622, Condition 4.1.12)
- 40 CFR 63 Subpart DDDD – R30-01900034-2006 SM01 – Condition 3.5.13. (40 CFR 62.2281(a), Permit No. R13-1622, Condition 4.1.12)

Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

40 CFR 63 Subpart DDDD - Condition 7.3.2 (40 CFR 63.2271(a); Permit No. R13-1622, Condition 4.1.12)

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

Georgia-Pacific Wood Products LLC
Mt. Hope OSB Plant

Unit Name: Misc. Coating

Emission Unit ID: Fugitive

Control Device ID: None

This covers the Group 1 miscellaneous coating operations under the PCWP MACT that are not specifically listed in the permit (such as the Nail Line Applicator and the Edge Seal Paint Booth). Other miscellaneous coating operations occur at the facility (such as Logo application, addition of trademark and other identifying information). These are required to be non-HAP coating operations.

Unit Description:

Actual Operating Parameters

	2009	Calendar Year
Hours:	4,520	hours/year
Actual Paint Consumption:	983	gallons
Paint Density:	12.6	lb/gallon
VOC Content %:	0.22	%
% Solids:	60.7%	
Transfer efficiency:	65%	

Potential Operating Parameters

Hours:	8,760	hours/year
Maximum Paint Consumption:	0.9	gallons/hour
Maximum Paint Consumption:	6,500	gallons

<i>Criteria Air Pollutants</i>						
Pollutant	Control Efficiency	Reference	Calendar Year 2009		Potential Emissions	
			Actual Emissions		Potential Emissions	
			lb/hr	tpy	lb/hr	tpy
TSP/PM ₁₀ /PM _{2.5}	75.0%	1	0.15	0.33	0.60	2.17
VOC		2	0.0060	0.014	0.021	0.090

Control efficiency of 75% provided since coating occurs inside building.

References

- 1 Particulate emissions from the coating operation are a function of the following variables: 1) percent solids in the coating; 2) transfer efficiency of the spraying operation; and 3) control device efficiency, if applicable. The transfer efficiency is a measure of the percent of solids that are transferred to the object being painted. The remaining solids that are "oversprayed" are entrained in the exhaust air and emitted to the atmosphere. It is conservatively assumed that 100% of the PM emitted is PM10.
- 2 Emissions based on VOC content contained in Certified Product Data Sheet for white stencil paint (highest VOC content coating).

C.21 – RECIPROCATING INTERNAL COMBUSTION ENGINES (RICE)

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: RICE-1	Emission unit name: Firewater Pump Engine	List any control devices associated with this emission unit: None
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Provide a description of the emission unit (type, method of operation, design parameters, etc.):

This reciprocating internal combustion engine (RICE) is used to run the firewater pump in emergencies when electric power has been interrupted.

Manufacturer: Cummins	Model number:	Serial number:
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Construction date:	Installation date: 04/01/1995	Modification date(s):
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Design Capacity (examples: furnaces - tons/hr, tanks - gallons): 255 hp

Maximum Hourly Throughput: 13 gallons/hr	Maximum Annual Throughput: 6,400 gallons/yr	Maximum Operating Schedule: 500 hours
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If yes, is it? <input type="checkbox"/> Indirect Fired <input checked="" type="checkbox"/> Direct Fired
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Maximum design heat input and/or maximum horsepower rating: 255 hp	Type and Btu/hr rating of burners:
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List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Diesel – 13 gallons/hr and 6,400 gallons/yr

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
Diesel	0.015	Negligible	140,000 / gallon

Emissions Data See attached spreadsheet entitled "RICE.xls"		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)	1.70	0.43
Nitrogen Oxides (NO _x)	7.91	1.98
Lead (Pb)		
Particulate Matter (PM _{2.5})	0.56	0.14
Particulate Matter (PM ₁₀)	0.56	0.14
Total Particulate Matter (TSP)	0.56	0.14
Sulfur Dioxide (SO ₂)	0.52	0.13
Volatile Organic Compounds (VOC)	0.64	0.16
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Total HAP	0.99	0.25
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
<p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>U.S. EPA, AP-42 Compilation of Air Emission Factors (5th Ed.). Section 3.3, Gasoline and Diesel Industrial Engines (Revised October 1996). Tables 3.3-1 and 3.3-2.</p>		

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

40 CFR 63 Subpart ZZZZ

Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

40 CFR 63, Subpart ZZZZ

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the **Schedule of Compliance Form** as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: RICE-2	Emission unit name: Thermal Oil Pump Engine	List any control devices associated with this emission unit: None
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Provide a description of the emission unit (type, method of operation, design parameters, etc.):

This reciprocating internal combustion engine (RICE) is used to run the thermal oil pump in emergencies when electric power has been interrupted.

Manufacturer: Hercules Engines, Inc.	Model number:	Serial number:
Construction date:	Installation date: 04/01/1995	Modification date(s):

Design Capacity (examples: furnaces - tons/hr, tanks - gallons): 41 hp

Maximum Hourly Throughput: 1,000 CF/hr	Maximum Annual Throughput: 500 MCF	Maximum Operating Schedule: 500 hours
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If yes, is it? <input type="checkbox"/> Indirect Fired <input checked="" type="checkbox"/> Direct Fired
Maximum design heat input and/or maximum horsepower rating: 41 hp	Type and Btu/hr rating of burners:

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Natural Gas – 1,000 CF/hr and 500 MCF/yr

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
Natural Gas	Negligible	Negligible	1,020 /CF

Emissions Data See attached spreadsheet entitled "RICE.xls"		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)	0.39	0.10
Nitrogen Oxides (NO _x)	0.24	0.06
Lead (Pb)		
Particulate Matter (PM _{2.5})	0.00020	0.000051
Particulate Matter (PM ₁₀)	0.00020	0.000051
Total Particulate Matter (TSP)	0.00020	0.000051
Sulfur Dioxide (SO ₂)	0.000061	0.000015
Volatile Organic Compounds (VOC)	0.0031	0.00077
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Total HAP	0.0034	0.00084
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
<p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>U.S. EPA, AP-42 Compilation of Air Emission Factors (5th Ed.). Section 3.2, Natural Gas-fired Reciprocating Engines (revised July 2000). Table 3.2-3.</p>		

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

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Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

40 CFR 63, Subpart ZZZZ

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the **Schedule of Compliance Form** as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: RICE-3 thru RICE-8	Emission unit name: Dryer Drum Engines	List any control devices associated with this emission unit: None
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Provide a description of the emission unit (type, method of operation, design parameters, etc.):

These reciprocating internal combustion engine (RICE) are used to rotate the dryer drums (2 engines per dryer, 3 dryers) in emergencies when electric power has been interrupted.

Manufacturer: Briggs and Stratton	Model number:	Serial number:
Construction date:	Installation date: 04/01/1995	Modification date(s):

Design Capacity (examples: furnaces - tons/hr, tanks - gallons): 18 hp

Maximum Hourly Throughput: 1 gallons/hr/each	Maximum Annual Throughput: 500 gallons/yr/each	Maximum Operating Schedule: 500 hours
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If yes, is it? <input type="checkbox"/> Indirect Fired <input checked="" type="checkbox"/> Direct Fired
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Maximum design heat input and/or maximum horsepower rating: 18 hp	Type and Btu/hr rating of burners:
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List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Gasoline – 1 gallons/hr and 500 gallons/yr

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
Gasoline	Negligible	Negligible	150,000 / gallon

Emissions Data See attached spreadsheet entitled "RICE.xls"		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)	0.29	0.071
Nitrogen Oxides (NO _x)	0.45	0.11
Lead (Pb)		
Particulate Matter (PM _{2.5})	0.03	0.007
Particulate Matter (PM ₁₀)	0.03	0.007
Total Particulate Matter (TSP)	0.03	0.007
Sulfur Dioxide (SO ₂)	0.024	0.0061
Volatile Organic Compounds (VOC)	0.89	0.22
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Total HAP	0.02	0.005
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

U.S. EPA, AP-42 Compilation of Air Emission Factors (5th Ed.). Section 3.3, Gasoline and Diesel Industrial Engines (Revised October 1996). Tables 3.3-1.

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or **construction permit** with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

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Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (*Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.*)

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Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the **Schedule of Compliance Form** as ATTACHMENT F.

Georgia-Pacific Wood Products LLC
Mt. Hope OSB Plant

Unit Name: Diesel-fired Engine
Emission Unit ID: RICE-1
Control Device ID: None
Unit Description: 255 HP diesel-fired engine used for emergency firewater pump.
Rated Power Output (HP): 255
Annual Operating Hours: 500

<i>Criteria Air Pollutants</i>				
Pollutant	<u>Emission Factor</u>	Reference	Potential Emissions	
	lb/hp-hr		lb/hr	tpy
TSP/PM10/PM2.5	0.00220	1	0.56	0.14
NOx	0.0310	1	7.91	1.98
CO	0.00668	1	1.70	0.43
SO2	0.00205	1	0.52	0.13
VOC	0.00251	1	0.64	0.16
Total HAP	0.00387	2	0.99	0.25

References

- 1 U.S. EPA, AP-42 Compilation of Air Emission Factors (5th Ed.). Section 3.3, Gasoline and Diesel Industrial Engines (revised October 1996). Table 3.3-1, "Emission Factors for Uncontrolled Gasoline and Diesel Industrial Engines," factors for diesel engines.
- 2 U.S. EPA, AP-42 Compilation of Air Emission Factors (5th Ed.). Section 3.3, Gasoline and Diesel Industrial Engines (revised October 1996). Table 3.3-2, "Speciated Organic Compound Emission Factors for Uncontrolled Diesel Industrial Engines," sum of individual HAP species.

Georgia-Pacific Wood Products LLC
Mt. Hope OSB Plant

Unit Name: Natural Gas-fired Engine
Emission Unit ID: RICE-2
Control Device ID: None
Unit Description: 41 HP natural gas fired engine used for emergency thermal oil pump.
Rated Power Output (HP): 41
Annual Operating Hours: 500

<i>Criteria Air Pollutants</i>				
Pollutant	Emission Factor lb/hp-hr	Reference	Potential Emissions	
			lb/hr	tpy
TSP/PM10/PM2.5	0.000049	1	0.00020	0.000051
NOx	0.0058	1	0.24	0.06
CO	0.00947	1	0.39	0.10
SO2	0.000015	1	0.000061	0.000015
VOC	0.000075	1	0.0031	0.00077
Total HAP	0.000082	2	0.0034	0.00084

References

- 1 U.S. EPA, AP-42 Compilation of Air Emission Factors (5th Ed.). Section 3.2, Natural Gas-fired Reciprocating Engines (revised July 2000). Table 3.2-3, "Uncontrolled Emission Factors for 4-Stroke Rich Burn Engines. Factors converted from lb/MMBtu to lb/hp-hr by dividing by 393.02.
- 2 U.S. EPA, AP-42 Compilation of Air Emission Factors (5th Ed.). Section 3.2, Natural Gas-fired Reciprocating Engines (revised July 2000). Table 3.2-3, "Uncontrolled Emission Factors for 4-Stroke Rich Burn Engines, sum of individual HAP species.

Georgia-Pacific Wood Products LLC
Mt. Hope OSB Plant

Unit Name: Gasoline-fired Engine
Emission Unit ID: RICE-3 thru 8
Control Device ID: None
 18 HP gasoline engine used for rotate dryer drums during emergency (2 units per dryer, 3 dryers).
Unit Description:
Rated Power Output (HP): 18
Annual Operating Hours: 500

<i>Criteria Air Pollutants</i>				
Pollutant	<u>Emission Factor</u>	Reference	Potential Emissions	
	lb/hp-hr		lb/hr	tpy
TSP/PM10/PM2.5	0.000721	1	0.030	0.007
NOx	0.011	1	0.45	0.11
CO	0.00696	1	0.29	0.071
SO2	0.000591	1	0.024	0.0061
VOC	0.0216	1	0.89	0.22
Total HAP	0.000485	2	0.020	0.0050

References

- 1 U.S. EPA, AP-42 Compilation of Air Emission Factors (5th Ed.). Section 3.3, Gasoline and Diesel Industrial Engines (revised October 1996). Table 3.3-1, "Emission Factors for Uncontrolled Gasoline and Diesel Industrial Engines," factors for gasoline engines.
- 2 As aldehydes reported in AP-42 Table 3.3-1.

APPENDIX D

West Virginia Regulatory Applicability Review

West Virginia Regulatory Applicability Review
Georgia-Pacific Wood Products LLC – Mt. Hope, WV OSB: Permit No. R30-01900034-2006

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Regulation	Description	Applicable Yes/No	Description of Applicability	Comments
45CSR2	To Prevent and Control Particulate Air Pollution from Combustion of Fuel in Indirect Heat Exchangers	Yes	This rule establishes emission limitations for smoke and particulate matter which are discharged from fuel burning units	The Mt. Hope OSB facility contains an auxiliary natural gas fired indirect heat exchanger that is subject to these requirements.
45CSR2A	Testing, Monitoring, Reporting, and Recordkeeping Requirements under 45 CSR 2	Yes	This rule provides guidance and clarification for complying with the testing, monitoring, recordkeeping and reporting requirements of 45CSR2.	The Mt. Hope OSB facility contains an auxiliary natural gas fired indirect heat exchanger that is subject to these requirements.
45CSR3	To Prevent and Control Air Pollution from the Operation of Hot Mix Asphalt Plants	No	This rule establishes emission limitations for hot mix asphalt plants and the plant property.	The Mt. Hope OSB facility is not a hot mix asphalt plant.
45CSR4	To Prevent and Control the Discharge of Air Pollutants into the Open Air which Causes or Contributes to an Objectionable Odor or Odors	Yes	This rule is designed to prevent and control the discharge of pollutants into the open air which causes or contributes to an objectionable odor or odors	This regulation is generally applicable to all facilities including the Mt. Hope OSB facility.
45CSR5	To Prevent and Control Air Pollution from the Operation Coal Preparation Plants, Coal Handling Operations, and Coal Disposal Areas	No	This rule is designed to prevent and control air pollution from the operation of coal preparation plants, coal handling operations and coal refuse disposal areas.	The Mt. Hope OSB facility is not a coal preparation plant nor does it contain any coal handling operations or coal refuse disposal areas.
45CSR6	To Prevent and Control Air Pollution from Combustion of Refuse	No	This rule is designed to prevent and control air pollution from combustion of refuse	The Mt. Hope OSB facility does not combust refuse.

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Regulation	Description	Applicable Yes/No	Description of Applicability	Comments
45CSR7	To Prevent and Control Particulate Matter Air Pollution from Manufacturing Processes and Associated Operations	Yes	The purpose of this rule is to prevent and control particulate matter air pollution from manufacturing processes and associated operations	The Mt. Hope OSB facility contains manufacturing processes and associated operations that are subject to these requirements.
45CSR7A	Compliance Test Procedures for 45CSR7 - To Prevent and Control Particulate Matter Air Pollution from Manufacturing Process Operations	Yes	The intent and purpose of this procedural rule is to establish test procedures to determine compliance with 45CSR7 - "To Prevent and Control Particulate Air Pollution From Manufacturing Process Operations".	The Mt. Hope OSB facility contains manufacturing processes and associated operations that are subject to these requirements.
45CSR8	Ambient Air Quality Standards	No	This rule establishes ambient air quality standards in West Virginia for sulfur oxides, particulate matter, carbon monoxide, ozone, nitrogen dioxide and lead, equivalent to the national primary and secondary ambient air quality standards	Compliance with ambient air quality standards is a state-wide requirement not a facility specific requirement.
45CSR10	To Prevent and Control Air Pollution the Emissions of Sulfur Oxides	Yes	The purpose of this rule is to prevent and control air pollution from the emission of sulfur oxides.	The Mt. Hope OSB facility contains manufacturing processes and associated operations that are subject to these requirements.
45CSR10A	Testing, Monitoring, Recordkeeping, and Reporting Requirements under 45CSR10	Yes	The purpose of this rule is to provide guidance and clarification for complying with the testing, monitoring, recordkeeping and reporting requirements of 45CSR10	The Mt. Hope OSB facility contains manufacturing processes and associated operations that are subject to these requirements.
45CSR11	Prevention of Air Pollution Emergency Episodes	No	The purpose of this rule is to provide a mechanism to prevent the buildup of air pollutant concentrations during periods of adverse meteorological conditions in which air pollutants may accumulate, thereby preventing the occurrence of an emergency due to the effects of these pollutants on health	The Mt. Hope facility is located in Fayette County (Region V) which has no designated Priority I or II pollutants.

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Regulation	Description	Applicable Yes/No	Description of Applicability	Comments
45CSR13	Permits for Construction, Modification, Relocation, and Operation of Stationary Sources of Air Pollutants	Yes	The purpose of this rule is to set forth the procedures for stationary source reporting, and the criteria for obtaining a permit to construct and operate a new stationary source which is not a major stationary source, to modify a non-major stationary source, to make modifications which are not major modifications to an existing major stationary source and to relocate non-major stationary sources within the state of West Virginia.	Applies to all facilities proposing to construct, modify, or operate a stationary source of air pollution within WV.
45CSR13A	The Permitting of Research and Development (R&D) Activities under 45CSR13.	No	The purpose of this rule is to provide guidance and clarification regarding the permitting of Research and Development (R&D) activities under 45CSR13 while ensuring compliance with all applicable requirements and at the same time providing operational flexibility.	The Mt. Hope facility does not conduct any research and development activities.
45CSR13B	The Permitting of Laboratory Facilities under 45CSR13	No	The purpose of this rule to provide guidance and clarification regarding the permitting of laboratory facilities under 45CSR13, while ensuring compliance with all applicable requirements and at the same time providing operational flexibility	The laboratory facilities at the Mt. Hope facility are defined as “bench scale laboratory equipment” which is exempt from permitting under 45CSR13.
45CSR14	Permits for Construction and Major Modification of Major Stationary Sources of Air Pollution for the Prevention of Significant Deterioration	Yes	The purpose of this rule is to set forth the procedures for major stationary sources to construct or modify a major stationary source of air pollution in an area classified as attaining National or West Virginia Ambient Air Quality Standards.	Applies to all major facilities proposing to construct, modify, or operate a major source or a major modification within WV. The Mt. Hope facility is a major source for PSD purposes.
45CSR16	Standards of Performance for New Stationary Sources Pursuant to 40 CFR Part 60	Yes	This rule establishes and adopts standards of performance for new stationary sources promulgated by USEPA pursuant to section 111(b) of the federal Clean Air Act (CAA), as amended.	The Mt. Hope facility contains stationary sources subject standards of performance contained in 40CFR60.
45CSR17	To Prevent and Control Particulate Matter Air Pollution from Material Handling, Preparation, Storage, and Other Sources of Fugitive Particulate Matter	Yes	The purpose of this rule is to prevent and control particulate matter air pollution from materials handling, preparation, storage and other sources of fugitive particulate matter.	The Mt. Hope facility contains material handling, preparation, storage, and other sources of fugitive particulate matter.

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Regulation	Description	Applicable Yes/No	Description of Applicability	Comments
45CSR18	To Prevent and Control Emissions from Commercial and Industrial Solid Waste Incineration Units	No	This rule establishes standards of performance and emission standards for commercial and industrial solid waste incineration (CISWI) units pursuant to Sections 111 and 129 of the federal Clean Air Act as amended in 1990 (CAA).	The Mt. Hope facility does not contain any solid waste incineration units.
45CSR19	Permits for Construction and Major Modification of Major Stationary Sources of Air Pollution Which Cause or Contribute to Nonattainment	No	The purpose of this rule is to set forth the procedures for major stationary sources to construct or modify a major stationary source of air pollution in an area classified as not attaining a National or West Virginia Ambient Air Quality Standards.	The Mt. Hope facility is located in Fayette County which is designated as attainment or unclassifiable for all criteria pollutants.
45CSR20	Good Engineering Practice as Applicable to Stack Height	Yes	This rule is promulgated to ensure that the degree of emission limitation required for the control of any air pollutant is not affected by that portion of any stack height which exceeds good engineering practice or by any other dispersion technique.	All stacks at the Mt. Hope facility are less than GEP stack height.
45CSR21	Regulation to Prevent and Control Air Pollution of Volatile Organic Compounds	No	This rule requires that persons engaged in the manufacture, mixing, storage, use, or application of volatile organic compounds control the emission of volatile organic compounds through the application of reasonably available control technology. This regulation applies to sources located in Putnam County, Kanawha County, Cabell County, Wayne County, and Wood County	The Mt. Hope facility is located in Fayette county, not in one of the counties where the regulation is applicable.
45CSR22	Air Quality Management Fee Program	Yes	This rule establishes a program to collect fees for certificates to operate and for permits to construct, modify or relocate sources of air pollution.	The Mt. Hope facility is subject to fee payments.
45CSR23	To Prevent and Control Emissions from Municipal Solid Waste Landfills	No	This rule establishes standards of performance and emission guidelines for municipal solid waste landfills pursuant to Section 111 of the federal Clean Air Act as amended in 1990 (CAA).	The Mt. Hope facility does not contain a municipal solid waste landfill.
45CSR25	To Prevent and Control Air Pollution from Hazardous Waste Treatment, Storage, or Disposal Facilities	No	This rule establishes a program of regulation over air emissions from the treatment, storage, and disposal of hazardous wastes.	The Mt. Hope facility is not a hazardous waste treatment, storage, or disposal facility.
45CSR27	To Prevent and Control Emissions of Toxic Air Pollutants	Yes	The purpose of this rule is to prevent and control the discharge of toxic air pollutants requiring the application of best available technology.	The Mt. Hope facility is subject to the requirements in this regulation.

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Regulation	Description	Applicable Yes/No	Description of Applicability	Comments
45CSR28	Air Pollutant Emissions Banking and Trading	Yes	The purpose of this rule is to establish a voluntary statewide air pollutant emissions trading program which provides incentives to make progress toward the attainment or maintenance of the national ambient air quality standards, the reduction or prevention of hazardous air pollutant emissions and the protection of human health, welfare and the environment.	Generally applicable. This rule applies to all persons who voluntarily choose to participate in an emission reduction credit trading program.
45CSR29	Rule Requiring the Submission of Emission Statements for Volatile Organic Compound Emissions and Nitrogen Oxide Emissions	No	This rule requires the submission of an emission statement from owners and operators of stationary sources emitting volatile organic compounds (VOCs) or oxides of nitrogen (NO _x). This rule applies only to stationary sources located in Putnam, Kanawha, Cabell, Wayne, Wood, and Greenbrier Counties.	The Mt. Hope facility is located in Fayette county, not in one of the counties where the regulation is applicable.
45CSR30	Requirements for Operating Permits	Yes	This rule provides for the establishment of a comprehensive air quality permitting system consistent with the requirements of Title V of the Clean Air Act, and provides for a transition period prior to the implementation of the permitting system.	The Mt. Hope facility is subject to this regulation.
45CSR30A	Deferral of Non-major and Area Sources from Permitting Requirements	No	This rule provides for the deferral of nonmajor and area sources from the obligation to obtain a permit under WV 45CSR30 "Requirements for Operating Permits".	The Mt. Hope facility is a major source for Title V purposes.
45CSR30B	Identification and Counting of Fugitive Emissions in Major Source Determinations Under WV 45CSR30	Yes	This rule provides guidance with respect to which stationary sources are required to count fugitive emissions, and the proper method of identifying such emissions, in making major source determinations for the purpose of determining applicability of the permitting program under WV 45CSR30 "Requirements for Operating Permits."	The Mt. Hope facility is subject to this regulation.
45CSR31	Confidential Information	Yes	This rule establishes the requirements for claiming information submitted to the Director as confidential and the procedures for determinations of confidentiality in accordance with the provisions of W. Va. Code '22-5-10.	Generally applicable. Applicable if a claim of confidentiality is made.
45CSR31A	Release of Previously Submitted Confidential Information	Yes	This rule establishes some of the factors to be considered pursuant to WVCSR '45-31-3.2 by the Director in his or her decision whether to release confidential information submitted prior to the effective date of WV45CSR31 (September 25, 1997) in response to a written request for the information in accordance with the West Virginia Freedom of Information Act (W.Va. Code '29B-1-1 et seq.).	Generally applicable. Applicable to the release of previously submitted confidential information.
45CSR31B	Confidential Business Information and Emission Data	Yes	This rule provides guidance and clarification concerning the term "types and amounts of pollutants discharged" defined under 45CSR31-2.4, the Department's legislative rule entitled "Confidential Information," and thus what information may not be claimed confidential in accordance with 45CSR31-6.	Generally applicable. Applicable if a claim of confidentiality is made.

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Regulation	Description	Applicable Yes/No	Description of Applicability	Comments
45CSR32	Serious and Minor Violations of Applicable Rules	No	This rule defines "serious violation" and "minor violation" for the violation of any provision of the Act, or for violation of any rules issued pursuant to the Act, or for the violation of any order, agreement, or permit, or any part thereof, issued under the Act.	Defines "serious violation" and "minor violation" but contains no specific requirements.
45CSR33	Acid Rain Provisions and Permits	No	This rule establishes general provisions and the operating permit program requirements for affected sources and affected units under the Acid Rain Program promulgated by the United States Environmental Protection Agency under Title IV of the Clean Air Act, as amended.	The Mt. Hope facility is not an affected source under the Acid Rain Program.
45CSR34	Emission Standards for Hazardous Air Pollutants for Source Categories Pursuant to 40 CFR Part 63	Yes	This rule establishes and adopts national emission standards for hazardous air pollutants (NESHAPS) promulgated by USEPA pursuant to 40 CFR Part 63 and Section 112 of the federal Clean Air Act (CAA), as amended.	The Mt. Hope facility has affected sources that are/will be subject to emission standards contained in 40CFR63.
45CSR35	Requirements for Determining Conformity of General Federal Actions to Applicable Air Quality Implementation Plans	No	This rule sets forth policy, criteria, and procedures for demonstrating and assuring conformity of such activities to all applicable implementation plans developed pursuant to Section 110 and Part D of the CAA.	Doesn't apply to the regulated community.
45CSR36	Transportation Conformity	No	This rule codifies general policy, criteria, and procedures for demonstrating and assuring conformity of such activities to applicable air quality implementation plans developed pursuant to Section 110 and Part D of the CAA.	Doesn't apply to the regulated community.
45CSR38	Provisions for the Determination of Compliance with Air Quality Management Rules	Yes	The purpose of this rule is to clarify the types of data that may be used by an owner of a facility subject to air pollutant emission standards or by the Director of the Division of Environmental Protection in determining whether the facility is in compliance with or violation of the emission standards	Generally applicable.
45CSR39	Control of Annual Nitrogen Oxide Emissions	No	This rule establishes general provisions and the designated representative, permitting, allowance and monitoring provisions for the state CAIR NO _x Annual Trading Program pursuant to the federal Clean Air Interstate Rule (CAIR)	The Mt. Hope facility doesn't contain any CAIR designated units.
45CSR40	Control of Ozone Season Nitrogen Oxide Emissions	No	This rule established the general provisions and the designated representative, permitting, allowance and monitoring provisions for the state CAIR NO _x Ozone Season Trading Program pursuant to the federal Clean Air Interstate Rule (CAIR)	The Mt. Hope facility doesn't contain any CAIR designated units.

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Regulation	Description	Applicable Yes/No	Description of Applicability	Comments
45CSR41	Control of Annual Sulfur Dioxide Emissions	No	This rule establishes general provisions and the designated representative, permitting, allowance and monitoring provisions for the state CAIR SO ₂ Trading Program pursuant to the federal Clean Air Interstate Rule (CAIR)	The Mt. Hope facility doesn't contain any CAIR designated units.
45CSR42	Greenhouse Gas Emissions Inventory Program	Yes	This rule establishes a greenhouse gas emissions inventory program in West Virginia and requires the reporting and inventory of greenhouse gas emissions by stationary sources which emit more than a <i>de minimis</i> amount of greenhouse gases on an annual basis.	The Mt. Hope facility generates greenhouse gas emissions above the <i>de minimis</i> quantity and is subject to this reporting requirement.

APPENDIX E

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40 CFR 50.1-50.12	NAAQS: Criteria Pollutants	No	Facilities are not required to demonstrate compliance with NAAQS except as part of a PSD/NSR review or as requested to on a case-by-case basis by state agencies. States are required to promulgate emissions regulations which, when complied with by facilities, will ensure attainment and maintenance of NAAQS. These emission regulations are incorporated into the State Implementation Plan (SIP).	Requirements apply to state air programs.
40 CFR 51 Subpart D 51.40	Requirements and Procedures for State Implementation Plans	No	Part 51 requires states to develop and obtain EPA approval of SIP to attain and maintain compliance with National Ambient Air Quality Standards (NAAQS). Part 52 contains a list of EPA's actions relative to these plans for each state. Part 51 is not directly applicable to facilities.	Requirements apply to state air programs.
40 CFR 52 Subpart A 52.01 – 52.31	General Provisions for State Implementation Plan Actions by EPA	No	This part sets forth the Administrator's approval and disapproval of state plans and the Administrator's promulgation of such plans or portions thereof. Approval of a plan or any portion thereof is based upon a determination by the Administrator that such plan or portion meets the requirements of section 110 of the Act and the provisions of part 51 of this chapter.	Requirements apply to state air programs.
40 CFR 52 Subpart A 52.21	Prevention of Significant Deterioration (PSD)	Yes	This paragraph is potentially applicable to any facility that is constructed or any facility to which physical changes are made since August 7, 1977 for which the state has not received EPA's approval to administer the PSD program.	The Mt. Hope OSB facility is a major source for PSD purposes.
40 CFR Subpart A 52.24	Statutory Restrictions on New Sources (NSR)	No	This paragraph is potentially applicable to any facility that is constructed or any facility to which physical changes are made since June 30, 1979 in any area designated as nonattainment for which the state has not received EPA's approval of its SIP as meeting the requirements of Part D, Title I of the CAA. The requirements pertain only to the non-attainment pollutant(s).	The Mt. Hope OSB facility is located in Fayette County which is designated as attainment or unclassifiable for all criteria pollutants.
40 CFR 52 Subpart II 52.2520-52.2565	West Virginia	No	Part 52 contains a chronological listing of EPA's approval actions of a state's state implementation plan (SIP). The SIP is an agreement between EPA and a State air pollution control agency on how a state will control air pollution for seven criteria pollutants (Lead, Ozone, Nitrogen oxides, Sulfur dioxide, Particulate matter with diameter less than 10 micrometers (PM-10), Volatile Organic Compounds (VOC), and carbon monoxide (CO)) so as to attain and maintain National Ambient Air Quality Standards (NAAQS). Those regulations approved into this section have been approved and by definition are federally-enforceable. For specific regulations, refer to the State-specific regulations.	This part applies to state agencies and not to a specific facility.
40 CFR 52 Subpart EEE 52.2850-52.2920	Approval and Promulgation of Plans	No	Only the states of Delaware, New Jersey, Pennsylvania, Kansas, Virginia, Maryland, Colorado, Missouri, District of Columbia, and Massachusetts have obligations in this section. Does not apply to Title V facilities specifically but regulations that resulted from these requirements may be contained in the state-specific regulations.	Does not apply to Title V facilities specifically but regulations that resulted from these requirements may be contained in the state-specific regulations.
40 CFR 55	Redesignate Corresponding Onshore Areas for Several Offshore Platforms in California	No	OCS platforms under the jurisdiction of the Santa Barbara County Air Pollution Control District may be affected by the promulgation of this rule.	The Mt. Hope OSB facility is not an OCS platform.
40 CFR 55.14	Outer Continental Shelf	No	OCS platforms except those located in the Gulf of Mexico west of 87.5 degrees longitude. Facilities located greater than 25 miles of states seaward boundaries shall be exempt from requirement to submit a notice	The Mt. Hope OSB facility is not an OCS platform.
40 CFR 60 Subpart A 60-1-60.19	General Provisions for NSPS	Yes	Applies to all facilities subject to NSPS. Includes a definition of what activities at a source constitute a modification, construction or reconstruction. Also includes general notification and recordkeeping requirements, general control device requirements, and time period after initial source startup or modification that compliance with a NSPS standard must be shown.	The Mt. Hope OSB facility contains sources subject to NSPS requirements.

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40 CFR 60 Subpart B 60.20-60.29	Adoption and Submittal of State Plans for Designated Facilities	No	The provisions of this subpart apply to states upon publication of a final guideline document under 60.22(a).	The Mt. Hope OSB facility is located in a state with this guideline.
40 CFR 60 Subpart C 60.30-60.32	Emission Guidelines and Compliance Times	No	The following subparts contain emission guidelines and compliance times for the control of certain designated pollutants in accordance with section 111(d) of the Act and subpart B. (a) Subpart Cb--Municipal Waste Combustors. (b) Subpart Cc--Municipal Solid Waste Landfills (c)-Sulfuric Acid Production Plants.	The Mt. Hope OSB facility does not combust municipal waste or produce sulfuric acid or have a municipal solid waste landfill.
40 CFR 60 Subpart Cb 60.3b-60.39b	Emissions Guidelines and Compliance Times for Large Municipal Waste Combustors That are Constructed on or Before September 20, 1994.	No	Affected facilities include Municipal Waste Combustors (MWC) units which process more than 250 tons/day. There is an exemption from emission standards for facilities which burn tires or fuel derived from tires and that burn no other municipal solid waste. Recordkeeping requirements still apply. Municipal Waste Combustors that fire exclusively medical wastes are also exempt from this regulation. Facilities which started construction , reconstruction, or modification on or before 12/20/89 must comply.	The Mt. Hope OSB facility does not combust municipal solid waste.
40 CFR 60 Subpart Cc 60.30c - 60.36c	NSPS: Emissions Guidelines and Compliance Times for Municipal Solid Waste Landfills	No	Affected facilities include municipal solid waste landfills for which construction, reconstruction, of modification was commenced before May 30, 1991.	The Mt. Hope OSB facility does not have a municipal solid waste landfill.
40 CFR 60 Subpart Cd 60.30d-60.32d	Emissions Guidelines and Compliance Times for Sulfuric Acid Production Units	No	If the affected facility is a sulfuric acid production plant, applies to any facility constructed, reconstructed, or modified after August 17, 1971.	The Mt. Hope OSB facility does not produce sulfuric acid.
40 CFR 60 Subpart Ce 60.30e - 60.39e	Emission Guidelines and Compliance Times for Hospital/Medical/Infectious Waste Incinerators	No	This subpart contains emission guidelines and compliance times for the control of certain designated pollutants from hospital/medical/infectious waste incinerator(s) (HMIWI).	The Mt. Hope OSB facility does not contain any hospital/medical/infectious waste incinerator(s) (HMIWI).
40 CFR 60 Subpart D 60.40-60.47	Standards for Performance for Fossil- Fuel- Fired Steam Generators for Which Construction Is Commenced After August 17, 1971	No	Wood-residual and fossil fuel fired boilers with fossil fuel heat input capacities of at least 250 MMBtu/hr. Note: Recovery boilers whose fossil fuel heat input capacity is at least 250 MMBtu/hr and which use fossil fuel for 10% or more of their annual heat input are subject to this rule when they are burning fossil fuel. Steam generators whose construction, reconstruction or modification commenced after August 17, 1971 or, if lignite fired, December 22, 1976, must comply.	The Mt. Hope OSB facility does not have a steam generating unit with a capacity of 250 MMBtu/hr or greater.
40 CFR 60 Subpart Da 60.40a-60.49a	Standards of Performance for Electric Utility Steam Generating Units for Which Construction Is Commenced After September 18, 1978	No	This regulation applies to electric utility steam generating unit that is capable of combusting more than 250 million BTU/hour heat input of fossil fuel either alone or in combination with another fuel. An electric utility steam generating unit is defined as any steam generating unit that is constructed for the purpose of supplying more than one third of its potential electrical output capacity and more than 25 Megawatts electrical output to any utility power distribution system for sale. This regulation applies to electric utility combined cycle units that are capable of combusting more than 250 million BTU/hr in the steam generator. For combined cycle gas turbines only emissions from the steam generating unit. Emissions from the gas turbine portion of a combine cycle unit are subject 40 CFR Part 60, Subpart GG. Any electric utility generating unit whose construction, reconstruction or modification commenced after September 18, 1978 must comply.	The Mt. Hope OSB facility does not produce electricity with steam generating units.

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40 CFR 60 Subpart Db 60.40b-60.49b	Standards of Performance for Industrial -Commercial- Institutional Steam Generating Units	No	Steam generating units, including duct burners, which have a heat input capacity of any fuel combusted in the steam generator of greater than 100 MMBtu/hr not covered by Subparts D, or Da. Note: Recovery boilers may be subject to this standard depending upon how much fossil fuel they burn. Steam generators whose construction, reconstruction or modification commenced after June 19, 1984 must comply. Any change to the existing steam generating unit for the purposes of combusting gases containing Total Reduced Sulfur which includes the compounds hydrogen sulfide, methyl mercaptan, dimethyl sulfide, and dimethyl disulfide is not considered a modification.	The Mt. Hope OSB facility does not have a steam generating unit within the applicable capacity requirements.
40 CFR 60 Subpart Dc 60.40c-60.48c	Standards of Performance for Small Industrial-Commercial- Institutional Steam Generating Units	Yes	Any device with a design maximum heat input capacity equal to or less than 100 MMBtu/hr but equal to or greater than 10 MMBtu/hr that combusts fuel and produces steam or heats water or any other heat transfer medium including any duct burner that combusts fuel and is part of a combined cycle system. Steam generators whose construction, reconstruction, or modification commenced after June 9, 1989 must comply.	The Mt. Hope OSB facility contains a steam generating unit constructed or modified after the applicability date.
40 CFR 60 Subpart E 60.50-60.54	Standards of Performance for Incinerators	No	Facilities with a charging rate of more than 50 tons/day which were constructed, reconstructed or modified after 08/17/71. An incinerator is defined as any furnace used in the process of burning solid waste for the purpose of reducing the volume of the waste by removing combustible matter.	The Mt. Hope OSB facility does not have any incinerators.
40 CFR 60 Subpart Ea 60.50a-60.59a	Standards of Performance for Municipal Waste Combustors	No	The affected unit is any device with a heat input capacity greater than 250 TPD of Municipal Solid Waste (MSW) or Refuse-Derived Fuel (RDF) . MSW is household, commercial/retail, and/or institutional waste. RDF is a type of MSW made by shredding and size reduction of MSW. Devices burning MSW or RDF derived solely from tires are exempt from this subpart except for the initial report required under 60.59a, paragraph (a). Cofired combustors that burn less than 30% segregated medical waste and no MSW are exempt. A cofired combustor is a unit combusting MSW or RDF with a non-MSW fuel and subject to a federally enforceable permit limitation limiting the unit to combusting a fuel feed stream, 30% or less of the weight which is comprised in aggregate of MSW or RDF measured on a 24-hour basis. This standard applies to any facility that undertakes construction, reconstruction, or modification after December 20, 1989.	The Mt. Hope OSB facility does not combust municipal waste.
40 CFR 60 Subpart Eb 60.50b - 60.59b	Standards of Performance for Municipal Waste Combustors for Which Construction is Commenced After September 20, 1994 or for which Modification or Reconstruction is Commenced after June 19, 1996.	No	Applies to Municipal Waste Combustors with a combustion capacity greater than 250 tons per day of municipal solid waste for which construction is commenced after September 20, 1994 or for which modification or reconstruction is commenced after June 19, 1996.	The Mt. Hope OSB facility does not have a municipal waste combustor.
40 CFR 60 Subpart Ec 60.50c - 60.58c	Standards of Performance for Hospital/Medical/Infectious Waste Incinerators for Which Construction is Commenced After June 20, 1996.	No	The affected facility to which this subpart applies is each individual hospital/medical/infectious waste incinerator (HMIWI) for which construction is commenced after June 20, 1996 or for which modification is commenced after March 16, 1998.	The Mt. Hope OSB facility does not contain any each individual hospital/medical/infectious waste incinerator (HMIWI) for which construction is commenced after June 20, 1996 or for which modification is commenced after March 16, 1998.

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40 CFR 60 Subpart F 60.60-60.66	Standards of Performance for Portland Cement Plants	No	Affected facilities include kilns, clinker coolers, raw mill systems, finish mill systems, raw mill dryers, raw material storage, clinker storage, finished product storage, conveyor transport points, bagging and bulk loading and unloading systems. Portland cement plant facilities that commence construction, reconstruction, or modification after August 17, 1971 must comply.	The Mt. Hope OSB facility does not manufacture portland cement.
40 CFR 60 Subpart G 60.70-60.74	Standards of Performance for Nitric Acid Plants	No	Affected facilities include each nitric acid production unit. Facilities which commenced construction, reconstruction, or modification after August 17, 1971 must comply.	The Mt. Hope OSB facility does not produce nitric acid.
40 CFR 60 Subpart H 60.80-60.85	Standards of Performance for Sulfuric Acid Plants	No	Affected facilities include each sulfuric acid production unit. Facilities which commenced construction, reconstruction or reconstruction after August 17, 1971 must comply.	The Mt. Hope OSB facility does not produce sulfuric acid.
40 CFR 60 Subpart I 60.90-60.94	Standards of Performance for Hot Mix Asphalt Facilities	No	The affected facility includes each hot mix asphalt facility. Facilities which commenced construction, reconstruction or modification after June 11, 1973 must comply. A hot mix asphalt facility means any facility used to manufacture hot mix asphalt by heating and drying aggregate and mixing with asphalt cements. The affected components of the hot mix asphalt facility subject to the standard are dryers, systems for screening, handling, storage, and weighing hot aggregate; systems for loading, transferring, and storing mineral filler, systems for mixing hot mix asphalt; and the loading, transfer, and storage systems associated with emission control systems.	The Mt. Hope OSB facility does not process asphalt cement.
40 CFR 60 Subpart J 60.100-60-109	Standards of Performance for Petroleum Refineries	No	Affected facilities are fluid catalytic cracking unit catalyst regenerators, fuel gas combustion devices and all Claus recovery plants except Claus plants of 20 long tons per day or less which commenced construction or modification after June 11, 1973, or any Claus sulfur recovery plant which commenced construction, reconstruction or modification after October 4, 1976. See regulation for details regarding exemptions.	The Mt. Hope OSB facility does not refine petroleum.
40 CFR 60 Subpart K 60.110-60.113a	Standards of Performance for Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced After June 11, 1973, and Prior to May 19, 1978	No	Vessels with capacities greater than 40,000 gallons that store petroleum, condensate, and any finished or intermediate products manufactured at a petroleum refinery except Nos. 2 through 6 fuel oils, gas turbine fuel oils Nos. 2-GT through 4-GT, or diesel fuel oils Nos. 2-D and 4-D may be subject to compliance. Vessels with capacities greater than 40,000 gallons and less than 65,000 gallons whose construction, reconstruction or modification commenced after March 8, 1974 and before May 19, 1978; vessels with capacities greater than 65,000 gallons whose construction, reconstruction, or modification commenced after June 11, 1973 and before May 19, 1978 must comply.	The Mt. Hope OSB facility has no petroleum storage vessels > 40,000 gallons.
40 CFR 60 Subpart Ka 60.110a-60.115a	Standards of Performance for Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced After May 18, 1978, and Prior to July 23, 1984	No	Vessels with capacities greater than 40,000 gallons that store petroleum, condensate, and any finished or intermediate products manufactured at a petroleum refinery except Nos. 2 through 6 fuel oils, gas turbine fuel oils Nos. 2-GT through 4-GT, or diesel fuel oils Nos. 2-D and 4-D. Vessels with capacities less than 40,000 gallons used for petroleum or condensate stored, processed, or treated prior to custody transfer are exempt. Vessels whose construction, reconstruction or modification commenced after May 18, 1978 and before July 23, 1984 must comply.	The Mt. Hope OSB facility has no petroleum storage vessels > 40,000 gallons.
40 CFR 60 Subpart Kb 60.110b-60.117b	Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984	No	The affected facility to which this subpart applies is each storage vessel with a capacity greater than or equal to 75 cubic meters (m3) that is used to store volatile organic liquids (VOL) for which construction, reconstruction, or modification is commenced after July 23, 1984 except that this subpart does not apply to storage vessels with a capacity greater than or equal to 151 m3 storing a liquid with a maximum true vapor pressure less than 3.5 kilopascals (kPa) or with a capacity greater than or equal to 75 m3 but less than 151 m3 storing a liquid with a maximum true vapor pressure less than 15.0 kPa.	The Mt. Hope OSB facility does not have any volatile organic liquid storage vessels that meet any of the applicability criteria specified in this subpart.

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40 CFR 60 Subpart L 60.120-60-124	Standards of Performance for Secondary Lead Smelters	No	Affected facilities include pot furnaces of more than 250 kg charging capacity, blast (cupola) furnaces, and reverberatory furnaces. Affected facilities which commence construction, reconstruction or modification after June 11, 1973 must comply.	The Mt. Hope OSB facility does not smelt lead.
40 CFR 60 Subpart M 60.130-60.133	Standards of Performance for Secondary Brass and Bronze Production Plants	No	Affected facilities include reverberatory and electric furnaces of at least 1000 kg production capacity and blast (cupola) furnaces of at least 250 kg/h capacity. Affected facilities that commence construction, reconstruction or modification after June 11, 1973 must comply. Furnaces from which molten brass or bronze are cast into the shape of finished products, such as foundry furnaces are exempt.	The Mt. Hope OSB facility does not produce brass or bronze.
40 CFR 60 Subpart N 60.140-60.144	Standards of Performance for Primary Emissions from Basic Oxygen Process Steelmaking Furnaces for Which Construction is Commenced After June 11, 1973	No	Affected facilities include the iron and steel plants with a basic oxygen process furnace. Affected facilities that commence construction, reconstruction or modification after June 11, 1973 must comply. A basic oxygen furnace is any furnace with a refractory lining in which molten steel is produced by charging scrap metal, molten iron, and flux material or alloy additions into a vessel and introducing a high volume of oxygen-rich gas. Open hearth, blast and reverberatory furnaces are not included.	The Mt. Hope OSB facility does not produce iron or steel.
40 CFR 60 Subpart Na 60-140a-60.145a	Standards of Performance for Secondary Emissions From Basic Oxygen Process Steel Making Facilities for Which Construction is Commenced After January 20, 1983	No	Affected facilities include top-blown Basic Oxygen Process Furnaces (BOPFs), hot metal transfer stations, skimming stations used with bottom-blown or top-blown BOPF's. Affected facilities that commence construction, reconstruction or modification after January 20, 1983 must comply. Any BOPF subject to this standard must also comply with 40 CFR Part 60, Subpart N.	The Mt. Hope OSB facility does not produce iron or steel.
40 CFR 60 Subpart O 60.150-60.156	Standards of Performance for Sewage Treatment Plants	No	Affected facilities include incinerators that combust wastes containing at least 10% sewage sludge (dry basis) produced by municipal sewage treatment plants, or each incinerator that charges more than 1000 kg./day municipal sewage sludge (dry basis). Affected facilities that commence construction, reconstruction or modification after June 11, 1973 must comply.	The Mt. Hope OSB facility does not incinerate sewage sludge.
40 CFR 60 Subpart P 60.160-60.166	Standards of Performance for Primary Copper Smelters	No	Affected facilities include dryers, roasters, smelting furnaces, and copper converter. Affected facilities that commence construction, reconstruction or modification after October 16, 1974 must comply.	The Mt. Hope OSB facility does not smelt copper.
40 CFR 60 Subpart Q 60.170-60.176	Standards of Performance for Primary Zinc Smelters	No	Affected facilities include roasters and sintering machines. Affected facilities that commence construction, reconstruction or modification after October 16, 1974 must comply.	The Mt. Hope OSB facility does not smelt zinc.
40 CFR 60 Subpart R 60.180-60.186	Standards of Performance for Primary Lead Smelters	No	Affected facilities include sintering machines, sintering machine discharge ends, blast furnaces, dross reverberatory furnaces, electric smelting furnaces, and converters. Affected facilities that commence construction, reconstruction or modification after October 16, 1974 must comply.	The Mt. Hope OSB facility does not smelt lead.
40 CFR 60 Subpart S 60.190-60.195	Standards of Performance for Primary Aluminum Reduction Plants	No	Affected facilities include potroom groups and anode bake plants. Affected facilities that commence construction, reconstruction or modification after October 23, 1974 must comply.	The Mt. Hope OSB facility does not process aluminum.
40 CFR 60 Subpart T 60.200-60.205	Standards of Performance for the Phosphate Fertilizer Industry: Wet- Process Phosphoric Acid Plants	No	Affected facilities include each wet-process phosphoric acid plant having a design capacity of more than 15 tons of equivalent P2O5 feed per calendar day. Affected components include reactors, filters, evaporators, and hot wells. Affected facilities that commence construction, reconstruction or modification after October 22, 1974 must comply.	The Mt. Hope OSB facility does not produce phosphate fertilizer.
40 CFR 60 Subpart U 60.210-215	Standards of Performance for the Phosphate Fertilizer Industry: Superphosphoric Acid Plants	No	Affected facilities includes each wet-process superphosphoric acid plant having a design capacity of more than 15 tons of equivalent P2O5 feed per calendar day. Affected components include evaporators, hot wells, acid sumps, and cooling tanks. Affected facilities that commence construction, reconstruction or modification after October 22, 1974 must comply.	The Mt. Hope OSB facility does not produce phosphate fertilizer.

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40 CFR 60 Subpart V 60.220-60.225	Standards of Performance for the Phosphate Fertilizer Industry: Diammonium Phosphate Plants	No	Affected facilities include each granular diammonium phosphate plant having a design capacity of more than 15 tons of equivalent P2O5 feed per calendar day. Affected components include reactors, granulators, dryers, coolers, screens, and mills. Affected facilities that commence construction, reconstruction or modification after October 22, 1974 must comply.	The Mt. Hope OSB facility does not produce diammonium phosphate.
40 CFR 60 Subpart W 60.230-60.235	Standards of Performance for the Phosphate Fertilizer Industry: Triple Superphosphate Plants	No	Affected facilities includes each triple superphosphate acid plant having a design capacity of more than 15 tons of equivalent P2O5 feed per calendar day. Affected facilities that commence construction, reconstruction or modification after October 22, 1974 must comply. The affected facility includes any combination of mixers, curing belts (dens), reactors, granulators, dryers, cookers, screens, mills, and facilities which store run-off-pile triple superphosphate.	The Mt. Hope OSB facility does not produce triple superphosphate.
40 CFR 60 Subpart X 60.240-60.245	Standards of Performance for the Phosphate Fertilizer Industry: Granular Triple Superphosphate Storage Facilities	No	Affected facilities includes each granular triple superphosphate acid plant. Affected components include piles, conveyors, elevators, screens, and mills. Affected facilities that commence construction, reconstruction or modification after October 22, 1974 must comply.	The Mt. Hope OSB facility does not store granular superphosphate.
40 CFR 60 Subpart Y 60.250-60.255	Standards of Performance for Coal Preparation Plants	No	Affected facilities include: thermal dryers, pneumatic coal-cleaning equipment (air tables), coal processing and conveying equipment (including breakers and crushers), coal storage systems, and coal transfer and loading systems. Affected facilities that commenced construction, reconstruction or modification after October 24, 1974 must comply. Coal preparation plants that process > 200 tons per day (tpd).	The Mt. Hope OSB facility does not use or process coal.
40 CFR 60 Subpart Z 60.260-60.266	Standards of Performance for Ferroalloy Production Facilities	No	Affected facilities include electric submerged arc furnaces and dust handling equipment. Affected facilities that commenced construction, reconstruction or modification after October 21, 1974 must comply. Electric submerged arc furnaces produce silicon metal, ferrosilicon, calcium silicon, silicomanganese zirconium, ferrochrome silicon, silvery iron, high carbon ferrochrome chargechrome, standard ferromanganese, silicomanganese, ferromanganese silicon, or calcium carbide and dust handling equipment.	The Mt. Hope OSB facility does not produce ferroalloys.
40 CFR 60 Subpart AA 60.270-60.276	Standards of Performance for Steel Plants: Electric Arc Furnaces Constructed After October 21, 1974, and On or Before August 17, 1983	No	Affected facilities include steel plants that produce carbon, alloy, or specialty steels; electric arc furnaces, and dust handling systems. Affected facilities that commenced construction, reconstruction or modification after October 21, 1974, but on or before August 17, 1983, must comply.	The Mt. Hope OSB facility does not use electric arc furnaces.
40 CFR 60 Subpart AAa 60.270a-60.276a	Standards of Performance for Steel Plants: Electric Arc Furnaces And Argon-Oxygen Decarburization Vessels Constructed After August 17, 1983	No	Affected facilities include steel plants that produce carbon, alloy, or specialty steels; electric furnaces, argon-oxygen decarburization vessels, and dust handling systems. Affected facilities that commenced construction, reconstruction or modification after August 17, 1983 must comply. Dust handling equipment means any equipment used to handle particulate matter collected by the control device and located at or near the control device for an electric arc furnace.	The Mt. Hope OSB facility does not use electric arc furnaces.
40 CFR 60 Subpart BB 60.280-60.286	Standards of Performance for Kraft Pulp Mills	No	The provisions of this subpart apply to specified equipment within a kraft pulp mill which began construction, reconstruction, or modification on or after September 24, 1976.	The Mt. Hope OSB facility is not a kraft pulp mill.
40 CFR 60 Subpart CC 60.290-60.296	Standards of Performance for Glass Manufacturing Plants	No	Affected facilities are glass melting furnaces designed to produce > = 10,032 lbs. (4550 kg) of glass/day. All electric melters are not subject to compliance. Affected units that commenced construction, reconstruction or modification after June 15, 1979 must comply. Does not apply to hand glass melting furnaces.	The Mt. Hope OSB facility does not manufacture glass.
40 CFR 60 Subpart DD 60.300-60.305	Standards of Performance for Grain Elevators	No	Affected facilities are loading and unloading stations for trucks, barges, ships, and railcars. Also included are grain dryers and all grain handling operations. Affected units that commenced construction, reconstruction or modification after August 3, 1978 must comply.	The Mt. Hope OSB facility does not operate grain elevators.

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Regulation	Description	Applicable Yes/No	Description of Applicability	Comments
40 CFR 60 Subpart EE 60.310-60.316	Standards of Performance for Surface Coating of Metal Furniture	No	Affected facilities include metal furniture coating operations in which organic coatings are applied. Affected units that commenced construction, reconstruction or modification after November 28, 1980 must comply. Any owner or operator of a metal surface coating operation that uses less than 1016 gallons as applied per year is exempt from the emission standards requirements. The owner/operator that wishes to take advantage of this exemption must keep purchase or inventory records to show that the facility is below this level.	The Mt. Hope OSB facility does not perform surface coating of metal furniture.
40 CFR 60 Subpart GG 60.330-60.336	Standards of Performance for Stationary Gas Turbines	No	(a) The provisions of this subpart are applicable to the following affected facilities: All stationary gas turbines with a heat input at peak load equal to or greater than 10.7 gigajoules per hour, based on the lower heating value of the fuel fired. (b) Any facility under paragraph (a) of this section which commences construction, modification, or reconstruction after October 3, 1977, is subject to the requirements of this part except as provided in paragraphs (e) and (j) of 60.332.	The Mt. Hope OSB facility does not have a stationary gas turbine with heat input at peak load greater than 10.7 gigajoules per hour, does not combust municipal waste or produce sulfuric acid.
40 CFR 60 Subpart HH 60.340-60.344	Standards of Performance for Lime Manufacturing Plants	No	Affected units include each rotary lime kiln used in manufacture of lime. Affected units that commenced construction, reconstruction or modification after May 3, 1977 must comply.	The Mt. Hope OSB facility does not have any lime kilns.
40 CFR 60 Subpart KK 60.370-60.375	Standards of Performance for Lead-Acid Battery Manufacturing Plants	No	Affected units includes lead-acid battery manufacturing plant that has the capacity to produce in 24 hours batteries that contain at least 6.5 tons of lead. Affected units that commenced construction, reconstruction or modification after January 14, 1980 must comply.	The Mt. Hope OSB facility does not manufacture lead acid batteries.
40 CFR 60 Subpart LL 60.380-60.386	Standards of Performance for Metallic Mineral Processing Plants	No	All affected components of the metallic mineral processing plant. Affected units that commenced construction, reconstruction or modification after August 24, 1982 must comply. Affected components of the plant are each crusher and screen in open-pit mines; each crusher, screen, bucket elevator, conveyor belt transfer point, thermal dryer, product packaging station, storage bin, enclosed storage area, truck loading station, truck unloading station, railcar loading station, railcar unloading station, at the mill or concentrator. All facilities located in underground mines are exempted. Also, all facilities subsequent to and including the beneficiation of uranium ore are exempted.	The Mt. Hope OSB facility does not process metallic minerals.
40 CFR 60 Subpart MM 60.390-60.400	Standards of Performance for Automobile and Light Duty Truck Surface Coating Operations	No	Affected components include prime coat operations, guide coat operations, and topcoat operations. Affected units that commenced construction, modification, or reconstruction after October 5, 1979 must comply.	The Mt. Hope OSB facility does not perform surface coating operations for light duty trucks and automobiles.
40 CFR 60 Subpart NN 60.401-405	Standards of Performance for Phosphate Rock Plants	No	Affected facilities have a phosphate rock production capacity of at least 4 tons/hr. Affected components include dryers, calciners, grinders, and groundrock handling and storage facilities except those facilities producing or preparing phosphate rock solely for consumption in elemental phosphorus production. Affected units that commenced construction, modification, or reconstruction after September 21, 1979 must comply.	The Mt. Hope OSB facility does not process phosphate rock.
40 CFR 60 Subpart PP 60-420-60.424	Standards of Performance for Ammonium Sulfate Manufacture	No	Affected units include ammonium sulfate dryers within an ammonium sulfate manufacturing plant in three target sectors (caprolactam by-product, synthetic, and coke oven by-product). Affected units that commenced construction, reconstruction or modification after February 4, 1980 must comply.	The Mt. Hope OSB facility does not process ammonium sulfate.
40 CFR 60 Subpart QQ 60-430-60.435	Standards of Performance for the Graphic Arts Industry: Publication Rotogravure Printing	No	Affected facility is the publication rotogravure printing press. Affected facilities that commenced construction, reconstruction or modification after October 28, 1980 must comply.	The Mt. Hope OSB facility is not in the graphic arts industry.

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40 CFR 60 Subpart RR 60.440-60.447	Standards of Performance for Pressure Sensitive Tape and Label Surface Coating Operations	No	Affected facility is the coating line used in the manufacture of pressure sensitive tape and label materials. Affected facilities that commenced construction, reconstruction or modification after December 30, 1980 must comply. Any affected facility which inputs to the process 65.625 tons (45 Mg) of VOC or less per 12 month period is not subject to the emission limit requirements but must keep records to verify coating levels.	The Mt. Hope OSB facility does not manufacture pressure sensitive tape or labels.
40 CFR 60 Subpart SS 60.450-60.456	Standards of Performance for an Industrial Surface Coating: Large Appliances	No	Affected facility is the surface coating operation in a large appliance surface coating line. Affected facilities that commenced construction, reconstruction or modification after December 24, 1980 must comply. Large appliances are metal ranges, ovens, microwave ovens, refrigerators, freezers, washers, dryers, dishwashers, water heaters, or trash compactors manufactured for household, commercial or recreational uses.	The Mt. Hope OSB facility does not perform surface coating of large appliances.
40 CFR 60 Subpart TT 60.460-60.475	Standards of Performance for Metal Coil Surface Coating	No	Affected facilities include the prime coat operation, finish coat operation, and the prime and finish coat operation combined when the finish coat is applied wet on wet over the prime coat and both coatings are cured simultaneously. Affected facilities that commenced construction, reconstruction or modification after January 5, 1981 must comply.	The Mt. Hope OSB facility does not perform metal coil surfacing operations.
40 CFR 60 Subpart UU 60.470-60.475	Standards of Performance for Asphalt Processing and Asphalt Roofing Manufacture	No	Affected facilities include each saturator and each mineral handling and storage facility at asphalt roofing plants; and each asphalt storage tank and each blowing still at asphalt processing plants, petroleum refineries, and asphalt roofing plants. Affected facilities that commenced construction, reconstruction or modification after November 18, 1980 must comply.	The Mt. Hope OSB facility does not process asphalt.
40 CFR 60 Subpart VV 60.480-60.489	Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry	No	Standards control leakage from equipment that contains or contacts a process fluid that is at least 10% VOC by weight. Applies to pumps, compressors, agitators, pressure relief devices, sampling connection systems, accumulation vessels, control devices, and open-ended valves or lines. Applies to a facility for which construction or modification commenced after 1/5/81 and which produces, as an intermediate or final product, one or more of the chemicals listed in Section 60.489.	The Mt. Hope OSB facility does not manufacture chemicals.
40 CFR 60 Subpart VVa 60.480a-60.489a	Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry	No	The provisions of this subpart apply to affected facilities in the synthetic organic chemicals manufacturing industry that commences construction, reconstruction, or modification after November 7, 2006.	The Mt. Hope OSB facility does not manufacture chemicals.
40 CFR 60 Subpart WW 60.490-60.500	Standards of Performance for the Beverage Can Surface Coating Industry	No	Applies to exterior coating, overvarnish coating, and inside coating of beverage cans. Facilities which commenced construction, modification, or reconstruction after 11/26/80 must comply.	The Mt. Hope OSB facility does not perform beverage can surface coating.
40 CFR 60 Subpart XX 60.501-60.506	Standards of Performance for Bulk Gasoline Terminals	No	Applies to bulk gasoline terminals which deliver gasoline to gasoline tank trucks. Facilities which commenced construction, modification, or reconstruction after 12/17/80 must comply.	The Mt. Hope OSB facility does not have bulk gasoline terminals.
40 CFR 60 Subpart AAA 60.530-60.539b	Standards of Performance for New Residential Wood Heaters	No	Applies to the manufacture or use of residential wood heaters. Wood heaters manufactured on or before 07/01/88 and after 01/01/88 or sold at retail after 07/01/90 must comply. A coal-only heater is exempted. Boilers, furnaces, cook stoves, and open masonry fireplaces constructed on-site are exempted. Modification or reconstruction by itself will not make a source subject.	The Mt. Hope OSB facility does not have any residential wood heaters.
40 CFR 60 Subpart BBB 60.540-60.548	Standards of Performance for the Rubber Tire Manufacturing Industry	No	Applies to rubber tire manufacturing plants. Facilities which commenced construction, modification, or reconstruction after 01/20/83 must comply. The affected components of the tire manufacturing plant are each undertread cementing operation, each sidewall cementing operation, each tread end cementing operation, each bead cementing operation, each green tire spraying operation, each Michelin-A operation, each Michelin-B operation, and each Michelin-C automatic operation.	The Mt. Hope OSB facility does not manufacture rubber tires.

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40 CFR 60 Subpart DDD 60.560-60.566	Standards of Performance for Volatile Organic Compound (VOC) Emissions from the Polymer Manufacturing Industry	No	Applies to facilities involved in the manufacturing of polypropylene, polyethylene, polystyrene, or poly (ethylene terephthalate). Affected processes in the NSPS differ based on whether the manufacturing operation is batch or continuous. The applicability date for the standard is based on the specific manufacturing process covered. The applicability date for this regulation is when a facility undertakes construction, reconstruction, or modification. This date is either September 30, 1987 or January 10, 1989 based on the subject process.	The Mt. Hope OSB facility does not manufacture polymers.
40 CFR 60 Subpart FFF 60.580-60.585	Standards of Performance for Flexible Vinyl and Urethane Coating and Printing	No	Applies to rotogravure printing lines used to print or coat flexible vinyl or urethane products. Flexible vinyl and urethane products are those products except for resilient floor coverings (1977 SIC Code 3996) and flexible packaging that are >.002 inches thick and that contain a vinyl or urethane sheet or a vinyl or urethane coated web. Facilities which commenced construction, modification, or reconstruction after 01/18/83 must comply.	The Mt. Hope OSB facility does not coat flexible vinyl or urethane products.
40 CFR 60 Subpart GGG 60.590-60-594	Standards of Performance for Equipment Leaks of VOC in Petroleum Refineries	No	Applies to facilities in oil refineries, including compressors and equipment defined in 60.591. Facilities which commenced construction or modification after 01/04/83 must comply.	The Mt. Hope OSB facility is not a petroleum refinery.
40 CFR 60 Subpart GGGa 60.590a-60-593a	Standards of Performance for Equipment Leaks of VOC in Petroleum Refineries	No	The provisions of this subpart apply to affected facilities in petroleum refineries that commences construction, reconstruction, or modification after November 7, 2006.	The Mt. Hope OSB facility is not a petroleum refinery.
40 CFR 60 Subpart HHH 60.600-60.604	Standards of Performance for Synthetic Fiber Production Facilities	No	Applies to each solvent-spun synthetic fiber process producing more than 730 tons (500 megagrams) of fiber per year. Facilities that use the reaction spinning process to produce spandex fiber or viscose process to produce rayon fiber are not subject to compliance. Facilities which commenced construction, reconstruction or modification after 11/23/82 must comply.	The Mt. Hope OSB facility does not produce synthetic fiber.
40 CFR 60 Subpart III 60.610-60.618	Standards of Performance for Volatile Organic Compound (VOC) Emissions from the Synthetic Organic Chemical Manufacturing Industry (SOCMI) Air Oxidation Unit Processes	No	Facilities which produce any of the listed chemicals as a product, co-product, or intermediate, may trigger NSPS. Requires all new, modified, and reconstructed air oxidation facilities to control emissions. The affected processes include each air oxidation reactor not discharging its vent stream into a recovery system, each combination of air oxidation reactor and the recovery into a vent stream which is discharged, each combination of 2 or more air oxidation reactors and common recovery systems into which vent streams are discharged. Facilities which commenced construction, reconstruction or modification after 10/21/83 must comply.	The Mt. Hope OSB facility does not produce synthetic organic chemicals.
40 CFR 60 Subpart JJJ 60.620-60.625	Standards of Performance for Petroleum Dry Cleaners	No	The affected facility is a petroleum dry cleaning plant with a total manufacturers' rated dryer capacity equal to or greater than 84 lbs. Affected components include dryers, washers, filters, stills, and settling tanks. Facilities which commenced construction, reconstruction or modification after 12/14/82 must comply. However, any dryer installed between December 14, 1982, and September 21, 1984, in a plant with an annual solvent consumption level of less than 4700 gallons is exempt.	The Mt. Hope OSB facility does not perform dry cleaning operations.
40 CFR 60 Subpart KKK 60.630-60.60.636	Standards of Performance for Equipment Leaks of VOC From Onshore Natural Gas Processing Plants	No	Affected facilities include an onshore natural gas processing plants and a compressor in VOC service or in wet service. Facilities which commenced construction, reconstruction or modification after 01/20/84 must comply. Facilities covered by Subpart VV or GGG of Part 60 are exempted. Addition or replacement of equipment for the purpose of process improvement that is accomplished without capital expenditure (defined in Subpart A General Provisions) shall not be considered a modification.	The Mt. Hope OSB facility does not process natural gas.

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40 CFR 60 Subpart LLL 60.640-60.648	Standards of Performance for Onshore Natural Gas Processing: SO2 Emissions	No	Affected facilities that process natural gas include sweetening units and sweetening units followed by sulfur recovery. Does not apply to sweetening facilities producing acid gas that is completely injected into oil or gas bearing geologic strata or that is not otherwise released to the atmosphere. Facilities which commenced construction, reconstruction or modification after 01/20/84 must comply.	The Mt. Hope OSB facility does not process natural gas.
40 CFR 60 Subpart NNN 60.660-60.668	Standards of Performance for Volatile Organic Compound (VOC) Emissions From Synthetic Organic Chemical Manufacturing Industry (SOCMI) Distillation Operations	No	Affected facilities include one or more continuous distillation units within a process unit which process more than 1 gigagram (1,000 metric tons) per year and the common recovery unit. Distillation units without recovery units are also subject to applicability. Facilities which commenced construction, reconstruction or modification after 12/30/83 must comply. Any distillation unit operating as part of a process which produces coal tar or beverage alcohols or which does not contain or produce VOC at the facility is exempt. If a facility is subject to 40 CFR Part 60 Subpart DDD then it is not subject to the standard. Also, any distillation unit that is designed and operated as a batch operation is exempt. There are other exemptions in the rule which may be applicable to a source based on source-specific design parameters.	The Mt. Hope OSB facility does not manufacture synthetic organic chemicals.
40 CFR 60 Subpart OOO 60.670-60.676	Standards of Performance for Nonmetallic Mineral Processing Plants	No	Affected facilities of a fixed or portable nonmetallic mineral processing plant include crushers, grinding mills, screening operations, bucket elevators, belt conveyor, bagging operations, storage bins, enclosed truck or railcar loading stations. Facilities which commenced construction, reconstruction or modification after 08/31/83 must comply. Fixed sand and gravel plants and crushed stone plants with crushers that have a combined cumulative capacity of 25 tons per hour or less are exempt. Any facility that is subject to Subpart F or Subpart I of 40 CFR Part 60 is not subject to this standard.	The Mt. Hope OSB facility does not process non-metallic minerals.
40 CFR 60 Subpart PPP 60.680-60.685	Standards of Performance for Wool Fiberglass Insulation Manufacturing Plants	No	Affected facilities include rotary spin wool fiberglass insulation manufacturing lines. Facilities which commenced construction, reconstruction or modification after 02/07/84 must comply.	The Mt. Hope OSB facility does not manufacture wool fiberglass.
40 CFR 60 Subpart QQQ 60.690-60.699	Standards of Performance for VOC Emissions From Petroleum Refinery Wastewater Systems	No	Affected facilities include individual drain systems, oil-water separator, and an aggregate system (as defined in the regulation). Facilities which commenced construction or modification after 05/04/87 must comply.	The Mt. Hope OSB facility is not a petroleum refinery.
40 CFR 60 Subpart RRR 60.700-60.708	Standards of Performance for Volatile Organic Compound Emission From Synthetic Organic Chemical Manufacturing Industry (SOCMI) Reactor Process	No	Facilities which produce any of the listed chemicals as a product, co-product, or intermediate, may trigger NSPS. Requires all new, modified, and reconstructed reactor facilities to control emissions. Facilities which commenced construction, reconstruction or modification after 06/29/90 must comply.	The Mt. Hope OSB facility does not manufacture synthetic organic chemicals.
40 CFR 60 Subpart SSS 60.710-60.718	Standards of Performance for Magnetic Tape Coating Facilities	No	Affected facilities include coating operations and each piece of coating mix preparation equipment. Facilities which commenced construction, reconstruction or modification after 01/22/86 must comply.	The Mt. Hope OSB facility does not perform magnetic tape coating operations.

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40 CFR 60 Subpart TTT 60.670-60.726	Standards of Performance for Industrial Surface Coating: Surface Coating of Plastic Parts for Business Machines	No	Affected facilities include spray booths in which plastic parts for use in the manufacture of business machines receive prime coats, color coats, texture coats, or touch-up coats. Business machines include typewriters, electronic computing devices, telephones and telegraphs, office machines and photocopy machines. Coating mix preparation equipment that is used to manufacture coatings at one plant for shipment to another plant for use at an affected facility are exempt. Coating mix preparation and equipment is exempt during times that the equipment is used to apply waterborne coatings so long as the VOC content of the coatings is less than or equal to .9 percent VOC by weight in the solvent. Web coating operations that print an image on the surface of a substrate or any coating applied on the same printing line that applies the image is exempted. Facilities which commenced construction, reconstruction or modification after 01/08/86 must comply.	The Mt. Hope OSB facility does not perform surface coating of plastic parts for business machines.
40 CFR 60 Subpart UUU 60.730-60.737	Standards of Performance for Calciners and Dryers in Mineral Industries	No	Affected facilities include each calciner and dryer at a mineral processing plant (feed and product conveyors are not included as a part of the affected facility). For brick and related clay products industry, only the calcining and drying of raw materials prior to firing of the brick are covered. An affected facility that is subject to the provisions of 40 CFR Part 60 Subpart LL, Mineral Processing Plants is not subject. This regulation applies to affected facilities which commence, construction, reconstruction, or modification after April 30, 1987.	The Mt. Hope OSB facility does not perform operations in mineral industries.
40 CFR 60 Subpart VVV 60.740-60.748	Standards of Performance for Polymeric Coating of Supporting Substrates Facilities	No	Affected facilities include coating operations and any onsite coating mix preparation equipment used to prepare coatings for the polymeric coating of supporting substrates. Facilities which commenced construction, reconstruction or modification after 04/30/87 must comply.	The Mt. Hope OSB facility does not perform polymeric coating of supporting substrates.
40 CFR 60 Subpart WWW 60.750 - 60.759	Standards of Performance for Municipal Solid Waste Landfills	No	The provisions of this subpart apply to each municipal solid waste landfill that commenced construction, reconstruction, or modification or began to accept waste on or after May 30, 1991.	The Mt. Hope OSB facility does not have a municipal solid waste landfill.
40 CFR 60 Subpart AAAA 60.1000 - 60.1465	Standards of Performance for Small Municipal Waste Combustion Units for Which Construction is Commenced After August 30, 1999 or for Which Modification or Reconstruction is Commenced After June 6, 2001.	No	This subpart establishes new source performance standards for new small municipal waste combustion units.	The Mt. Hope OSB facility does not contain any new small municipal waste combustion units.
40 CFR 60 Subpart BBBB 60.1500 - 60.1940	Emission Guidelines and Compliance Times for Small Municipal Waste Combustion Units Constructed on or Before August 30, 1999.	No	This subpart establishes emission guidelines and compliance schedules for the control of emissions from existing small municipal waste combustion units.	The Mt. Hope OSB facility does not contain any existing small municipal waste combustion units.
40 CFR 60 Subpart CCCC 60.2000 - 60.2265	Standards of Performance for Commercial and Industrial Solid Waste Incineration Units for Which Construction Is Commenced After November 30, 1999 or for Which Modification or Reconstruction Is Commenced on or After June 1, 2001.	No	This regulation establishes standards of performance for commercial and industrial solid waste incineration units for which construction is commenced after November 30, 1999 or for which modification or reconstruction is commenced on or after June 1, 2001.	The Mt. Hope OSB facility does not contain any commercial and industrial solid waste incineration (CISWI) units.

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40 CFR 60 Subpart DDDD 60.2500 - 60.2875	Emissions Guidelines and Compliance Times for Commercial and Industrial Solid Waste Incineration Units that Commenced Construction On or Before November 30, 1999.	No	This subpart establishes emission guidelines and compliance schedules for the control of emissions from commercial and industrial solid waste incineration (CISWI) units.	The Mt. Hope OSB facility does not contain any commercial and industrial solid waste incineration (CISWI) units.
40 CFR 60 Subpart EEEE 60.2880 - 60.2977	Standards of Performance for Other Solid Waste Incineration Units for Which Construction is Commenced After December 9, 2004, or for Which Modification or Reconstruction is Commenced on or After June 16, 2006	No	This subpart establishes new source performance standards for other solid waste incineration (OSWI) units. Other solid waste incineration units are very small municipal waste combustion units and institutional waste incineration units. This subpart became effective June 16, 2006.	The Mt. Hope OSB facility does not contain any other solid waste incineration units.
40 CFR 60 Subpart FFFF 60.2980 - 60.3078	Emission Guidelines and Compliance Times for Other Solid Waste Incineration Units That Commenced Construction On or Before December 9, 2004	No	This subpart establishes emission guidelines and compliance schedules for the control of emissions from other solid waste incineration (OSWI) units.	The Mt. Hope OSB facility does not contain any other solid waste incineration units.
40 CFR 60 Subpart HHHH 60.4101 - 60.4176	Emission Guidelines and Compliance Times for Coal-Fired Electric Steam Generating Units	No	This subpart establishes the model rule comprising general provisions and the designated representative, permitting, allowance, and monitoring provisions for the State mercury (Hg) Budget Trading Program	The Mt. Hope OSB facility does not contain any units subject to these requirements.
40 CFR 60 Subpart IIII 60.4200 - 60.4219	Standards of Performance for Stationary Compression Ignition Internal Combustion Engines	No	The provisions of this subpart are applicable to manufacturers, owners, and operators of stationary compression ignition (CI) internal combustion engines (ICE) as specified in paragraphs (a)(1) through (3) of this rule.	The Mt. Hope OSB facility does not contain any units that were constructed, modified, or reconstructed after the dates contained in the rule.
40 CFR 60 Subpart JJJJ 60.4230 - 60.4248	Standards of Performance for Stationary Spark Ignition Internal Combustion Engines	No	The provisions of this subpart are applicable to manufacturers, owners, and operators of stationary spark ignition (CI) internal combustion engines (ICE) as specified in paragraphs (a)(1) through (5) of this rule.	The Mt. Hope OSB facility does not contain any units that were constructed, modified, or reconstructed after the dates contained in the rule.
40 CFR 60 Subpart KKKK 60.4300 - 60.4420	Standards of Performance for Stationary Combustion Turbines	No	This subpart establishes emission standards and compliance schedules for the control of emissions from stationary combustion turbines that commenced construction, modification or reconstruction after February 18, 2005.	The Mt. Hope OSB facility does not contain any stationary combustion turbines.
40 CFR 61 Subpart A 61.01-61.19	General Provisions for National Emission Standards for Hazardous Air Pollutants (NESHAP)	No	This part applies to the owner or operator of any stationary source for which a standard is prescribed under this part. This section includes definitions applicable to all 40 CFR Part 61 standards including the definition of what physical or operational changes trigger a modification or reconstruction. No more 40 CFR Part 61 regulations will be promulgated. All regulations that were to be promulgated under 40 CFR Part 61 will now be promulgated under 40 CFR Part 63.	The Mt. Hope OSB facility is not subject to any NESHAP in 40CFR61 and, therefore, is not subject to this part.
40 CFR 61 Subpart B 61.20-61.26	National Emission Standards for Radon Emissions from Underground Uranium Mines	No	The affected facility is an active underground uranium mine which has mined or is designed to mine over 100,000 tons of ore during the life of the mine. An affected facility is also an active underground mine which has had or will have an annual ore production rate greater than 10,000 tons unless it can be demonstrated to EPA that the mine's lifetime total ore production will not exceed 100,000 tons.	The Mt. Hope OSB facility does not mine uranium.

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40 CFR 61 Subpart C 61.30-61.34	National Emission Standard for Beryllium	No	Affected facilities include extraction plants, ceramic plants, foundries, incinerators, and propellant plants which process beryllium ore, beryllium, beryllium oxide, beryllium alloys, or beryllium-containing waste. Affected facilities also include machine shops which process beryllium, beryllium oxides, or any alloy when such alloy contains more than 5 percent beryllium by weight.	The Mt. Hope OSB facility does not process beryllium.
40 CFR 61 Subpart D 61.40-61.44	National Emission Standard for Beryllium Rocket Motor Firing	No	The affected facility is any rocket motor test sites that fire beryllium rocket motors where a rocket motor test site means any building, structure, facility, or installation where the static test firing of a beryllium rocket motor and/or the disposal of beryllium propellant is conducted.	The Mt. Hope OSB facility does not perform rocket motor testing.
40 CFR 61 Subpart E 61.50-61.56	National Emission Standard for Mercury	No	Affected facilities include stationary sources which process mercury ore to recover mercury, use mercury chlor-alkali cells to produce chlorine gas and alkali metal hydroxide, and incinerate or dry wastewater treatment plant sludge.	The Mt. Hope OSB facility does not process mercury.
40 CFR 61 Subpart F 61.60-61.71	National Emission Standard for Vinyl Chloride	No	Affected facilities include plants which produce ethylene dichloride by reaction of oxygen and hydrogen chloride with ethylene, vinyl chloride (by any process), or one or more polymers containing any fraction of polymerized vinyl chloride. Does not apply to equipment used in research and development if the reactor used to polymerize the vinyl chloride processed in the equipment has a capacity less than or equal to 50 gallons.	The Mt. Hope OSB facility does not process vinyl chloride.
40 CFR 61 Subpart H 61.90-61.97	National Emission Standards for Emissions of Radionuclides Other Than Radon From Department of Energy Facilities	No	Affected facilities include those owned or operated by the Department of Energy emitting any radionuclide other than radon-222 and radon-220 into the air. This subpart does not apply to facilities subject to 40 CFR Part 191 or 40 CFR Part 192.	The Mt. Hope OSB facility has no radionuclide emissions and is not a DOE facility.
40 CFR 61 Subpart I 61.100-61.109	National Emission Standards for Radionuclide Emissions from Facilities Licensed by the Nuclear Regulatory Commission and Federal Facilities Not Covered by Subpart H	No	Affected facilities include those Nuclear Regulatory Commission-licensed facilities and to facilities owned or operated by any Federal agency other than DOE.	The Mt. Hope OSB facility is not a licensed NRC facility.
40 CFR 61 Subpart J 61.110-61.112	National Emission Standard for Equipment Leaks (Fugitive Emission Sources) of Benzene	No	Affected equipment include the following: pumps, compressors, pressure relief devices, sampling connections, systems, open-ended valves or lines, flanges and other connections, and product accumulator vessels. Applies to equipment which contacts a fluid (liquid or gas) that is at least 10% by weight benzene.	The Mt. Hope OSB facility does not use benzene.
40 CFR 61 Subpart K 61.120-61.127	National Emission Standards for Radionuclide Emissions From Elemental Phosphorus Plants	No	Affected facilities include calciners and modulizing kilns at elemental phosphorus plants.	The Mt. Hope OSB facility is not an elemental phosphorous plant.
40 CFR 61 Subpart L 61.130-61.139	National Emission Standard for Benzene Emissions From Coke By-Product Recovery Plants	No	Affected facilities include each of the following sources at furnace and foundry coke by-product recovery plants: tar decanters, tar storage tanks, tar-intercepting sumps, flushing-liquor circulation tanks, light-oil sumps, light-oil condensers, light-oil decanters, wash-oil decanters, wash-oil circulation tanks, naphthalene processing, final coolers, final-cooler cooling towers, and the equipment intended to operate in benzene service: pumps, valves, exhausters, pressure relief devices, sampling connection systems, open-ended valves or lines, and flanges or other connectors.	The Mt. Hope OSB facility is not a coke byproduct recovery plant and does not use benzene.
40 CFR 61 Subpart M 61.140-61.157	National Emission Standard for Asbestos	No	Applies to facilities demolishing asbestos. Each owner/operator shall either discharge no visible emissions to the outside air, including fugitive sources, or use the methods specified by 61.152 to clean emissions.	The Mt. Hope OSB facility does not contain asbestos.
40 CFR 61 Subpart N 61.160-61.165	National Emission Standard for Inorganic Arsenic Emissions from Glass Manufacturing Plants	No	Affected facilities include glass melting furnaces that use commercial arsenic as a raw material. This subpart does not apply to pot furnaces.	The Mt. Hope OSB facility is not a glass manufacturing plant.

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40 CFR 61 Subpart O 61.170-61.177	National Emission Standard for Inorganic Arsenic Emissions from Primary Copper Smelters	No	Affected facilities include each copper converter at any new or existing primary copper smelter, except where the total arsenic charging rate for the copper converter department averaged over one year is less than 75 kg/h, as determined under 61.174(f).	The Mt. Hope OSB facility does not perform copper smelting.
40 CFR 61 Subpart P 61.180-61.186	National Emission Standard for Inorganic Arsenic Emissions from Arsenic Trioxide and Metallic Arsenic Production Facilities	No	Provisions apply to metallic arsenic production plants and arsenic trioxide plants that process low-grade arsenic bearing materials by a roasting condensation process.	The Mt. Hope OSB facility does not produce arsenic.
40 CFR 61 Subpart Q 61.190-61.193	National Emission Standards for Radon Emissions From Department of Energy Facilities	No	Provisions apply to design and operation of facilities for radium-containing material owned and operated by the DOE that emit radon-222 into the air. See regulation for list of examples.	The Mt. Hope OSB facility is not owned or operated by the DOE.
40 CFR 61 Subpart R 61.200-61.210	National Emission Standards for Radon Emissions From Phosphogypsum Stacks	No	Provisions apply to owners or operators of a phosphogypsum stack, and persons that own, sell, distribute, or use phosphogypsum which is produced as a result of wet acid phosphorus production or is removed from existing phosphogypsum stack.	The Mt. Hope OSB facility does not process phosphogypsum.
40 CFR 61 Subpart T 61.220-61.225	National Emission Standards for Radon Emissions From the Disposal of Uranium Mill Tailings	No	Provisions apply to owners and operators of sites that are used to dispose of tailings, and that managed residual radioactive material or uranium by-product materials during and following the processing of uranium ores.	The Mt. Hope OSB facility is not an uranium mill.
40 CFR 61 Subpart V 61.240-61.247	National Emission Standard for Equipment Leaks (Fugitive Emission Sources)	No	Provisions apply to pumps, compressors, pressure relief devices, sampling connection systems, open-ended valves or lines, valves, flanges, and other connectors, product accumulator vessels, and control devices required by this subpart. Applicable for VHAPs for which a standard for equipment leaks of the substance has been proposed and promulgated. The only substances for which this applies is benzene and vinyl chloride which is at least 10% by weight in a fluid (liquid or gas).	The Mt. Hope OSB facility does not use or store benzene or vinyl chloride.
40 CFR 61 Subpart W 61.250-61.256	National Emission Standards for Radon Emissions From Operating Mill Tailings	No	Affected facilities include those that manage uranium byproduct materials during and following the processing of uranium ores, often called uranium mills and their associated tailings. This regulation does not apply to the disposal of the tailings.	The Mt. Hope OSB facility does not manage mill tailings.
40 CFR 61 Subpart Y 61.270-61.277	National Emission Standard for Benzene Emissions from Benzene Storage Vessels	No	Affected facilities include storage vessels that are storing Industrial Grade Benzene, Refined Benzene-485, Refined Benzene-535, and Refined Benzene-545. See ASTM standards for specific gravity information, which may determine classification. Storage vessels with a design capacity < 10000 gallons are exempt from emission standard requirements in the regulation. However, they must still comply with the recordkeeping provisions of the regulation. This regulations does not apply to pressure vessels designed to operate in excess of 204.9 kPa which do not emit to the atmosphere. A source subject to this rule which is also subject to either 40 CFR Subparts K, Ka, or Kb shall only be required to comply with the most stringent requirements for the source.	The Mt. Hope OSB facility does not use or store benzene.

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40 CFR 61 Subpart BB 61.300-61.306	National Emission Standard for Benzene Emissions from Benzene Transfer Operations	No	Affected facilities include loading racks at which benzene is loaded into tank trucks, railcars, or marine vessels at each benzene production facility and bulk terminal. Loading racks are exempted from this regulation if only the following are loaded: benzene-laden waste (subject to 40 CFR Part 60, Subpart FF), gasoline, crude oil, natural gas liquids, petroleum distillates, or benzene-laden liquid from coke by-product recovery plants. Any affected facility which loads only liquid containing less than 70 weight percent benzene is exempt from emission standards requirements but must comply with recordkeeping and reporting requirements. Any affected facility whose annual benzene loading is 343,461 gallons (1.3 million liters) or less of 70 weight percent or greater benzene is exempted from the emission standards but must comply with recordkeeping and reporting requirements.	The Mt. Hope OSB facility does not use or store benzene.
40 CFR 61 Subpart FF 61.340-61.359	National Emission Standard for Benzene Waste Operations	No	Affected facilities include chemical manufacturing plants, coke byproduct recovery plants, and petroleum refineries. Waste operations in refineries include wastewater treatment plants. Facilities with > 10Mg/yr benzene waste are subject to this requirement. Facilities with 1 - 10 Mg/yr benzene must only evaluate the benzene quantity annually.	The Mt. Hope OSB facility does not use or store benzene.
40 CFR 62 Subpart A 62.01-62.12	General Provisions for Approval and Promulgation of State Plans for Designated Facilities and Pollutants (NESHAP Delegations)	No	This part sets forth the Administrator's approval and disapproval of State plans for control of designated pollutants and facilities, and the Administrator's promulgation of such plans or portions thereof. Approval of a plan or any portion of a plan is based on a determination by the Administrator that it meets the requirements of Section 111(d) of the act and the provisions of Part 60 of this chapter. The pollutants and source categories regulated under section 111(d) of the Clean Air Act include fluoride emissions from phosphate fertilizer plants, sulfuric acid mist from sulfuric acid mist plants, total reduced sulfur from kraft pulp mills, and fluoride emissions from primary aluminum plants. Part 62 includes a chronological list of all actions pertaining to a states section 111(d) plans along with a list of sources covered under each standard and a negative declaration in the event that a state has no sources in the particular source category.	This subpart applies to state permitting authorities.
40 CFR 62 Subpart XX 62.12100 - 62.12160	State of West Virginia's 111(d) Plan	No	The part sets out the sources within WV that are subject to the State's 111(d) plan.	The Mt. Hope OSB facility is not one of listed facilities subject to the 111(d) plan.
40 CFR 63 Subpart A 63.63.1-63.16	General Provisions for NESHAP	Yes	Applies to both major and area sources of HAPs. A major source is one that emits or has potential considering controls, in the aggregate, 10 tpy or more of any HAP or 25 tpy or more of any combination of HAP, unless specific regulations or the regulatory authority establish a lesser quantity. New sources are sources that have initial startup dates before or after effective relevant standard date of March 16, 1994. Responsibility to notify EPA that source is subject to standard no later than 120 days after effective date (existing sources) or 120 days after initial startup (new).	The general provisions of Subpart A are applicable to all facilities subject to a standard promulgated pursuant to 40 CFR 63. With the promulgation of 40 CFR 63, Subpart DDDD, National Emission Standards for Hazardous Air Pollutants: Plywood and Composite Wood Products, on July 30, 2004, the Mt. Hope OSB facility became subject to a standard under 40 CFR 63.
40 CFR 63 Subpart B 63.40-63.56	Requirements for Control Technology Determinations for Major Sources in Accordance with Clean Air Act Sections 112 (g) and 112 (i)	No	The requirements apply to any owner or operator who constructs or reconstructs a major source of hazardous air pollutants after the effective date of a Title V program in the state in which the major source is located.	The Mt. Hope OSB facility has not constructed a major source of HAPs since the effective date of West Virginia's Title V program.

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40 CFR 63 Subpart C 63.60-63.69	List of Hazardous Air Pollutants, Petitions Process, Lesser Quantity Designations, Source Category List.	No	This regulation provides the list of hazardous air pollutants, petitions process, lesser quantity designations, source category list with no applicable requirements.	This subpart has no applicable requirements.
40 CFR 63 Subpart D 63.70-63.81	Regulations Governing Compliance Extensions for Early Reductions of Hazardous Air Pollutants	No	Allows sources that voluntarily make early reductions of HAP emissions to delay compliance w/MACT for 6 yrs. EPA has revised several of the deadlines to help resolve problems resulting from the overlapping of CAA programs.	Will apply to a facility that chooses to participate in the early reduction program. This regulation does not apply to the Mt. Hope OSB facility.
40 CFR 63 Subpart E 63.90 - 63.99	Approval of State Programs and Delegation of Federal Authorities	No	This subpart establishes procedures for the approval of State rules or programs to be implemented and enforced in place of otherwise applicable section 112 federal rules, emission standards or requirements.	This requirement applies to state permitting authorities.
40 CFR 63 Subpart F 63.100-63.106	National Emission Standards for Organic Hazardous Air Pollutants From the Synthetic Organic Chemical Manufacturing Industry	No	Applicability criteria for SOCMCI sources, definitions, general recordkeeping, and general reporting requirements. The process unit : 1) must be used to manufacture as a primary product one or more of the 385 SOCMCI chemicals , 2) located at a site that is a major source (PTE 10 tpy any single HAP, 25 tpy total HAPs), 3) as defined in §112(a) use one or more of the 112 OHAPs as a reactant or manufacture one or more of the OHAPs as a product, by-product, or co-product.	The Mt. Hope OSB facility does not manufacture chemicals.
40 CFR 63 Subpart G 63.110-63.118	National Emission Standards for Organic Hazardous Air Pollutants From the Synthetic Organic Chemical Manufacturing Industry Process Vents, Storage Vessels, Transfer Operations, and Wastewater	No	Applies to HAP emission points associated with OHAP-emitting SOCMCI processes at new and existing sources. Emission points include process vents from reactor processes, air oxidation processes, and distillation operations; Group I process vents must have a flow rate of 0.18 scfm or greater, a total OHAP concentration 50 ppmv or greater and a TRE value less than or equal to 1.0. Process vents which fail one or more of the Group 2 process vents are considered Group 2 vents. A new source is defined as any system which commenced construction on or after December 1992.	The Mt. Hope OSB facility is not a SOCMCI chemical manufacturing facility.
40 CFR 63 Subpart H 63.160-63.182	National Emission Standards for Organic Hazardous Air Pollutants for Equipment Leaks	No	Applies to new and existing process units associated with a SOCMCI production process at a major source and makes or uses an OHAP reactant, or any of the six non-SOCMCI processes. Applies to pumps, valves, compressors, agitators, pressure relief devices, sampling connection systems, open-ended lines, connectors, surge control vessels, bottoms receivers, instrumentation system and closed-vent systems, and control devices. Equipment must be in OHAP service and in contact with 5 wt% or more total OHAP for 300 or more hours per year.	The Mt. Hope OSB facility is not a SOCMCI chemical manufacturing facility.
40 CFR 63 Subpart I 63.190-63.193	National Emission Standards for Organic Hazardous Air Pollutants for Certain Processes Subject to the Negotiated Regulation for Equipment Leaks	No	This regulation applies to major sources of hazardous air pollutants which produce the following: styrene-butadiene rubber production, polybutadiene rubber production, processes producing the following agricultural chemicals: Captafol, Captan, Chlorothalonil, Dachtal, and Tordon TM acid, processes producing the following polymers or resins: Hypalon, Oxybisphenoxarsine/1,3-diisocyanate, Polycarbonates, Polysulfide rubber, chlorinate paraffins, and symmetrical tetrachloropyridine, pharmaceutical production processes producing using carbon tetrachloride or methylene chloride, processes producing the polymers/resins or other chemicals as follows: methylmethacrylate-butadiene-styrene resins, butadiene-furfural cotrimer, methylmethacrylate-acrylonitrile-butadiene-styrene resins and ethylidene norbornene. The affected components of the above facilities are pumps, compressors, agitators, pressure relief devices, sampling connection systems, open-ended valves or lines, valves, connectors, surge control vessels, bottom receivers, and instrumentation systems that are intended to operate in organic hazardous air pollutant service for 300 hours or more during the calendar year. This regulation does not apply to research and development facilities regardless of whether the facilities are located at the same plant site as a subject process.	The Mt. Hope OSB facility does not produce products covered in this section.

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40 CFR 63 Subpart J 63.210-63.217	National Emission Standards for Hazardous Air Pollutants for Polyvinyl Chloride and Copolymers Production	No	This subpart establishes national emission standards for hazardous air pollutants (NESHAP) for polyvinyl chloride (PVC) and copolymers production.	The Mt. Hope OSB facility does not contain polyvinyl chloride (PVC) and copolymers production.
40 CFR 63 Subpart L 63.300-63.313	National Emission Standards for Coke Oven Batteries	No	Unless otherwise specified in 63.306, 63.307, and 63.311, the provisions of this subpart apply to existing by-product coke oven batteries at a coke plant and to existing nonrecovery coke oven batteries at a coke plant on and after the dates specified.	The Mt. Hope OSB facility is not a coke plant.
40 CFR 63 Subpart M 63.320-63.325	National Perchloroethylene Air Emission Standards for Dry Cleaning Facilities	No	Applies to industrial, commercial, and coin-operated dry cleaning machines in which perchloroethylene is utilized.	The Mt. Hope OSB facility does not perform dry cleaning operations.
40 CFR 63 Subpart N 63.340 - 63.348	NESHAP: Hard and Decorative Chromium Electroplating and Chromium Anodizing Tanks	No	This rule applies to each chromium electroplating or chromium anodizing tank at facilities performing hard chromium electroplating, decorative chromium electroplating, or chromium anodizing. All affected sources must obtain a title V permit regardless of emission levels (i.e. major or area source).	The Mt. Hope OSB facility does not perform chromium electroplating.
40 CFR 63 Subpart O 63.360 - 63.368	NESHAP: Ethylene Oxide from Commercial Sterilization	No	This rule applies to all sterilization sources using 1 ton of ethylene oxide in all consecutive 12 month periods after December 12, 1996 in sterilization or fumigation operations. This rule does not apply to hospitals, doctors offices, clinics or other facilities whose primary purpose is to provide medical services to humans or animals. This rule does not apply to research and development facilities as defined in section 112(c)(7) of title III of the Clean Air Act. Sources which use 1 ton per year or greater of ethylene oxide must obtain a title V permit.	The Mt. Hope OSB facility does not have ethylene oxide sterilization operations.
40 CFR 63 Subpart Q 63.400-63.407	National Emission Standards for Hazardous Air Pollutants for Industrial Process Cooling Towers	No	The provisions of this subpart apply to all new and existing industrial process cooling towers that are operated with chromium-based water treatment chemicals on or after September 8, 1994 and are either major sources or are integral parts of facilities that are major sources as defined in 63.401. This regulation does not apply to industrial process cooling towers that exclusively treat cooling water from HVAC systems. The regulation does apply to cooling towers that treat both HVAC cooling water and process cooling water.	The Mt. Hope OSB facility does not use chromium based water treatment chemicals in an industrial process cooling tower.
40 CFR 63 Subpart R 63.420 - 63.429	National Emission Standards for Gasoline Distribution Facilities (Bulk Gasoline Terminals and Pipeline Breakout Stations)	No	The affected source to which the provisions of this subpart apply is each bulk gasoline terminal.	The Mt. Hope OSB facility does not contain any bulk gasoline terminals.
40 CFR 63 Subpart S 63.440 - 63.459	National Emission Standards for Hazardous Air Pollutants from the Pulp and Paper Industry	No	The provisions of this subpart apply to the owner or operator of processes that produce pulp, paper, or paperboard.	The Mt. Hope OSB facility does not produce pulp, paper, or paperboard.
40 CFR 63 Subpart T 63.460 - 63.470	National Emission Standard for Halogenated Solvent Cleaning Resins	No	The provisions of this subpart apply to each individual batch vapor, in-line vapor, in-line cold, and batch cold solvent cleaning machine that uses any solvent containing methylene chloride, perchlorethylene, trichloroethylene, 1,1,1-trichloroethane, carbon tetrachloride, or chloroform in any combination of these halogenated solvents in total concentration greater than 5% by weight.	The Mt. Hope OSB facility does not use halogenated solvents in any cleaning machine.
40 CFR 63 Subpart U 63.480 - 63.507	NESHAP: Group I Polymers and Resins	No	The provisions of this subpart apply to elastomer product process units (EPPUs).	The Mt. Hope OSB facility does not have any elastomer product process units (EPPUs).
40 CFR 63 Subpart W 63.520 - 63.529	National Emission Standards for Hazardous Air Pollutants for Epoxy Resins Production and Non-Nylon Polyamides Production	No	The provisions of this subpart apply to all existing, new, and reconstructed manufacturers of basic liquid epoxy resins (BLR) and manufacturers of wet strength resins (WSR).	The Mt. Hope OSB facility does not manufacturer basic liquid epoxy resins (BLR) or wet strength resins (WSR).

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40 CFR 63 Subpart X 63.541 - 63.551	National Emission Standards For Hazardous Air Pollutants From Secondary Lead Smelting	No	The provisions of this subpart apply to the following affected sources at all secondary lead smelters: blast, reverberatory, rotary, and electric smelting furnaces; refining kettles; agglomerating furnaces; dryers; process fugitive sources; and fugitive dust sources	The Mt. Hope OSB facility is not a secondary lead smelter.
40 CFR 63 Subpart Y 63.560 - 63.599	National Emission Standards for Marine Tank Vessel Tank Loading Operations	No	The provisions of this subpart pertaining to the MACT standards in §63.562(b) and (d) of this subpart are applicable to existing and new sources with emissions of 10 or 25 tons, as that term is defined in §63.561, except as specified in paragraph (d) of this section, and are applicable to new sources with emissions less than 10 and 25 tons, as that term is defined in §63.561, except as specified in paragraph (d) of this section.	The Mt. Hope OSB facility does not have a marine tank vessel tank loading operation.
40 CFR 63 Subpart AA 63.600 - 63.611	National Emission Standards for Hazardous Air Pollutants From Phosphoric Acid Manufacturing Plants	No	National Emission Standards for Hazardous Air Pollutants From Phosphoric Acid Manufacturing Plants	The Mt. Hope OSB facility is not a phosphoric acid manufacturing plant.
40 CFR 63 Subpart BB 63.620 - 63.632	National Emission Standards for Hazardous Air Pollutants From Phosphate Fertilizers Production Plants	No	The requirements of this subpart apply to the owner or operator of each phosphate fertilizers production plant.	The Mt. Hope OSB facility is not a phosphate fertilizers production plant.
40 CFR 63 Subpart CC 63.640 - 63.656	National Emission Standards for Hazardous Air Pollutants From Petroleum Refineries	No	This subpart applies to petroleum refining process units and to related emission points that are specified in (c)(5) paragraphs (c)(5) through (c)(7) of this section that are located at a plant site that meet the criteria in paragraphs (a)(1) and (a)(2) of this section	The Mt. Hope OSB facility is not a petroleum refinery.
40 CFR 63 Subpart DD 63.680 - 63.698	National Emission Standards for Hazardous Air Pollutants from Off-Site Waste and Recovery Operations	No	The provisions of this subpart apply to the owner and operator of a plant site for which both of the conditions specified in paragraphs (a)(1) and (a)(2) of this section are applicable. If either one of these conditions does not apply to the plant site, then the owner and operator of the plant site are not subject to the provisions of this subpart.	The Mt. Hope OSB facility does not have off-site waste and recovery operations.
40 CFR 63 Subpart EE 63.701 - 63.708	National Emission Standards For Magnetic Tape Manufacturing Operations	No	he provisions of this subpart apply to each new and existing magnetic tape manufacturing operation located at a major source of hazardous air pollutant (HAP) emissions.	The Mt. Hope OSB facility does not have any magnetic tape manufacturing operations.
40 CFR 63 Subpart GG 63.741 - 63.759...	National Emission Standards for Aerospace Manufacturing and Rework Facilities	No	This subpart applies to facilities that are engaged, either in part or in whole, in the manufacture or rework of commercial, civil, or military aerospace vehicles or components and that are major sources.	The Mt. Hope OSB facility does not have any aerospace manufacturing or rework facilities.
40 CFR 63 Subpart HH 63.760 - 63.779	National Emission Standards for Hazardous Air Pollutants From Oil and Natural Gas Production Facilities	No	This subpart applies to the owners and operators of the emission points that are located at oil and natural gas production facilities.	The Mt. Hope OSB facility does not contain any oil and natural gas production facilities.
40 CFR 63 Subpart II 63.780 - 63.789	National Emission Standards for Shipbuilding and Ship Repair (Surface Coating)	No	The provisions of this subpart apply to shipbuilding and ship repair operations at any facility that is a major source.	The Mt. Hope OSB facility does not have any ship building or repair facilities.
40 CFR 63 Subpart JJ 63.800 - 63.819	National Emission Standards for Wood Furniture Manufacturing Operations	No	The affected source to which this subpart applies is each facility that is engaged, either in part or in whole, in the manufacture of wood furniture or wood furniture components and that is located at a plant site that is a major source as defined in 40 CFR Part 63, Subpart A, §63.2.	The Mt. Hope OSB facility is not a wood furniture manufacturing operation.
40 CFR 63 Subpart KK 63.820 - 63.831	National Emission Standards for the Printing and Publishing Industry	No	The provisions of this subpart apply to each new and existing facility that is a major source of hazardous air pollutants (HAP), as defined in 40 CFR 63.2, at which publication rotogravure, product and packaging rotogravure, or wide-web flexographic printing presses are operated	The Mt. Hope OSB facility is not a printing or publishing operation.

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40 CFR 63 Subpart LL 63.840 - 63.859	National Emission Standards for Hazardous Air Pollutants for Primary Aluminum Reduction Plants	No	The requirements of this subpart apply to the owner or operator of each new pitch storage tank and new or existing potline, paste production plant, or anode bake furnace associated with primary aluminum production and located at a major source.	The Mt. Hope OSB facility is not a primary aluminum production plant.
40 CFR 63 Subpart MM 63.860 - 63.868	National Emission Standards for Hazardous Air Pollutants for Chemical Recovery Combustion Sources at Kraft, Soda, Sulfite, and Stand-Alone Semichemical Pulp Mills	No	The requirements of this subpart apply to the owner or operator of each kraft, soda, sulfite, or stand-alone semichemical pulp mill that is a major source of hazardous air pollutants (HAP) emissions.	The Mt. Hope OSB facility is not a kraft, soda, sulfite, or stand-alone semichemical pulp mill.
40 CFR 63 Subpart OO 63.900 - 63.908	National Emission Standards for Tanks - Level 1	No	The provisions of this subpart apply to the control of air emissions from tanks for which another subpart of 40 CFR parts 60, 61, or 63 references the use of this subpart for such air emission control. These air emission standards for tanks are placed here for administrative convenience and only apply to those owners and operators of facilities subject to the other subparts that reference this subpart	The Mt. Hope OSB facility is not subject to the other subparts that reference this subpart, therefore, this subpart is not applicable.
40 CFR 63 Subpart PP 63.920 - 63.928	National Emission Standards for Containers	No	The provisions of this subpart apply to the control of air emissions from containers for which another subpart of 40 CFR parts 60, 61, or 63 references the use of this subpart for such air emission control. These air emission standards for containers are placed here for administrative convenience and only apply to those owners and operators of facilities subject to the other subparts that reference this subpart.	The Mt. Hope OSB facility is not subject to the other subparts that reference this subpart, therefore, this subpart is not applicable.
40 CFR 63 Subpart QQ 63.940 - 63.949	National Emission Standards for Surface Impoundments	No	The provisions of this subpart apply to the control of air emissions from surface impoundments for which another subpart of 40 CFR parts 60, 61, or 63 references the use of this subpart for such air emission control. These air emission standards for surface impoundments are placed here for administrative convenience and only apply to those owners and operators of facilities subject to the other subparts that reference this subpart.	The Mt. Hope OSB facility is not subject to the other subparts that reference this subpart, therefore, this subpart is not applicable.
40 CFR 63 Subpart RR 63.960 - 63.967	National Emission Standards for Individual Drain Systems	No	The provisions of this subpart apply to the control of air emissions from individual drain systems for which another subpart of 40 CFR parts 60, 61, or 63 references the use of this subpart for such air emission control. These air emission standards for individual drain systems are placed here for administrative convenience and only apply to those owners and operators of facilities subject to the other subparts that reference this subpart.	The Mt. Hope OSB facility is not subject to the other subparts that reference this subpart, therefore, this subpart is not applicable.
40 CFR 63 Subpart SS 63.980 - 63.999	National Emission Standards for Closed Vent Systems, Control Devices, Recovery Devices and Routing to a Fuel Gas System or a Process	No	The provisions of this subpart include requirements for closed vent systems, control devices and routing of air emissions to a fuel gas system or process. These provisions apply when another subpart references the use of this subpart for such air emission control.	The Mt. Hope OSB facility does not have any closed vent systems, control devices and routing of air emissions to a fuel gas system or process for which another subpart references the use of this subpart for such air emission control.
40 CFR 63 Subpart TT 63.1000 - 63.1018	National Emission Standards for Equipment Leaks—Control Level 1	No	The provisions of this subpart apply to the control of air emissions from equipment leaks for which another subpart references the use of this subpart for such air emission control.	The Mt. Hope OSB facility is not subject to any subpart for the control of air emissions from equipment leaks for which another subpart references the use of this subpart for such air emission control.

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40 CFR 63 Subpart UU 63.1019 - 63.1039	National Emission Standards for Equipment Leaks—Control Level 2 Standards	No	The provisions of this subpart apply to the control of air emissions from equipment leaks for which another subpart references the use of this subpart for such air emission control.	The Mt. Hope OSB facility is not subject to any subpart that requires the control of air emissions from equipment leaks for which another subpart references the use of this subpart for such air emission control.
40 CFR 63 Subpart VV 63.1040 - 63.1050	National Emission Standards for Oil-Water Separators and Organic-Water Separators	No	The provisions of this subpart apply to the control of air emissions from oil-water separators and organic-water separators for which another subpart of 40 CFR parts 60, 61, or 63 references the use of this subpart for such air emission control. These air emission standards for oil-water separators and organic-water separators are placed here for administrative convenience and only apply to those owners and operators of facilities subject to the other subparts that reference this subpart.	The Mt. Hope OSB facility is not subject to the other subparts that reference this subpart, therefore, this subpart is not applicable.
40 CFR 63 Subpart WW 63.1060 - 63.1067	National Emission Standards for Storage Vessels (Tanks)—Control Level 2	No	The provisions of this subpart apply to the control of air emissions from storage vessels for which another subpart references the use of this subpart for such air emission control.	The Mt. Hope OSB facility is not subject to any subpart that requires the control of air emissions from storage vessels for which another subpart references the use of this subpart for such air emission control.
40 CFR 63 Subpart XX 63.1080 - 63.1097	National Emission Standards for Ethylene Manufacturing Process Units: Heat Exchange Systems and Waste Operations	No	This subpart establishes requirements for controlling emissions of hazardous air pollutants (HAP) from heat exchange systems and waste streams at new and existing ethylene production units.	The Mt. Hope OSB facility does not contain any new or existing ethylene production units
40 CFR 63 Subpart YY 63.110 - 63.1114	National Emission Standards for Hazardous Air Pollutants for Source Categories: Generic Maximum Achievable Control Technology Standards	No	This subpart applies to Acetal Resins Production, Acrylic and Modacrylic Fibers Production, Carbon Black Production, Cyanide Chemicals Manufacturing, Ethylene Production, Hydrogen Fluoride Production, Polycarbonate Production, and Spandex Production.	The Mt. Hope OSB facility does not contain any of the listed source categories to which this subpart is applicable.
40 CFR 63 Subpart CCC 63.1155 - 63.1174	National Emission Standards for Hazardous Air Pollutants for Steel Pickling—HCl Process Facilities and Hydrochloric Acid Regeneration Plants	No	The provisions of this subpart apply to the all new existing steel pickling facilities that pickle carbon steel using hydrochloric acid solution that contains 6 percent or more by weight HCl and is at a temperature of 100°F or higher; and All new and existing hydrochloric acid regeneration plants and plants that are major sources for hazardous air pollutants (HAP) or are parts of facilities that are major sources for HAP.	The Mt. Hope OSB facility does not contain any of the listed source categories to which this subpart is applicable.
40 CFR 63 Subpart DDD 63.1175 - 63.1199	National Emission Standards for Hazardous Air Pollutants for Mineral Wool Production	No	This subpart establishes national emission standards for hazardous air pollutants emitted from existing, new, and reconstructed cupolas and curing ovens at facilities that produce mineral wool.	The Mt. Hope OSB facility does not contain any existing, new, or reconstructed cupolas and curing ovens at facilities that produce mineral wool.
40 CFR 63 Subpart EEE 63.1200 - 63.1214	National Emission Standards for Hazardous Air Pollutants from Hazardous Waste Combustors	No	The provisions of this subpart apply to all hazardous waste combustors: hazardous waste incinerators, hazardous waste burning cement kilns, and hazardous waste burning lightweight aggregate kilns.	The Mt. Hope OSB facility does not contain any hazardous waste combustors: hazardous waste incinerators, hazardous waste burning cement kilns, or hazardous waste burning lightweight aggregate kilns.

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40 CFR 63 Subpart GGG 63.1250 - 63.1261	National Emission Standards for Pharmaceuticals Production	No	The affected source subject to this subpart consists of the pharmaceutical manufacturing operations.	The Mt. Hope OSB facility does not contain any pharmaceutical manufacturing operations.
40 CFR 63 Subpart HHH 63.1270 - 63.1289	National Emission Standards for Hazardous Air Pollutants From Natural Gas Transmission and Storage Facilities	No	This subpart applies to owners and operators of natural gas transmission and storage facilities that transport or store natural gas prior to entering the pipeline to a local distribution company or to a final end user (if there are no local distribution company), and that are major sources of hazardous air pollutants (HAP) emissions.	The Mt. Hope OSB facility is not an owner or operator of natural gas transmission and storage facilities.
40 CFR 63 Subpart III 63.1290 - 63.1309	National Emission Standards for Hazardous Air Pollutants for Flexible Polyurethane Foam Production	No	The provisions of this subpart apply to each new and existing flexible polyurethane foam or rebond foam process.	The Mt. Hope OSB facility does not contain any new or existing flexible polyurethane foam or rebond foam process.
40 CFR 63 Subpart JJJ 63.1310 - 63.1336	National Emission Standards for Hazardous Air Pollutant Emissions: Group IV Polymers and Resins	No	The provisions of this subpart apply to each group of one or more thermoplastic product process units (TPPU) and associated equipment.	The Mt. Hope OSB facility does not contain any group of one or more thermoplastic product process units (TPPU) and associated equipment.
40 CFR 63 Subpart LLL 63.1340 - 63.1359	National Emission Standards for Hazardous Air Pollutants From the Portland Cement Manufacturing Industry	No	The provisions of this subpart apply to each new and existing portland cement plant which is a major source or an area source.	The Mt. Hope OSB facility is not a new or existing portland cement plant
40 CFR 63 Subpart MMM 63.1360 - 63.1369	National Emission Standards for Hazardous Air Pollutants for Pesticide Active Ingredient Production	No	The affected source subject to this subpart is the facility-wide collection of pesticide active ingredient manufacturing process units (PAI process units) that process, use, or produce HAP, and are located at a plant site that is a major source.	The Mt. Hope OSB facility does not include any pesticide active ingredient manufacturing process units (PAI process units).
40 CFR 63 Subpart NNN 63.1380 - 63.1399	National Emission Standards for Hazardous Air Pollutants for Wool Fiberglass Manufacturing	No	The requirements of this subpart apply to the owner or operator of each wool fiberglass manufacturing facility that is a major source or is located at a facility that is a major source.	The Mt. Hope OSB facility is not a wool fiberglass manufacturing facility.
40 CFR 63 Subpart OOO 63.1400 - 63.1419	National Emission Standards for Hazardous Air Pollutant Emissions: Manufacture of Amino/Phenolic Resins	No	The provisions of this subpart apply to the owner or operator of processes that produce amino/phenolic resins and that are located at a plant site that is a major source.	The Mt. Hope OSB facility does not manufacture amino/phenolic resins.
40 CFR 63 Subpart PPP 63.1420 - 63.1439	National Emission Standards for Hazardous Air Pollutant Emissions for Polyether Polyols Production	No	The provisions of this subpart apply to each group of one or more polyether polyol manufacturing process units (PMPUs) and associated equipment.	The Mt. Hope OSB facility does not contain any polyether polyol manufacturing process units (PMPUs) and associated equipment.
40 CFR 63 Subpart QQQ 63.1440 - 63.1459	National Emission Standards for Hazardous Air Pollutants for Primary Copper Smelting	No	This subpart establishes national emission standards for hazardous air pollutants (NESHAP) for primary copper smelters.	The Mt. Hope OSB facility does not contain a primary copper smelter.
40 CFR 63 Subpart RRR 63.1500 - 63.1520	National Emission Standards for Hazardous Air Pollutants for Secondary Aluminum Production	No	The requirements of this subpart apply to the owner or operator of each secondary aluminum production facility.	The Mt. Hope OSB facility is not a secondary aluminum production facility.
40 CFR 63 Subpart TTT 63.1541 - 63.1550	National Emission Standards for Hazardous Air Pollutants for Primary Lead Smelting	No	The provisions of this subpart apply to the following affected sources at primary lead smelters: sinter machine, blast furnace, dross furnace, process fugitive sources, and fugitive dust sources.	The Mt. Hope OSB facility is not a primary lead smelter.

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40 CFR 63 Subpart UUU 63.1560 - 63.1579	National Emission Standards for Hazardous Air Pollutants for Petroleum Refineries: Catalytic Cracking Units, Catalytic Reforming Units, and Sulfur Recovery Units	No	This subpart establishes national emission standards for hazardous air pollutants (HAP) emitted from petroleum refineries.	The Mt. Hope OSB facility is not a petroleum refinery.
40 CFR 63 Subpart VVV 63.1580 - 63.1595	National Emission Standards for Hazardous Air Pollutants: Publicly Owned Treatment Works	No	This subpart applies to owners or operators of publicly owned treatment works (POTW) is located at a POTW which is a major source of HAP emissions, or at any industrial POTW regardless of whether or not it is a major source of HAP.	The Mt. Hope OSB facility does not own or operate a POTW.
40 CFR 63 Subpart XXX 63.1620 - 63.1679	National Emission Standards for Hazardous Air Pollutants for Ferroalloys Production: Ferromanganese and Silicomanganese	No	This subpart applies to all new and existing ferromanganese and silicomanganese production facilities that manufacture ferromanganese or silicomanganese and are major sources or are co-located at major sources of hazardous air pollutant emissions.	The Mt. Hope OSB facility does not contain any new or existing ferromanganese or silicomanganese production facilities.
40 CFR 63 Subpart AAAA 63.1930 - 63.1990	National Emission Standards for Hazardous Air Pollutants: Municipal Solid Waste Landfills	No	This subpart establishes national emission standards for hazardous air pollutants for existing and new municipal solid waste (MSW) landfills.	The Mt. Hope OSB facility does not contain an existing or new municipal solid waste (MSW) landfills.
40 CFR 63 Subpart CCCC 63.2130 - 63.2192	National Emission Standards for Hazardous Air Pollutants: Manufacturing of Nutritional Yeast	No	This subpart establishes national emission limitations for hazardous air pollutants emitted from manufacturers of nutritional yeast.	The Mt. Hope OSB facility does not manufacturer nutritional yeast.
40 CFR 63 Subpart DDDD 63.2230 - 63.2292	National Emission Standards for Hazardous Air Pollutants: Plywood and Composite Wood Products	Yes	This subpart establishes national compliance options, operating requirements, and work practice requirements for hazardous air pollutants (HAP) emitted from plywood and composite wood products (PCWP) manufacturing facilities.	The Mt. Hope OSB is subject to this subpart.
40 CFR 63 Subpart EEEE 63.2330 - 63.2406	National Emission Standards for Hazardous Air Pollutants: Organic Liquids Distribution (Non-Gasoline)	No	This subpart establishes national emission limitations, operating limits, and work practice standards for organic hazardous air pollutants (HAP) emitted from organic liquids distribution (OLD) (non-gasoline) operations at major sources of HAP emissions.	The Mt. Hope OSB facility does not contain any organic liquids distribution (OLD) (non-gasoline) operations.
40 CFR 63 Subpart FFFF 63.2430 - 63.2550	National Emission Standards for Hazardous Air Pollutants: Miscellaneous Organic Chemical Manufacturing	No	This subpart establishes national emission standards for hazardous air pollutants (NESHAP) for miscellaneous organic chemical manufacturing.	The Mt. Hope OSB facility does not contain miscellaneous organic chemical manufacturing.
40 CFR 63 Subpart GGGG 63.2830 - 63.2872	National Emission Standards for Hazardous Air Pollutants: Solvent Extraction for Vegetable Oil Production	No	This subpart establishes national emission standards for hazardous air pollutants (NESHAP) for emissions during vegetable oil production.	The Mt. Hope OSB facility is not involved in vegetable oil production.
40 CFR 63 Subpart HHHH 63.2980 - 63.3079	National Emission Standards for Hazardous Air Pollutants for Wet-Formed Fiberglass Mat Production	No	This subpart establishes national emission standards for hazardous air pollutants (NESHAP) for emissions from facilities that produce wet-formed fiberglass mat.	The Mt. Hope OSB facility does not produce wet-formed fiberglass mats.
40 CFR 63 Subpart IIII 63.3080 - 63.3176	National Emission Standards for Hazardous Air Pollutants: Surface Coating of Automobiles and Light-Duty Trucks	No	This subpart establishes national emission standards for hazardous air pollutants (NESHAP) for facilities which surface coat new automobile or new light-duty truck bodies or body parts for new automobiles or new light-duty trucks.	The Mt. Hope OSB facility does not surface coat new automobile or new light-duty truck bodies or body parts for new automobiles or new light-duty trucks.

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40 CFR 63 Subpart JJJJ 63.3280 - 63.3420	National Emission Standards for Hazardous Air Pollutants: Paper and Other Web Coating	No	This subpart establishes emission standards for web coating lines and specifies what you must do to comply if you own or operate a facility with web coating lines that is a major source of HAP.	The Mt. Hope OSB facility does not own or operate any web coating lines.
40 CFR 63 Subpart KKKK 63.3480 - 63.3561	National Emission Standards for Hazardous Air Pollutants: Surface Coating of Metal Cans	No	This subpart establishes national emission standards for hazardous air pollutants (NESHAP) for metal can surface coating facilities.	The Mt. Hope OSB facility does not contain any metal can surface coating facilities.
40 CFR 63 Subpart MMMM 63.3880 - 63.3981	National Emission Standards for Hazardous Air Pollutants for Surface Coating of Miscellaneous Metal Parts and Products	No	This subpart establishes national emission standards for hazardous air pollutants (NESHAP) for miscellaneous metal parts and products surface coating facilities.	The Mt. Hope OSB facility does not contain any miscellaneous metal parts and products surface coating facilities.
40 CFR 63 Subpart NNNN 63.4080 - 63.4181	National Emission Standards for Hazardous Air Pollutants: Surface Coating of Large Appliances	No	This subpart establishes national emission standards for hazardous air pollutants for large appliance surface coating facilities.	The Mt. Hope OSB facility does not contain any large appliance surface coating facilities.
40 CFR 63 Subpart OOOO 63.4280 - 63.4371	National Emission Standards for Hazardous Air Pollutants: Printing, Coating, and Dyeing of Fabrics and Other Textiles	No	This subpart establishes national emission standards for hazardous air pollutants (NESHAP) for fabric and other textiles printing, coating and dyeing operations.	The Mt. Hope OSB facility does not contain any fabric and other textiles printing, coating and dyeing operations.
40 CFR 63 Subpart PPPP 63.4480 - 63.4581	National Emission Standards for Hazardous Air Pollutants for Surface Coating of Plastic Parts and Products	No	This subpart establishes national emission standards for hazardous air pollutants (NESHAP) for plastic parts and products surface coating facilities.	The Mt. Hope OSB facility does not contain any plastic parts and products surface coating facilities.
40 CFR 63 Subpart QQQQ 63.4680 - 63.4781	National Emission Standards for Hazardous Air Pollutants: Surface Coating of Wood Building Products	No	This subpart establishes national emission standards for hazardous air pollutants (NESHAP) for wood building products surface coating sources.	The Mt. Hope OSB facility does not contain any wood building products surface coating sources subject to this subpart.
40 CFR 63 Subpart RRRR 63.4880 - 63.4891	National Emission Standards for Hazardous Air Pollutants: Surface Coating of Metal Furniture	No	This subpart establishes national emission standards for hazardous air pollutants (NESHAP) for metal furniture surface coating facilities.	The Mt. Hope OSB facility does not contain any metal furniture surface coating facilities.
40 CFR 63 Subpart SSSS 63.5080 - 63.5209	National Emission Standards for Hazardous Air Pollutants: Surface Coating of Metal Coil	No	This subpart establishes emission standards for a facility that performs metal coil surface coating operations and is a major source of HAP.	The Mt. Hope OSB facility does not contain any metal coil surface coating operations.
40 CFR 63 Subpart TTTT 63.5280 - 63.5460	National Emission Standards for Hazardous Air Pollutants for Leather Finishing Operations	No	This subpart establishes national emission standards for hazardous air pollutants (NESHAP) for leather finishing operations.	The Mt. Hope OSB does not contain any leather finishing operations.
40 CFR 63 Subpart UUUU 63.5480 - 63.5610	National Emission Standards for Hazardous Air Pollutants for Cellulose Products Manufacturing	No	This subpart establishes emission limits, operating limits, and work practice standards for hazardous air pollutants (HAP) emitted from cellulose products manufacturing operations. The Mt. Hope OSB facility does not contain any cellulose products manufacturing operations.	The Mt. Hope OSB facility does not contain any cellulose products manufacturing operations.
40 CFR 63 Subpart VVVV 63.5680 - 63.5779	National Emission Standards for Hazardous Air Pollutants for Boat Manufacturing	No	This subpart establishes national emission standards for hazardous air pollutants (HAP) for new and existing boat manufacturing facilities with resin and gel coat operations, carpet and fabric adhesive operations, or aluminum recreational boat surface coating operations.	The Mt. Hope OSB facility does not contain any boat manufacturing facilities.

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40 CFR 63 Subpart WWWW 63.5780 - 63.5975	National Emission Standards for Hazardous Air Pollutants: Reinforced Plastic Composites Production	No	This subpart establishes national emissions standards for hazardous air pollutants (NESHAP) for reinforced plastic composites production.	The Mt. Hope OSB facility does not contain any reinforced plastic composites production.
40 CFR 63 Subpart XXXX 63.5780 - 63.5975	National Emissions Standards for Hazardous Air Pollutants: Rubber Tire Manufacturing	No	This subpart establishes national emission standards for hazardous air pollutants (NESHAP) for rubber tire manufacturing.	The Mt. Hope OSB facility does not contain any rubber tire manufacturing operations.
40 CFR 63 Subpart YYYY 63.6080 - 63.6175	National Emission Standards for Hazardous Air Pollutants for Stationary Combustion Turbines	No	This subpart establishes national emission limitations and operating limitations for hazardous air pollutants (HAP) emissions from stationary combustion turbines located at major sources of HAP emissions	The Mt. Hope OSB facility does not contain any stationary combustion turbines.
40 CFR 63 Subpart ZZZZ 63.6580 - 63.6675	National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines	Yes	This subpart establishes national emission limitations and operating limitations for hazardous air pollutants (HAP) emitted from stationary reciprocating internal combustion engines (RICE) located at major sources of HAP emissions.	The Mt. Hope OSB facility contains stationary reciprocating internal combustion engines (RICE) that are subject to the requirements in this subpart.
40 CFR 63 Subpart AAAAA 63.7080 - 63.7143	National Emission Standards for Hazardous Air Pollutants for Lime Manufacturing Plants	No	This subpart establishes national emission standards for hazardous air pollutants (NESHAP) for lime manufacturing plants.	The Mt. Hope OSB facility does not contain any lime manufacturing plants.
40 CFR 63 Subpart BBBB 63.7180 - 63.7195	National Emission Standards for Hazardous Air Pollutants for Semiconductor Manufacturing	No	This subpart establishes national emission standards for hazardous air pollutants (NESHAP) for semiconductor manufacturing facilities.	The Mt. Hope OSB facility does not contain any semiconductor manufacturing facilities.
40 CFR 63 Subpart CCCCC 63.7280 - 63.7352	National Emission Standards for Hazardous Air Pollutants for Coke Ovens: Pushing, Quenching, and Battery Stacks	No	This subpart establishes national emission standards for hazardous air pollutants (NESHAP) for pushing, soaking, quenching, and battery stacks at coke oven batteries.	The Mt. Hope OSB facility does not contain any coke oven batteries.
40 CFR 63 Subpart DDDDD 63.7480 - 63.7575	National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters	Yes	This subpart establishes national emission limits and work practice standards for hazardous air pollutants (HAP) emitted from industrial, commercial, and institutional boilers and process heaters. Original Boiler MACT with an applicable date of September 2007 was vacated by the Courts.	The Mt. Hope OSB facility has at least one source that will be subject to the requirements contained in this standard once the standard is promulgated.
40 CFR 63 Subpart EEEEE 63.7680 - 63.7765	National Emission Standards for Hazardous Air Pollutants for Iron and Steel Foundries	No	This subpart establishes national emission standards for hazardous air pollutants (NESHAP) for iron and steel foundries.	The Mt. Hope OSB facility does not contain any iron or steel foundries.
40 CFR 63 Subpart FFFFF 63.7780 - 63.7852	National Emission Standards for Hazardous Air Pollutants for Integrated Iron and Steel Manufacturing Facilities	No	This subpart establishes national emission standards for hazardous air pollutants (NESHAP) for integrated iron and steel manufacturing facilities.	The Mt. Hope OSB facility does not contain any integrated iron or steel manufacturing facilities.
40 CFR 63 Subpart GGGGG 63.7880 - 63.7957	National Emission Standards for Hazardous Air Pollutants: Site Remediation	No	This subpart establishes national emissions limitations and work practice standards for hazardous air pollutants (HAP) emitted from site remediation activities.	The Mt. Hope OSB facility is not conducting any site remediation activities subject to this subpart.
40 CFR 63 Subpart HHHHH 63.7980 - 63.8105	National Emission Standards for Hazardous Air Pollutants: Miscellaneous Coating Manufacturing	No	This subpart establishes national emission standards for hazardous air pollutants (NESHAP) for miscellaneous coating manufacturing.	The Mt. Hope OSB facility does not contain any miscellaneous coating manufacturing operations.

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40 CFR 63 Subpart IIIII 63.8180 - 63.826	National Emission Standards for Hazardous Air Pollutants: Mercury Emissions From Mercury Cell Chlor-Alkali Plants	No	This subpart establishes national emission standards for hazardous air pollutants (NESHAP) for affected sources of mercury emissions at mercury cell chlor-alkali plants.	The Mt. Hope OSB facility does not contain any mercury cell chlor-alkali plants.
40 CFR 63 Subpart JJJJJ 63.8380 - 63.8515	National Emission Standards for Hazardous Air Pollutants for Brick and Structural Clay Products Manufacturing	No	This subpart establishes national emission limitations for hazardous air pollutants (HAP) emitted from brick and structural clay products (BSCP) manufacturing facilities.	The Mt. Hope OSB facility does not contain any brick and structural clay products (BSCP) manufacturing facilities.
40 CFR 63 Subpart KKKKK 63.8530 - 63.8665	National Emission Standards for Hazardous Air Pollutants for Clay Ceramics Manufacturing	No	This subpart establishes national emission limitations and work practice standards for hazardous air pollutants (HAP) emitted from clay ceramics manufacturing facilities.	The Mt. Hope OSB facility does not contain any clay ceramics manufacturing facilities.
40 CFR 63 Subpart LLLLL 63.8680 - 63.8698	National Emission Standards for Hazardous Air Pollutants: Asphalt Processing and Asphalt Roofing Manufacturing	No	This subpart establishes national emission standards for hazardous air pollutants (NESHAP) for existing and new asphalt processing and asphalt roofing manufacturing facilities.	The Mt. Hope OSB facility does not contain any asphalt processing and asphalt roofing manufacturing facilities.
40 CFR 63 Subpart MMMMM 63.8780 - 63.8830	National Emission Standards for Hazardous Air Pollutants: Flexible Polyurethane Foam Fabrication Operations	No	This subpart establishes national emission standards for hazardous air pollutants (NESHAP) emitted from flexible polyurethane foam fabrication operations.	The Mt. Hope OSB facility does not contain any flexible polyurethane foam fabrication operations.
40 CFR 63 Subpart NNNNN 63.8980 - 63.9075	National Emission Standards for Hazardous Air Pollutants: Hydrochloric Acid Production	No	This subpart establishes national emission standards for hazardous air pollutants (NESHAP) and work practice standards for hazardous air pollutants (HAP) emitted from hydrochloric acid (HCl) production.	The Mt. Hope OSB facility does not contain any hydrochloric acid (HCl) production.
40 CFR 63 Subpart PPPPP 63.9280 - 63.9375	National Emission Standards for Hazardous Air Pollutants for Engine Test Cells/Stands	No	This subpart establishes national emission standards for hazardous air pollutants (NESHAP) for engine test cells/stands located at major sources of hazardous air pollutants (HAP) emissions.	The Mt. Hope OSB facility does not contain any engine test cells/stands.
40 CFR 63 Subpart QQQQQ 63.9480 - 63.9579	National Emission Standards for Hazardous Air Pollutants for Friction Materials Manufacturing Facilities	No	This subpart establishes national emission standards for hazardous air pollutants (NESHAP) for friction materials manufacturing facilities that use a solvent-based process.	The Mt. Hope OSB facility does not contain any friction materials manufacturing facilities that use a solvent-based process.
40 CFR 63 Subpart RRRRR 63.9580 - 63.965	National Emission Standards for Hazardous Air Pollutants: Taconite Iron Ore Processing	No	This subpart establishes national emission standards for hazardous air pollutants (NESHAP) for taconite iron ore processing.	The Mt. Hope OSB facility does not contain any taconite iron ore processing facilities.
40 CFR 63 Subpart SSSSS 63.9780 - 63.9824	National Emission Standards for Hazardous Air Pollutants for Refractory Products Manufacturing	No	This subpart establishes national emission standards for hazardous air pollutants (NESHAP) for refractory products manufacturing facilities.	The Mt. Hope OSB facility does not contain any refractory products manufacturing facilities.
40 CFR 63 Subpart TTTTT 63.9880 - 63.9942	National Emission Standards for Hazardous Air Pollutants for Primary Magnesium Refining	No	This subpart establishes national emission standards for hazardous air pollutants (NESHAP) for primary magnesium refineries.	The Mt. Hope OSB facility does not contain any primary magnesium refineries.
40 CFR 63 Subpart WWWW 63.10382 - 63.10448	National Emission Standards for Hospital Ethylene Oxide Sterilizers	No	This subpart establishes national emission standards for owners or operators of an ethylene oxide sterilization facility at a hospital that is an area source of hazardous air pollutant (HAP) emissions	The Mt. Hope OSB facility is not a hospital nor does it perform ethylene oxide sterilization.

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40 CFR 63 Subpart YYYYY 63.10680 - 63.10692	National Emission Standards for Hazardous Air Pollutants for Area Sources: Electric Arc Furnace Steelmaking Facilities	No	This subpart establishes national emission standards for owners or operators of an electric arc furnace (EAF) steelmaking facility that is an area source of hazardous air pollutant (HAP) emissions.	The Mt. Hope OSB facility is not EAF steelmaking facility.
40 CFR 63 Subpart ZZZZZ 63.10880 - 63.10906	National Emission Standards for Hazardous Air Pollutants for Iron and Steel Foundries Area Sources	No	This subpart establishes national emission standards for owners or operators of an iron and steel foundry that is an area source of hazardous air pollutant (HAP) emissions.	The Mt. Hope OSB facility is not an iron or steel foundry.
40 CFR 63 Subpart BBBBBB 63.11080 - 63.11100	National Emission Standards for Hazardous Air Pollutants for Source Category: Gasoline Distribution Bulk Terminals, Bulk Plants, and Pipeline Facilities	No	This subpart establishes national emission limitations and management practices for hazardous air pollutants (HAP) emitted from area source gasoline distribution bulk terminals, bulk plants, and pipeline facilities	The Mt. Hope OSB facility does not contain a gasoline distribution bulk terminals, bulk plants, or pipeline facilities.
40 CFR 63 Subpart CCCCCC 63.11110 - 63.11132	National Emission Standards for Hazardous Air Pollutants for Source Category: Gasoline Dispensing Facilities	No	This subpart establishes national emission limitations and management practices for hazardous air pollutants (HAP) emitted from the loading of gasoline storage tanks at gasoline dispensing facilities (GDF).	The Mt. Hope OSB facility is not an area source.
40 CFR 63 Subpart DDDDDD 63.11140 - 63.11145	National Emission Standards for Hazardous Air Pollutants for Polyvinyl Chloride and Copolymers Production Area Sources	No	This subpart applies to facilities that produce polyvinyl chloride (PVC) or copolymers and is an area source of hazardous air pollutant (HAP) emissions.	The Mt. Hope OSB facility does not produce PVC or copolymers.
40 CFR 63 Subpart EEEEEEE 63.11146 - 63.11152	National Emission Standards for Hazardous Air Pollutants for Primary Copper Smelting Area Sources	No	This subpart applies to a primary copper smelter that is an area source of hazardous air pollutant (HAP) emissions.	The Mt. Hope OSB facility does not smelt copper.
40 CFR 63 Subpart FFFFFFF 63.11153 - 63.11159	National Emission Standards for Hazardous Air Pollutants for Secondary Copper Smelting Area Sources	No	This subpart applies to a secondary copper smelter that is an area source of hazardous air pollutant (HAP) emissions.	The Mt. Hope OSB facility does not smelt copper.
40 CFR 63 Subpart GGGGGG 63.11160 - 63.11168	National Emission Standards for Hazardous Air Pollutants for Primary Nonferrous Metals Area Sources—Zinc, Cadmium, and Beryllium	No	This subpart applies to a primary zinc production facility or primary beryllium production facility that is an area source of hazardous air pollutant (HAP) emissions.	The Mt. Hope OSB facility does not produce zinc or beryllium.
40 CFR 63 Subpart HHHHHH 63.11169 - 63.11180	National Emission Standards for Hazardous Air Pollutants: Paint Stripping and Miscellaneous Surface Coating Operations at Area Sources	No	This subpart applies to a paint stripping and miscellaneous surface coating operations at area source of hazardous air pollutant (HAP) emissions.	The Mt. Hope OSB facility does not perform pant stripping or surface coating operations to which this subpart applies.
40 CFR 63 Subpart LLLLLL 63.11193 - 63.11199	National Emission Standards for Hazardous Air Pollutants for Acrylic and Modacrylic Fibers Production Area Sources	No	This subpart applies to an acrylic or modacrylic fibers production plant that is an area source of hazardous air pollutant (HAP) emissions.	The Mt. Hope OSB facility does not produce acrylic or modacrylic fibers.
40 CFR 63 Subpart MMMMMM 63.11400 - 63.11406	National Emission Standards for Hazardous Air Pollutants for Carbon Black Production Area Sources	No	This subpart applies to a carbon black production facility that is an area source of hazardous air pollutant (HAP) emissions.	The Mt. Hope OSB facility does not produce carbon black.

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40 CFR 63 Subpart NNNNNN 63.11407 - 63.11413	National Emission Standards for Hazardous Air Pollutants for Chemical Manufacturing Area Sources: Chromium Compounds	No	This subpart applies to a chromium compounds manufacturing facility that is an area source of hazardous air pollutant (HAP) emissions.	The Mt. Hope OSB facility does not produce chromium.
40 CFR 63 Subpart OOOOOO 63.11414 - 63.11420	National Emission Standards for Hazardous Air Pollutants for Flexible Polyurethane Foam Production and Fabrication Area Sources	No	This subpart applies to a flexible polyurethane foam production or fabrication facility that is an area source of hazardous air pollutant (HAP) emissions.	The Mt. Hope OSB facility does not produce or fabricate flexible polyurethane foam.
40 CFR 63 Subpart PPPPPP 63.11421 - 63.11427	National Emission Standards for Hazardous Air Pollutants for Lead Acid Battery Manufacturing Area Sources	No	This subpart applies to a lead acid battery manufacturing plant that is an area source of hazardous air pollutant (HAP) emissions.	The Mt. Hope OSB facility does not produce lead acid batteries.
40 CFR 63 Subpart QQQQQQ 63.11428 - 63.11434	National Emission Standards for Hazardous Air Pollutants for Wood Preserving Area Sources	No	This subpart applies to a wood preserving operation that is an area source of hazardous air pollutant (HAP) emissions.	The Mt. Hope OSB facility does not conduct wood preserving.
40 CFR 63 Subpart RRRRRR 63.11435 - 63.11447	National Emission Standards for Hazardous Air Pollutants for Clay Ceramics Manufacturing Area Sources	No	This subpart applies to owners or operators of a clay ceramics manufacturing facility (as defined in §63.11444), with an atomized glaze spray booth or kiln that fires glazed ceramic ware, that processes more than 45 megagrams per year (Mg/yr) (50 tons per year (tpy)) of wet clay and is an area source of hazardous air pollutant (HAP) emissions.	The Mt. Hope OSB facility is not a clay ceramics manufacturer.
40 CFR 63 Subpart SSSSSS 63.11448 - 63.11461	National Emission Standards for Hazardous Air Pollutants for Glass Manufacturing Area Sources	No	This subpart applies to owners or operators of a glass manufacturing facility that is an area source of hazardous air pollutant (HAP) emissions.	The Mt. Hope OSB facility is not a glass manufacturer.
40 CFR 63 Subpart TTTTTT 63.11462 - 63.11474	National Emission Standards for Hazardous Air Pollutants for Secondary Nonferrous Metals Processing Area Sources	No	This subpart applies to owners or operators of secondary nonferrous metals processing facility (as defined in §63.11472) that is an area source of hazardous air pollutant (HAP) emissions.	The Mt. Hope OSB facility is not a secondary nonferrous metals processor.
40 CFR 63 Subpart VVVVVV 63.11494 - 63.11503	National Emission Standards for Hazardous Air Pollutants for Chemical Manufacturing Area Sources	No	This subpart applies to owners or operators of a chemical manufacturing process unit (CMPU) that meets the conditions specified in paragraphs (a)(1) through (3) of this section facility that is an area source of hazardous air pollutant (HAP) emissions..	The Mt. Hope OSB facility is not an owner or operator of a chemical manufacturing process unit (CMPU).
40 CFR 63 Subpart WWWWWW 63.11504 - 63.11513	National Emission Standards for Hazardous Air Pollutants: Area Source Standards for Plating and Polishing Operations	No	This subpart applies to owners or operators of plating and polishing facility that is an area source of hazardous air pollutant (HAP) emissions.	The Mt. Hope OSB facility is not a plating and polishing facility.
40 CFR 63 Subpart XXXXXX 63.11514 - 63.11523	National Emission Standards for Hazardous Air Pollutants Area Source Standards for Nine Metal Fabrication and Finishing Source Categories	No	This subpart applies to owners or operators of an area source that is primarily engaged in the operations in one of the nine source categories.	The Mt. Hope OSB facility is not a metal fabricator or finisher.
40 CFR 63 Subpart YYYYYY 63.11524 - 63.11543	National Emission Standards for Hazardous Air Pollutants for Area Sources: Ferroalloys Production Facilities	No	This subpart applies to owners or operators of a ferroalloys production area source.	The Mt. Hope OSB facility is not a ferroalloys producer.

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Regulation	Description	Applicable Yes/No	Description of Applicability	Comments
40 CFR 63 Subpart YYYYYY 63.11544 - 63.11558	National Emission Standards for Hazardous Air Pollutants: Area Source Standards for Aluminum, Copper, and Other Nonferrous Foundries	No	This subpart applies to owners or operators of an aluminum foundry, copper foundry, or other nonferrous foundry area source.	The Mt. Hope OSB facility is not an aluminum foundry, copper foundry, or other nonferrous foundry.
40 CFR 63 Subpart AAAAAA 63.11559 - 63.11567	National Emission Standards for Hazardous Air Pollutants for Area Sources: Asphalt Processing and Asphalt Roofing Manufacturing	No	This subpart applies to owners or operators an asphalt processing operation and/or asphalt roofing manufacturing operation that is an area source of hazardous air pollutant (HAP) emissions	The Mt. Hope OSB facility is not an asphalt processing operation and/or asphalt roofing manufacturing operation.
40 CFR 63 Subpart BBBBBB 63.11579 - 63.11588	National Emission Standards for Hazardous Air Pollutants for Area Sources: Chemical Preparations Industry	No	This subpart applies to owners or operators chemical preparation facility that is an area source of hazardous air pollutant (HAP) emissions	The Mt. Hope OSB facility is not a chemical preparation facility.
40 CFR 63 Subpart CCCCCC 63.11599 - 63.11618	National Emission Standards for Hazardous Air Pollutants for Area Sources: Paints and Allied Products Manufacturing	No	This subpart applies to owners or operators of paints and allied products manufacturing facility that is an area source of hazardous air pollutant (HAP) emissions	The Mt. Hope OSB facility is not paints or allied products manufacturing facility.
40 CFR 63 Subpart DDDDDD 63.11619 - 63.11638	National Emission Standards for Hazardous Air Pollutants for Area Sources: Prepared Feeds Manufacturing	No	This subpart applies to owners or operators of prepared feeds manufacturing facility that uses a material containing chromium or a material containing manganese that is an area source of hazardous air pollutant (HAP) emissions	The Mt. Hope OSB facility is not a prepared feeds manufacturing facility.
40 CFR 64 ... 64.1 - 64.10	Compliance Assurance Monitoring for Major Stationary Sources	Yes	The requirements of this part apply to a pollutant specific emissions unit at a major source that is required to obtain a part 70 or 71 permit if the unit satisfies all of the following criteria: (1) The unit is subject to an emission limitation or standard for the applicable air pollutant, (2) The unit uses a control device to achieve compliance with any such emission limitation or standard; and the unit has potential pre-control device emissions of the applicable regulated air pollutant that are equal to or greater than 100 percent of the amount, in tons per year, required for a source to be classified as a major source.	The Mt. Hope OSB facility has emission units that are subject to the requirements in this part.
40 CFR 65 Subpart A 65.01-65.10	General Provisions	No	Section 113(d) of the Act authorizes the Administrator to issue to certain sources delayed compliance orders permitting a delay in compliance with applicable regulations contained in a State implementation plan. All orders issued by the Administrator under section 113(d) (1), (3), (4) or (5) of the Act will be issued in accordance with the procedures set forth in this part. All such federal delayed compliance orders will be summarized under the subpart corresponding to the State in which the affected source is located. No direct applicability to title V sources.	The Mt. Hope OSB facility has not been issued a delayed compliance order.
40 CFR 68	Chemical Accident Prevention Provisions	No	These requirements apply to facilities that store regulated substance above the threshold quantities identified in the regulation.	The Mt. Hope OSB facility does not store any regulated substances above the threshold quantity.

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40 CFR 70 70.1 – 70.11	State Operating Permit Programs	Yes	Requires operating permits for all sources regulated under the CAA and imposes a fee system to pay for permitting costs. A state program must provide for permitting of at least major sources, affected sources, sources subject to standards under Section 111 or 112 of the Act, and sources in a source category designated by the Administrator pursuant to this section. Minor sources (including minor NSPS and NESHAPS sources) are deferred from having to apply for a title V permit for a period of up to 5 years from promulgation (7/21/97). For MACT standards promulgated after 7/21/92, the standard itself will specify whether EPA requires a title V permit. This subpart of the Code of Federal Regulations will include a chronological listing of EPA's approval, interim approval, or disapproval action for each state/local programs title V operating permit program.	The Mt. Hope OSB facility has a Title V permit issued pursuant to these requirements and pays required fees.
40 CFR 72 and 73	Acid Rain Program: Permits and Allowance System	No	Establishes general provisions and operation permit requirements for affected sources and units under the Acid Rain Program.	The Mt. Hope OSB facility does not operate fossil-fuel-fired electric utilities.
40 CFR 72 and 77	Acid Rain Program	No	Controls acid deposition by reducing SO ₂ and NO _x emissions from fossil-fuel-fired electric utilities. Phase I of the program is the period between 01/01/95 and 12/31/99. Phase II is the period beginning 01/01/00 and beyond.	The Mt. Hope OSB facility does not operate fossil-fuel-fired electric utilities.
40 CFR 82	Stratospheric Ozone Protection	Yes	Requires phase out Class I and Class II ozone depleting compounds (ODCs). Amended 03/06/91.	Will apply to air conditioning and refrigeration units when serviced.
40 CFR 82 Subpart A 82.1 - 82.13	Production and Consumption Controls	No	This regulation applies to any person that produces, transforms, destroys, imports, or exports a controlled ozone depleting substance (Class I – Group I and II substances) or imports a controlled product (Class I and II substances). This regulation does not apply to chemical manufacturing processes, resulting from unreacted stock, in which there is inadvertent or coincidental creation of insignificant quantities of a controlled substance; or an unintended by product of research and development applications.	The Mt. Hope OSB facility does not produce or import Class I or II compounds.
40 CFR 82 Subpart B 82.30-82.42	Servicing of Motor Vehicle Air Conditioners	No	These regulations apply to any person performing service on a motor vehicle for consideration when this service involves the refrigerant in the motor vehicle air conditioner, defined as a mechanical vapor compression refrigeration equipment used to cool the driver's compartment of any motor vehicle. This applies to facilities that service motor vehicles on-site.	The Mt. Hope OSB facility does not service motor vehicles.
40 CFR 82 Subpart C 82.60 - 82.70	Ban on Nonessential Products Containing Class I Substances	No	Facilities which use CFC-containing party streamers, noise horns, cleaning fluid for electronic or photographic equipment, plastic flexible or packaging foam products, or aerosol or other pressurized dispensers must comply. The products described in 82.66(b) may be sold to persons who provide proof of being a commercial user, as defined in 82.62. See 40 CFR Part 82 (82.66) for the definition of a nonessential product.	The Mt. Hope OSB facility does not distribute CFC containing products.
40 CFR 82 Subpart E 82.100-82.124	The Labeling of Products Using Ozone-Depleting Substances	No	Products manufactured with or consisting of class I or class II substances as defined by 40 CFR Part 82, Appendix A (to Subpart A) must comply. All containers in which a Class I as Class II substance is stored or transported must be labeled.	The Mt. Hope OSB facility does not distribute ozone depleting substances.
40 CFR 82 Subpart F 82.150-82.166	Protection of Stratospheric Ozone; Recycling and Emission Reduction	Yes	Facilities which use equipment fitting into one of the major categories. Also, facilities that use refrigerants which are classified as class I or class II substances must comply. Also includes any person servicing, maintaining, repairing, or disposing of appliances.	The Mt. Hope OSB facility must comply when servicing air conditioning and refrigeration units.
40 CFR 82 Subpart G 82.170-82.182	Significant New Alternatives Policy Program	Yes	Facilities that use substances classified as class I or class II ozone-depleting substances must comply. See Comments.	The Mt. Hope OSB facility must use approved substitutes.

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Regulation	Description	Applicable Yes/No	Description of Applicability	Comments
40 CFR 98	Mandatory Greenhouse Gas Reporting	No	This part establishes mandatory greenhouse gas (GHG) reporting requirements for owners and operators of certain facilities that directly emit GHG as well as for certain fossil fuel suppliers and industrial GHG suppliers. For suppliers, the GHGs reported are the quantity that would be emitted from combustion or use of the products supplied. A facility that contains any source category (as defined in subparts C through JJ of this part) that is listed in rule in any calendar year starting in 2010 and that emits 25,000 metric tons CO ₂ e or more per year or any source category specifically required to report by the requirements in the rule.	The Mt. Hope OSB facility is not a specific source category required to report nor does it emit greater than 25,000 metric tons CO ₂ e or more per year in combined emissions from stationary fossil fuel combustion units.