



# COMMONWEALTH of VIRGINIA

Molly Joseph Ward  
Secretary of Natural Resources

DEPARTMENT OF ENVIRONMENTAL QUALITY  
Blue Ridge Regional Office  
www.deq.virginia.gov

David K. Paylor  
Director

Robert J. Weld  
Regional Director

**Lynchburg Office**  
7705 Timberlake Road  
Lynchburg, Virginia 24502  
(434) 582-5120  
Fax (434) 582-5125

**Roanoke Office**  
3019 Peters Creek Road  
Roanoke, Virginia 24019  
(540) 562-6700  
Fax (540) 562-6725

## COMMONWEALTH OF VIRGINIA Department of Environmental Quality Blue Ridge Regional Office

### STATEMENT OF LEGAL AND FACTUAL BASIS

Georgia-Pacific Wood Products LLC  
11795 Brookneal Highway (Hwy 501S) Gladys, Virginia  
Permit No. BRRO-30903

Title V of the 1990 Clean Air Act Amendments required each state to develop a permit program to ensure that certain facilities have federal Air Pollution Operating Permits, called Title V Operating Permits. As required by 40 CFR Part 70 and 9VAC5 Chapter 80, Georgia-Pacific Wood Products LLC has applied for a Title V Operating Permit for its "Brookneal" facility. The Department has reviewed the application and has prepared a Title V Operating Permit.

Engineer/Permit Contact: \_\_\_\_\_ Date: \_\_\_\_\_  
Mary S. Monroe  
(540) 562-6850

Air Permit Manager: \_\_\_\_\_ Date: \_\_\_\_\_  
David J. Brown

Regional Director: \_\_\_\_\_ Date: \_\_\_\_\_  
Robert J. Weld

## **FACILITY INFORMATION**

### Permittee

Georgia-Pacific Wood Products LLC  
P.O. Box 340  
Brookneal, VA 24528

### Facility

Georgia-Pacific Wood Products LLC  
11795 Brookneal Highway (Hwy 501S)  
Gladys, Virginia 24554

County-Plant Identification Number: 51-031-00163

## **SOURCE DESCRIPTION**

NAICS Code: 321219 – The facility manufactures a reconstituted wood product known as oriented strandboard (OSB).

Tree length logs are brought to the mill by truck and are unloaded, separated by species and length, and stored at the log yard. The logs are cut to the appropriate length via the log cut-up saw and then sent to the debarkers where the bark is removed. The bark is conveyed to a bark hog where it is ground for fuel and stored in a silo prior to being used in the Wellons Energy System. The debarked logs continue on to flakers where the logs are cut into flakes approximately 1.5 inches wide by 4 inches long. The flakes 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 green flake bins. The green flakes are then conveyed to the drying operation where they are dried in three rotary drum dryers. The dried flakes are screened to remove finer material and are stored in the dry flake bins. The dried flakes are then conveyed to a blending operation where resin and wax are added. The blended flakes are 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 where heat and pressure compresses the mat into a board. The finishing processes begin when the rough panels from the pressing operation are trimmed. The boards from the press are cut and trimmed into 4' x 8' sheets. Once the boards are trimmed to the appropriate dimensions, the edges of the board are sealed with a water based paint which is applied in a spray booth. Some of the boards may be finished further by sanding. The boards are then packaged for transport and sale.

The facility is a Title V major source of Particulate Matter (PM10), Nitrogen Dioxides (NOx),

Carbon Monoxide (CO), Volatile Organic Compounds (VOC) and Hazardous Air Pollutants (HAP). This source is located in an attainment area for all pollutants, and is a PSD minor source. The facility is currently permitted under a Minor New Source Review (NSR) Permit dated June 26, 2012.

The Industrial, Commercial and Institutional Boilers and Process Heaters MACT standard (40 CFR 63 Subpart DDDDD) applies to an existing 45 MMBtu/hr auxiliary process heater. Since the emissions from the auxiliary process heater are not routed through the direct-fired dryers, the auxiliary process heater is not subject to the Plywood Composite Wood Products (PCWP) MACT. The preamble of the PCWP rule states in part: the final PCWP rule regulates only that portion of emissions from a combustion unit that are routed through the direct-fired dryers. Any emissions from a combustion unit that are not routinely through the direct-fired dryers would be subject to the Industrial, Commercial, Institutional Boilers and Process Heaters NESHAP.<sup>1</sup>

The Stationary Reciprocating Internal Combustion Engines (RICE) MACT standard (40 CFR 63 Subpart ZZZZ) applies to the following existing engine: 84 hp natural gas-fired backup thermal oil pump engine (spark ignition). This engine commenced construction before June 12, 2006 and is considered an emergency stationary RICE. The 215 hp diesel-fired fire pump engine is subject to the Stationary Compression Ignition Internal Combustion Engines (CI ICE) NSPS standard (40 CFR 60 Subpart IIII). This engine was manufactured as a certified National Fire Protection Association (NFPA) fire pump engine after July 1, 2006 and is considered an emergency stationary CI ICE.

The PCWP MACT standard (40 CFR 63 Subpart DDDD) applies to the plywood composite wood products manufacturing facility as an existing source (commenced construction before January 9, 2003). The affected source is the collection of dryers, refiners, blenders, formers, presses, board coolers and other process units including the Wellons Energy System, which are associated with the manufacturing of plywood and composite wood products.

The New Source Performance Standard (NSPS) Subpart Dc applies to the 45 MMBtu/hr natural gas-fired auxiliary process heater. This process heater was constructed after the June 9, 1989 applicability date in NSPS Dc. NSPS Db applies to the 240 MMBtu/hr wood-fired furnace (Wellons Energy System). The wood-fired Wellons Energy System was constructed after the June 19, 1984 applicability date in NSPS Db. The Wellons Energy System supplies the heat for both the flake drying process and thermal oil for the press. In addition, the Wellons Energy System serves as the control device for pollutants generated from the flake drying process.

Compliance Assurance Monitoring (CAM) Rule - The requirements of 40 CFR 64, CAM, apply

---

<sup>1</sup> Federal Register, Volume 69, No. 146, July 30, 2004, Page 45963

to each emissions unit meeting all three of the following criteria at a major source required to obtain a Title V permit:

- The unit emits or has the potential to emit (in the absence of add-on control devices) quantities of one or more regulated air pollutants that exceed major source thresholds,
- The unit is subject to one or more emission limitations for the regulated air pollutants for which it is major before control, and
- The unit uses a control device to achieve compliance with one or more of these emission limitations.

The emission units listed below meet all three of these criteria. The following approved CAM Plans are included as attachments to the Title V permit:

- Attachment A - monitors the Wellons Energy System controlling VOC/CO from the flake drying process
- Attachment B - monitors the urea injection system controlling NOx from the Wellons Energy System
- Attachment C - monitors the ESP controlling PM-10 from the flake drying system
- Attachment D - monitors the RTO/TCO controlling VOC from the press
- Attachment E - monitors the fabric filter controlling PM-10 from the sander (material handling system 9500)

The application for renewal of this federal operating permit was received on June 27, 2012 and was deemed timely and administratively complete. Supplemental application information was received on February 11, 2016, April 14, 2016, September 21, 2016 and November 2, 2016.

### **COMPLIANCE STATUS**

A full compliance evaluation of this facility, including a site visit, has been conducted. In addition, all reports and other data required by permit conditions or regulations, which are submitted to DEQ, are evaluated for compliance. Based on these compliance evaluations, the facility has not been found to be in violation of any state or federal applicable requirements at this time.

### **EMISSION UNIT AND CONTROL DEVICE IDENTIFICATION**

The emission units, pollution control devices and stacks are the units described in the Significant Emission Units table on pages 7 – 9 of the Title V permit.

**EMISSIONS INVENTORY**

A copy of the 2015 Pollutant Emissions Report is attached. Emissions are summarized in the following tables:

	2015 Criteria Pollutant Emission in Tons/Year				
	VOC	CO	SO <sub>2</sub>	PM <sub>10</sub>	NO <sub>x</sub>
Total	126.17 tons	209.88 tons	19.97 tons	145.39 tons	199.25 tons

	2015 Hazardous Air Pollutant Emission In Tons/Year				
	Formaldehyde	Methanol	Acetaldehyde	Acrolein	Phenol
Total	5.02 tons	23.64 tons	2.31 tons	1.14 tons	2.75 tons

**EMISSION UNIT APPLICABLE REQUIREMENTS**

The following section discusses requirements for emissions units at Georgia-Pacific Wood Products LLC (GP). These requirements are based upon the Minor NSR permit dated June 26, 2012 and applicable federal requirements. The conditions from the Title V permit are not repeated verbatim in the following numbered items. The regulatory authority for each condition is listed in parentheses below each condition in the Title V permit.

**Process Equipment Requirements - Emission Unit 1200 – Log Debarkers**

**Limitations**

Condition 1 Visible emissions from the log debarkers are limited to 10% opacity.

**Monitoring**

Condition 2 The permittee is required to conduct weekly visible emission evaluations of the two log debarkers. If visible emissions are observed, the permittee must either correct the issue so that no visible emissions are observed or conduct a VEE in accordance with EPA Method 9.

**Recordkeeping**

Condition 3 The permittee is required to keep records of all emission data and operating parameters necessary to demonstrate compliance with the Title V permit. These records shall include, but are not limited to, visible emission monitoring results.

The monitoring and recordkeeping included in this section meet permit content obligations at 9VAC5-80-110 E & K and are considered sufficient to assure compliance with the limits included in this permit.

### **Process Equipment Requirements - Emission Unit 3500 - Wellons/Dryer System**

The Wellons/dryer system includes, but is not limited to, (1) Energy system (3) dryers, and (3) cyclones.

### **Limitations**

Condition 4 Carbon monoxide (CO), and volatile organic compounds (VOC) emissions from the flake dryers shall be controlled by the Energy System.

Condition 5 Particulate emissions from the Energy System shall be controlled by multicyclones connected in parallel and followed by an Electrostatic Precipitator (ESP). The permittee is required to conduct an annual inspection of each multicyclone. Each multicyclone shall be equipped with a device to continuously measure the differential pressure drop across the multicyclone.

Condition 6 The controlling temperature shall be maintained at 1,400°F or at the minimum temperature established pursuant to 40 CFR 63.2262(k), whichever is higher, when any dryer is processing flakes.

Condition 7 This condition specifies the approved fuels for the Energy System.

Condition 8 The approved fuels for the in-line burners are natural gas and propane.

Condition 9 The condition specifies the yearly throughput limitation for each of the fuels for the Energy System.

Condition 10 Visible emissions from the Energy System are limited to 10% opacity.

Condition 11 This condition specifies the Particulate Matter, PM-10, Sulfur Dioxide, Nitrogen

Oxides, Carbon Monoxide and Volatile Organic Compound emission limitations from the operation of the Wellons/dryer system.

### **Monitoring**

Condition 12 A continuous emission monitor shall be installed on the Energy System stack to measure and record opacity. The monitoring system shall be installed, maintained, evaluated, calibrated and operated in accordance with 40 CFR 60.13, 40 CFR 60 Subpart Db and 40 CFR 60, Appendix B, Performance Specification 1.

### **Compliance Assurance Monitoring**

Condition 13 The permittee is required to implement an approved Compliance Assurance Monitoring (CAM) Plan to monitor the Wellons Energy System controlling VOC and CO from the flake drying process.

Condition 14 The permittee is required to implement an approved Compliance Assurance Monitoring (CAM) Plan to monitor the urea injection system controlling NO<sub>x</sub> from the Wellons Energy System.

Condition 15 The permittee is required to implement an approved Compliance Assurance Monitoring (CAM) Plan to monitor the electrostatic precipitator controlling PM-10 from the flake drying system, including the Wellons Energy System.

### **Recordkeeping**

Condition 16 The permittee is required to maintain records of all emissions data and operating parameters necessary to demonstrate compliance with the Title V permit. These records shall include, but are not limited to the following: fuel consumption, SSM events, Energy System controlling temperature and exhaust gas flow rate and COMS EERs.

### **Testing**

Condition 17 The permittee is required to conduct a stack test once every five years to demonstrate compliance with the particulate matter pound per million BTU emission limits contained in the Title V permit.

Condition 18 The facility shall be constructed as to allow for emissions testing and monitoring.

The monitoring and recordkeeping included in Conditions 12 and 16 meet permit content obligations at 9VAC5-80-110 E & K. In addition, the facility will conduct monitoring for VOC, CO, NOx and PM-10 from the Energy System as outlined in the Compliance Assurance Plans (Attachments A, B & C). The required monitoring and recordkeeping are considered sufficient to assure compliance with the limits included in this permit.

**Process Equipment Requirements – Emission Unit 3600 - 45 MMBtu/hr  
Auxiliary Thermal Oil Heater**

**Limitations**

Condition 19 The approved fuels for the auxiliary thermal oil heater are natural gas and propane.

**Recordkeeping**

Condition 20 The permittee is required to keep records of all emission data and operating parameters necessary to demonstrate compliance with the Title V permit. These records shall include, but are not limited to, the thermal oil heater's monthly and yearly consumption of natural gas and propane.

**MACT Subpart DDDDD – Industrial, Commercial, and Institutional Boilers  
and Process Heaters – Fuel Burning Equipment – Emission Unit 3600 – 45  
MMBtu/hr Auxiliary Thermal Oil Heater**

**General Compliance Requirements**

Condition 21 The permittee is required to operate in compliance with the requirements of 40 CFR Part 63 Subpart DDDDD, by the applicable compliance dates as specified in 40 CFR 63.7495(b).

Condition 22 The permittee shall comply with the applicable General Provisions as specified in 40 CFR 63.7565.

**Initial Compliance Requirements**

Condition 23 The permittee is required to demonstrate initial compliance with the work practice standards as specified in §63.7540(a)(10)(i) through (vi) and Table 3 to Subpart DDDDD no later than the compliance date specified in §63.7495.

### **Continuous Compliance Requirements**

Condition 24 The permittee is required to demonstrate continuous compliance with the work practice standards by conducting an annual performance tune up according to §63.7540(a)(10).

### **Notification, Reports and Recordkeeping**

Condition 25 The permittee is required to submit all of the notifications applicable to the facility in accordance with 40 CFR Part 63, Subpart DDDDD.

Condition 26 The permittee is required to submit each report in Table 9 of 40 CFR Part 63, Subpart DDDDD that applies to the permitted facility.

Condition 27 The permittee is required to keep records of each notification and report that the permittee submitted to comply with 40 CFR Part 63, Subpart DDDDD.

Condition 28 The permittee is required to keep records in a form suitable and readily available for expeditious review, according to §63.10(b)(1).

### **Process Equipment Requirements – Emission Unit 6000 – Dry Flake Storage & Blending System**

The Dry Flake Storage & Blending System includes, but is not limited to, (2) blenders.

### **Limitations**

Condition 29 The annual throughput of powdered resin is limited to 13,009 tons per year, calculated monthly as the sum of each consecutive 12-month period.

Condition 30 This condition specifies the Particulate Matter, PM-10 and Volatile Organic Compound emission limitations from the operation of the blenders.

### **Recordkeeping**

Condition 31 The permittee is required to keep records of all emission data and operating parameters necessary to demonstrate compliance with the Title V permit. These records shall include, but are not limited to, the origin and value of all emission factors for all pollutants for purposes of calculating emission rates and the yearly throughput of powdered resin.

### **Testing**

Condition 32 The permitted facility shall be constructed as to allow for emissions testing and monitoring.

The recordkeeping included in this section meets permit content obligations at 9VAC5-80-110 E & K and is considered sufficient to assure compliance with the limits included in this permit.

### **Process Equipment Requirements – Emission Unit 7000 – Forming/Pressing System**

The Forming/Pressing System includes, but is not limited to, (1) forming line, (1) press, and low pressure material handling systems 6900 (Mat Trim baghouse) and 6800 (Forming Area baghouse).

### **Limitations**

Condition 33 Emissions from the press shall be captured by a Wood Products Enclosure. Particulate and VOC emissions from the press shall be controlled by a Regenerative Thermal Oxidizer (RTO) with a Thermal Catalytic Oxidizer (TCO) option.

Condition 34 The minimum combustion chamber temperature for the RTO shall be maintained at 1500°F or at the minimum temperature established pursuant to 40 CFR 63.2262(k), whichever is higher, when the press is in operation. The minimum combustion chamber temperature for the TCO shall be maintained at 900°F or at the minimum temperature established pursuant to 40 CFR 63.2262(l), whichever is higher, when the press is in operation.

Condition 35 Visible emissions from the press are limited to 10% opacity.

Condition 36 This condition specifies the Particulate Matter, PM-10, Nitrogen Oxides, Carbon Monoxide and Volatile Organic Compound emission limitations from the operation of the press.

Condition 37 Particulate emissions from the low pressure material handling systems 6800 (Forming Area baghouse) and 6900 (Mat Trim baghouse) shall be controlled by fabric filters. Each fabric filter shall be equipped with a differential pressure device.

- Condition 38 Visible emissions from the fabric filters are limited to 5% opacity.
- Condition 39 This condition specifies the Particulate Matter and PM-10 emission limitations from the operation of the low pressure material handling systems (Systems 6800 and 6900).

### **Monitoring**

- Condition 40 The permittee is required to conduct weekly visible emission evaluations of the press (RTO/TCO stack). If visible emissions are observed, the permittee must either correct the issue so that no visible emissions are observed or conduct a VEE in accordance with EPA Method 9.
- Condition 41 The permittee is required to conduct weekly visible emission evaluations of the low pressure material handling systems 6800 and 6900 stacks. If visible emissions are observed, the permittee must either correct the issue so that no visible emissions are observed or conduct a VEE in accordance with EPA Method 9.

### **Compliance Assurance Monitoring**

- Condition 42 The permittee is required to implement an approved Compliance Assurance Monitoring (CAM) Plan to monitor the RTO/TCO controlling VOC from the press.

### **Notifications**

- Condition 43 The permittee is required to submit notifications as outlined in this condition.

### **Recordkeeping**

- Condition 44 The permittee is required to keep records of all emission data and operating parameters necessary to demonstrate compliance with the Title V permit. These records shall include, but are not limited to, the origin and value of all emission factors for all pollutants for purposes of calculating emission rates, RTO/TCO temperatures and visible emission monitoring results.

### **Testing**

- Condition 45 The facility is required to conduct periodic activity tests on the TCO catalyst to

determine the on-going activity level in terms of percent destruction of VOC.

Condition 46 The facility shall be constructed as to allow for emissions testing and monitoring.

The monitoring and recordkeeping included in Conditions 40, 41 and 44 meet permit content obligations at 9VAC5-80-110 E & K. In addition, the facility will monitor the RTO/TCO controlling VOC from the press as outlined in the Compliance Assurance Plan (Attachment D). This required monitoring and recordkeeping in conjunction with the recordkeeping specified in the MACT DDDD section of the permit, meet permit content obligations at 9VAC5-80-110 E & K and are considered sufficient to assure compliance with the limits included in this permit.

### **Process Equipment Requirements - Emission Unit 8000 – Trim System**

The Trim System includes, but is not limited to, the low pressure material handling system 8900 (Finishing Area baghouse) and material handling system 8950 (Dry Fuel cyclone).

### **Limitations**

- Condition 47 Particulate emissions from the low pressure material handling system 8900 (Finishing Area baghouse) shall be controlled by a fabric filter. The fabric filter shall be equipped with a differential pressure device.
- Condition 48 Particulate emissions from the high pressure material handling system 8950 (Dry Fuel cyclone) shall be controlled by a cyclone with a minimum design efficiency of 99.9 percent.
- Condition 49 Visible emissions from the low pressure material handling system's fabric filter 8900 are limited to 5% opacity.
- Condition 50 Visible emissions from the number 8950 (Dry Fuel cyclone) high pressure material handling system's cyclone are limited to 5% opacity.
- Condition 51 This condition specifies the Particulate Matter, PM-10 and VOC emission limitations from the operation of the low pressure material handling system 8900 (Finishing Area baghouse).
- Condition 52 This condition specifies the Particulate Matter, PM-10 and Volatile Organic Compound emission limitations from the operation of the material handling system 8950 (Dry Fuel cyclone).

### **Monitoring**

- Condition 53 The permittee is required to conduct weekly visible emission evaluations of the low pressure material handling system 8900 stack. If visible emissions are observed, the permittee must either correct the issue so that no visible emissions are observed or conduct a VEE in accordance with EPA Method 9.
- Condition 54 The permittee is required to conduct weekly visible emission evaluations of the material handling system 8950 stack. If visible emissions are observed, the permittee must either correct the issue so that no visible emissions are observed or conduct a VEE in accordance with EPA Method 9.

### **Recordkeeping**

- Condition 55 The permittee is required to keep records of all emission data and operating parameters necessary to demonstrate compliance with the Title V permit. These records shall include, but are not limited to, the origin and value of all emission factors for all pollutants for purposes of calculating emission rates and visible emission monitoring results.

### **Testing**

- Condition 56 The facility shall be constructed as to allow for emissions testing and monitoring.

The monitoring and recordkeeping included in this section meet permit content obligations at 9VAC5-80-110 E & K and are considered sufficient to assure compliance with the limits included in this permit.

### **Process Equipment Requirements - Emission Unit 9000 - Finishing System**

The Finishing System includes, but is not limited to, (1) tongue & groove machine, (1) sander, low pressure material handling system 9500 (sander dust collection), high pressure material handling system 9600 (sander dust transportation), and a spray booth.

### **Limitations**

- Condition 57 Particulate emissions from the low pressure material handling system 9500 (Sander baghouse) shall be controlled by a fabric filter. The fabric filter shall be equipped with a differential pressure device.

- Condition 58 Particulate emissions from the high pressure material handling system 9600 (Sander dust cyclone) shall be controlled by a cyclone with a minimum design efficiency of 99.9%.
- Condition 59 Visible emissions from the 9500 low pressure material handling system's fabric filter and from the 9600 high pressure material handling system's cyclone are limited to 5% opacity.
- Condition 60 This condition specifies the Particulate Matter, PM-10 and VOC emission limitations from the operation of the 9500 and 9600 material handling systems.
- Condition 61 Particulate emissions from the spray booth shall be controlled by a water curtain, filter collectors, or DEQ approved equivalent.
- Condition 62 This condition specifies the Particulate Matter and PM-10 emission limitations from the operation of the spray booth.

### **Monitoring**

- Condition 63 The permittee is required to conduct weekly visible emission evaluations of the material handling system 9600 stack. If visible emissions are observed, the permittee must either correct the issue so that no visible emissions are observed or conduct a VEE in accordance with EPA Method 9.
- Condition 64 The permittee is required to conduct weekly visible emission evaluations of the spray booth stacks. If visible emissions are observed, the permittee must either correct the issue so that no visible emissions are observed or conduct a VEE in accordance with EPA Method 9.

### **Compliance Assurance Monitoring**

- Condition 65 The permittee is required to implement an approved Compliance Assurance Monitoring (CAM) Plan to monitor the fabric filter controlling PM-10 from the sander (material handling system 9500).

### **Recordkeeping**

- Condition 66 The permittee is required to keep records of all emission data and operating parameters necessary to demonstrate compliance with the Title V permit. These records shall include, but are not limited to, the origin and value of all emission

factors for all pollutants for purposes of calculating emission rates and visible emission monitoring results.

### **Testing**

Condition 67 The facility shall be constructed as to allow for emissions testing and monitoring.

The monitoring and recordkeeping included in this section meet permit content obligations at 9VAC5-80-110 E & K and are considered sufficient to assure compliance with the limits included in this permit.

### **Process Equipment Requirements – Emission Unit 9900 – General Plant**

The General Plant includes, but is not limited to, the facility roads and open storage of wood materials.

### **Limitations**

Condition 68 The permittee is required to take reasonable precautions to prevent particulate matter from becoming airborne from vehicular traffic.

Condition 69 The permittee shall utilize wet suppression as necessary to control fugitive particulate emissions from the open storage of wood materials.

Condition 70 Visible emissions from fugitive emission points are limited to 10% opacity.

Condition 71 This condition specifies the hourly and annual limitations for the production of finished oriented strandboard.

Condition 72 This condition specifies Particulate Matter and PM-10 emission limitations from the facility roads.

### **Recordkeeping**

Condition 73 The permittee is required to keep records of all emission data and operating parameters necessary to demonstrate compliance with the Title V permit. These records shall include, but are not limited to, the origin and value of all emission factors for all pollutants for purposes of calculating emission rates and oriented strandboard production.

### **Testing**

Condition 74 The facility shall be constructed as to allow for emissions testing and monitoring.

The recordkeeping included in this section meets permit content obligations at 9VAC5-80-110 E & K and is considered sufficient to assure compliance with the limits included in this permit.

### **Fuel Burning Equipment – Emission Unit 10000 – Emergency Diesel Fire Pump (0600D) and Emergency Natural Gas Backup Thermal Oil Pump (3780)**

The 215 hp emergency diesel fire pump (0600D) and 84 hp emergency natural gas backup thermal oil pump (3780) are subject to the New and Modified Stationary Sources regulations in 9VAC5-50-10 et seq. The two engines are subject to 40 CFR Part 63, Subpart ZZZZ-National Emission Standards for Hazardous Air Pollutants for Reciprocating Internal Combustion Engines. The 215 hp emergency diesel fire pump is also subject to 40 CFR Part 60, Subpart IIII-Standards of Performance for Stationary Compression Ignition Internal Combustion Engines.

### **Limitations**

Condition 75 Visible emissions from the emergency diesel fire pump are limited to 20% opacity except for one six-minute period in any one hour in which visible emissions shall not exceed 30% opacity.

Condition 76 The approved fuel for the emergency fire pump is diesel fuel.

Condition 77 The approved fuel for the emergency backup thermal oil pump is natural gas and propane.

### **Monitoring**

Condition 78 The permittee is required to conduct weekly visible emission evaluations of the emergency diesel fire pump (0600D) stack. If visible emissions are observed, the permittee must either correct the issue so that no visible emissions are observed or conduct a VEE in accordance with EPA Method 9.

### **Recordkeeping**

Condition 79 The permittee is required to keep records of all emission data and operating parameters necessary to demonstrate compliance with the Title V permit. These

records shall include, but are not limited to, visible emission monitoring results.

**MACT Subpart ZZZZ – Stationary Reciprocating Internal Combustion Engines – Emission Unit 10000 - Emergency Diesel Fire Pump (0600D) and Emergency Natural Gas Backup Thermal Oil Pump (3780)**

**General Compliance Requirements**

- Condition 80 The permittee is required to operate in compliance with the emission limitations, operating limitations and other requirements in Subpart ZZZZ that apply to the source at all times.
- Condition 81 The permittee is required to comply with the emission limitations and operating limitations in Subpart ZZZZ that apply to the SI RICE no later than October 19, 2013.

**Limitations**

- Condition 82 The permittee shall comply with the emission limitations in Item 6 in Table 2c to Subpart ZZZZ of Part 63.
- Condition 83 For the emergency fire pump engine, the permittee shall comply with Subpart ZZZZ by complying with Subpart IIII.

**Initial Compliance Requirements**

- Condition 84 The permittee is required to operate and maintain the stationary RICE and after-treatment control device (if any) according to the manufacturer's emission related written instructions or the permittee shall develop their own maintenance plan.
- Condition 85 The permittee may utilize an oil analysis program as described in 40 CFR 63.6625 (j) to extend the specified oil change requirement in Table 2(c).
- Condition 86 The permittee is required to minimize the engine's time spent at idle during startup.

**Monitoring**

- Condition 87 The permittee is required to install a non-resettable hour meter on the stationary RICE if one is not already installed.

### **Continuous Compliance Requirements**

Condition 88 The permittee is required to demonstrate continuous compliance with each emission limitation, operating limitation and other requirements in Table 2c to Subpart ZZZZ of Part 63 that apply to the source according to the methods specified in Table 6.

Condition 89 The permittee shall comply with the applicable requirements in Table 8.

Condition 90 The permittee is required to meet the requirements in 40 CFR 63.6640(f) in order for the engine to be classified as emergency engine.

### **Notifications, Reports and Recordkeeping**

Condition 91 The permittee is required to keep records of notifications, reports, each occurrence and duration of each malfunction of operation or the air pollution control equipment, maintenance, actions taken during malfunctions to minimize emissions and to document continuous compliance.

Condition 92 If the emergency stationary RICE does not meet the standards in Subpart ZZZZ applicable to non-emergency engines, the permittee shall keep records of the hours of operation of the engine that is recorded through the non-resettable hour meter.

Condition 93 The permittee is required to keep records in a form suitable and readily available for expeditious review, according to §63.10(b)(1).

Condition 94 The permittee shall report Subpart ZZZZ deviations in the semiannual monitoring reports as outlined in the permit.

### **NSPS III – Standards of Performance for Stationary Compression Ignition Internal Combustion Engines – Emission Unit 10000 - Emergency Diesel Fire Pump (0600D)**

#### **Emission Standards**

Condition 95 The emergency fire pump engine shall meet the emission standards in Table 4 of Subpart III.

#### **Fuel Requirements**

Condition 96 The permittee is required to purchase diesel fuel in accordance with 40 CFR 60.4207(b).

### **Compliance Requirements**

Condition 97 The permittee shall comply with 40 CFR 60.4211(a).

Condition 98 The permittee shall demonstrate compliance with the emission standards for the emergency fire pump engine by purchasing a certified engine.

Condition 99 The permittee is required to meet the requirements in 40 CFR 60.4211(f) in order for the engine to be classified as an emergency engine.

Condition 100 The permittee shall comply with the applicable requirements in Table 8.

### **Monitoring**

Condition 101 The permittee shall install a non-resettable hour meter.

### **Recordkeeping and Reporting**

Condition 102 The permittee is required to keep records of the hours of operation, certification documents, fuel oil purchases and the manufacturer's instructions.

Condition 103 The permittee shall report Subpart IIII deviations in the semiannual monitoring reports as outlined in the permit.

The monitoring, recordkeeping and reporting included in these three sections pertaining to the emergency diesel fire pump and emergency natural gas backup thermal oil pump meet permit content obligations at 9VAC5-80-110 E & K and are considered sufficient to assure compliance with the limits included in this permit.

### **MACT DDDD - Plywood and Composite Wood Products (PCWP)**

This section of the permit is for the implementation of the National Emission Standards for Hazardous Air Pollutants (NESHAP): Plywood and Composite Wood Products (PCWP), 40 CFR 63 Subpart DDDD, referred to as the PCWP MACT. The process units subject to the PCWP MACT include, but are not limited to: the Wellons/Dryer System (Emission Unit 3500) and Forming/Pressing System (Emission Unit 7000).

### **General Compliance Requirements**

- Condition 104 The permittee must comply with the applicable provisions of Table 10 of 40 CFR 63 Subpart DDDD.
- Condition 105 Terms used in this section of the permit are defined in the Clean Air Act (CAA), in 40 CFR 63.2, the General Provisions, and in 40 CFR 63.2292.

### **Limitations**

- Condition 106 The permittee is required to use an emission control system to demonstrate that the resulting emissions meet the compliance options and operating requirements in Tables 1B and 2 of Subpart DDDD. This condition outlines the requirements of Table 1B and 2 for the Energy System and Dryers; and Press.
- Condition 107 The permittee is required to meet the work practice requirement in Table 3 of Subpart DDDD.
- Condition 108 The permittee is required to be in compliance with the compliance options, operating requirements, and the work practice requirements in Subpart DDDD at all times, except during periods of process unit or control device startup, shutdown, and malfunction; prior to process unit initial startup; and during the routine control device maintenance exemption.
- Condition 109 The permittee is required to operate and maintain the affected source, including air pollution control and monitoring equipment, according to the provisions of 40 CFR 63.6(e)(1)(i).
- Condition 110 The permittee is required to develop a written startup, shutdown, and malfunction plan (SSMP) according to the provisions of 40 CFR 63.6(e)(3).

### **Initial Compliance Requirements**

- Condition 111 The permittee is required to demonstrate initial compliance with each compliance option, operating requirement, and work practice requirement that applies to the permitted facility according to Tables 5 and 6 of Subpart DDDD and according to 40 CFR 63.2260 through 40 CFR 63.2269.

### **Continuous Compliance Requirements**

Condition 112 The permittee is required to demonstrate continuous compliance with the compliance options, operating requirements, and work practice requirements in 40 CFR 63.2240 and 63.2241 that apply to the permitted facility according to the methods specified in Tables 7 and 8 of Subpart DDDD.

### **Monitoring**

Condition 113 The permittee is required to install, operate, and maintain each continuous parameter monitoring system (CPMS) according to paragraphs (a)(1) through (3) of 40 CFR 63.2269.

Condition 114 For each temperature monitoring device, the permittee must meet the requirements in Condition 113, and paragraphs (b)(1) through (6) of 40 CFR 63.2269.

Condition 115 The permittee is required to monitor and collect data according to 40 CFR 63.2270.

### **Testing**

Condition 116 The permittee is required to demonstrate initial compliance with the compliance options and operating requirements by conducting performance tests and establishing each site-specific operating requirement in Table 2 according to the requirements in 40 CFR 63.2262 and Table 4 of Subpart DDDD.

Condition 117 The permittee is required to conduct each performance test according to the requirements in 40 CFR 63.7(e)(1), the requirements in paragraph (b) through (o) of 40 CFR 63.2262, and according to the methods specified in Table 4 of Subpart DDDD.

### **Recordkeeping**

Condition 118 The permittee is required to keep records of each notification and report that the permittee submitted to comply with Subpart DDDD, SSMs, performance tests and performance evaluations.

Condition 119 The permittee is required to keep records in a form suitable and readily available for expeditious review, according to §63.10(b)(1).

### **Reporting**

Condition 120 The permittee is required to report each instance in which the permitted facility did not meet each compliance option, operating requirement, and work practice requirement in Tables 7 and 8 of 40 CFR 63 Subpart DDDD that applies to the permitted facility.

### **Notifications**

Condition 121 The permittee is required to submit all of the notifications in 40 CFR 63.7(b) and (c), 63.8(e), (f)(4) and (f)(6), 63.9(b) through (e), and (g) and (h) by the dates specified. The permittee is required to notify the Administrator within 30 days before the permittee takes any actions specified in (g)(1) through (3) of 40 CFR 63.2280.

### **Reports**

Condition 122 The permittee is required to submit each report in Table 9 of Subpart DDDD that applies to the permitted facility. This condition outlines reporting requirements for deviations, submission schedules and the information that must be included in the compliance report.

The monitoring and recordkeeping included in this section meet permit content obligations at 9VAC5-80-110 E & K and are considered sufficient to assure compliance with the limits included in this permit.

### **General Compliance Assurance Monitoring (CAM) Provisions**

Condition 123 Each monitoring approach shall be designed and implemented in compliance with 40 CFR 64.3(b) or (d). This condition outlines the information that is required to be included in the CAM Plan.

Condition 124 The permittee is required to conduct the monitoring and fulfill the other obligations specified in 40 CFR 64.7 through 40 CFR 64.9.

Condition 125 If a monitoring approach uses a monitoring device, the permittee is required to maintain the monitoring equipment.

Condition 126 The permittee is required to conduct all monitoring in continuous operation (or shall collect data at all required intervals) at all times that the PSEU is operating. The requirement to conduct monitoring at all times does not apply to periods of monitoring malfunctions, associated repairs and required quality assurance or

control activities.

- Condition 127 Upon detecting an excursion or exceedance, the permittee is required to restore operation of the PSEU (including the control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions.
- Condition 128 Determination that acceptable procedures were used in response to an excursion or exceedance will be based on information available (e.g. monitoring results, review of operation and maintenance procedures and records, and inspection of the control device).
- Condition 129 The permittee is required to notify the BRRO in accordance with the Title V permit and, if necessary, submit a revised CAM Plan for approval if any of the events as described in this condition should occur.
- Condition 130 The permittee is required to develop, implement and maintain a QIP in accordance with 40 CFR 64.8 should the number of exceedances or excursions exceeds its threshold in the table included in this condition.
- Condition 131 Monitoring required under Part 64 shall not excuse the permittee from complying with any existing requirements under federal, state, or local law, or any other applicable requirement under the Act, as described in 40 CFR 64.10.
- Condition 132 The permittee is required to maintain records of monitoring data, monitor performance data, corrective actions taken, any written QIP required pursuant to 40 CFR 64.8 and any activities undertaken to implement a QIP.
- Condition 133 The permittee is required to submit CAM reports for each PSEU as part of the Title V semi-annual monitoring reports.

The monitoring and recordkeeping included in this section meet permit content obligations at 9VAC5-80-110 E and are considered sufficient to assure compliance with the limits included in this permit.

### **STREAMLINED REQUIREMENTS**

Condition 41 of the June 26, 2012 NSR (TV-10) permit limits visible emissions from the Energy System to 10% opacity as determined by EPA Method 9. The NSPS Db visible emission limit from the Energy System is 20% opacity except for one 6-minute period per hour of not more

than 27% opacity. Therefore, the NSPS Db requirement has been streamlined by the more stringent minor NSR permit requirement.

Condition 34 of the June 26, 2012 NSR (TV-11) permit limits filterable particulate matter emissions to 0.07 lbs/MMBtu from the operation of the Wellons/Dryer System. The NSPS Db filterable particulate matter emission limit from this equipment is 0.10 lbs/MMBtu. Therefore, the NSPS Db requirement has been streamlined by the more stringent minor NSR permit requirement.

The following conditions from the June 26, 2012 NSR permit have not been included in the Title V permit for the reasons stated:

- Conditions 22, 23, 25, 26, 27, 28, 29, 30, 32 and 33 have been completed and are no longer applicable.
- Condition 17 has been streamlined as all of the NSPS Db applicable requirements are included in the Title V permit.
- Condition 18 has been streamlined as all of the NSPS Dc applicable requirements are included in the Title V permit.

**INSIGNIFICANT EMISSIONS UNITS**

The insignificant emission units are presumed to be in compliance with all requirements of the Clean Air Act as may apply. Based on this presumption, no monitoring, recordkeeping or reporting shall be required for these emission units in accordance with 9VAC5-80-110.

Insignificant emission units include the following:

<b>Emission Unit No.</b>	<b>Emission Unit Description</b>	<b>Citation<sup>1</sup> (9VAC_)</b>	<b>Pollutant(s) Emitted (9VAC5-80-720 B)</b>	<b>Rated Capacity (9VAC5-80-720 C)</b>
1100	(2) log cut-up saws	5-80-720 B.1	PM/PM10	---
1300	green chip loadout bin	5-80-720 B.1	PM/PM10	---
1400	fuel hog	5-80-720 B.1	PM/PM10	---
2000	(2) flakers	5-80-720 B.1	PM/PM10	---
3650	screen fines loadout bin	5-80-720 B.1	PM/PM10	---
3700	hog fuel silo	5-80-720 B.1	PM/PM10	---

<b>Emission Unit No.</b>	<b>Emission Unit Description</b>	<b>Citation<sup>1</sup> (9VAC_)</b>	<b>Pollutant(s) Emitted (9VAC5-80-720 B)</b>	<b>Rated Capacity (9VAC5-80-720 C)</b>
3800	dry fuel silo	5-80-720 B.1	PM/PM10	---
3900	Sanderdust silo	5-80-720 B.1	PM/PM10	---
0600	250 gal diesel fuel storage tank	5-80-720 A	---	---
0810	1000 gal hydraulic oil storage tank	5-80-720 B.2	VOC	---
0815	6000 gal hydraulic oil storage tank	5-80-720 B.2	VOC	---
0820	2000 gal diesel fuel storage tank	5-80-720 B.2	VOC	---
0825	550 gal gasoline storage tank	5-80-720 B.2	VOC	---
0993	250 gal kerosene storage tank	5-80-720 B.2	VOC	---
3250	6000 gal urea storage tank	5-80-720 B.2	VOC	---
5086	500 gal used oil storage tank	5-80-720 C.3	VOC	500
6610	10,000 gal wax storage tank	5-80-720 B.2	VOC	---
6615	10,000 gal wax storage tank	5-80-720 B.2	VOC	---
3752	15,000 gal thermal oil storage tank	5-80-720 B.2	VOC	---
---	(3) wood fuel storage bins	5-80-720 B.1	PM/PM10	---
---	(3) green flake storage bins	5-80-720 B.1	PM/PM10	---
---	(2) dry flake storage bins	5-80-720 B.1	PM/PM10	---

<sup>1</sup>The citation criteria for insignificant activities are as follows:

9VAC5-80-720 A - Listed Insignificant Activity, Not Included in Permit Application

9VAC5-80-720 B - Insignificant due to emission levels

9VAC5-80-720 C - Insignificant due to size or production rate

**COMPLIANCE PLAN**

None at this time.

## **INAPPLICABLE REQUIREMENTS**

On February 21, 2012, GP submitted comments to the EPA regarding the proposed revisions to the National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial Commercial and Institutional Boilers and Process Heaters (40 CFR Part 63, Subpart DDDDD). The notice of reconsideration and proposed amendments of this standard were published in the Federal Register on December 23, 2011. In the submittal, GP stated that the EPA had previously identified the Wellons Energy System as an affected source subject to Subpart DDDDD. GP provided a description of the Wellons Energy System and requested that EPA remove the system from the Boiler MACT emissions source database because the unit is regulated as an affected source under the Plywood Composite Wood Products MACT (40 CFR Part 63, Subpart DDDD) standard. The EPA agreed that the specified combustion unit is subject to Subpart DDDD and removed the unit from the major source inventory of industrial, commercial and institutional boilers and process heaters.<sup>2</sup> MACT Subpart DDDDD states that any boiler or process heater that is part of the affected source subject to another subpart of this part, is not subject to this standard.<sup>3</sup>

During the finishing processes, each board is stamped with a small GP logo. In addition, the edges of the finished panels are sealed with a water based edge sealant. These miscellaneous coating and finishing operation are subject to the PCWP MACT, and therefore, are not subject to the Wood Building Products (Surface Coating) MACT (40 CFR 63 Subpart QQQQ).<sup>4</sup>

The facility is permitted to burn “on-site generated Non-Hazardous Secondary Materials” (NHSM) (TV-7) as determined in accordance with the 40 CFR Part 241 NHSM rule. The permittee is required to maintain records in accordance with 40 CFR 60.2740(u) (TV-16.f) to document that the facility is not subject to the requirements of the Commercial and Industrial Solid Waste Incineration (CISWI) rule (40 CFR 60 Subpart CCCC or 9VAC5-40 Article 45).

Greenhouse Gas Emissions – There are no applicable GHG permitting requirements.

## **GENERAL CONDITIONS**

The permit contains general conditions required by 40 CFR Part 70 and 9VAC5-80-110 that

---

<sup>2</sup> Summary of Public Comments and Responses for National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial and Institutional Boilers and Process Heaters, Final Rule, notice of final action on reconsideration; E.O. 12866 NESHAP for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters, 2060-AR13 Final Rule 20120822

<sup>3</sup> Paraphrased from 40 CFR 63.7491(h)

<sup>4</sup> Paraphrased from 40 CFR 63.4681(c)(1)

apply to all Federal-operating permitted sources. These include requirements for submitting semi-annual monitoring reports and an annual compliance certification report. The permit also requires notification of deviations from permit requirements or any excess emissions.

## **Comments on General Conditions**

### **Federal Enforceability**

Article 1 (9VAC5-80-110 N) states that all terms and conditions in the Title V permit are enforceable by the administrator and citizens under the federal Clean Air Act, except those that have been designated as only state-enforceable.

### **Permit Expiration**

This condition refers to the Board taking action on a permit application. The “Board” refers to the State Air Pollution Control Board. The authority to take action on permit application(s) has been delegated to the Regions as allowed by §2.2-604 and §10.1-1185 of the *Code of Virginia*, and the “Department of Environmental Quality Agency Policy Statement No. 2-09”.

### **Failure/Malfunction Reporting**

Section 9VAC5-20-180 requires malfunction and excess emission reporting within four hours of discovery. Section 9VAC5-20-180 is from the general regulations. All affected facilities are subject to section 9VAC5-20-180 including Title V facilities. A facility may make a single report that meets the requirements of 9VAC5-20-180. The report must be made within four daytime business hours of discovery of the malfunction.

### **Permit Modification**

This general condition cites the sections that follow:

9VAC5-80-50. Applicability, Federal Operating Permit for Stationary Sources

9VAC5-80-190. Changes to Permits

9VAC5-80-260. Enforcement

9VAC5-80-1100. Applicability, Permits For New and Modified Stationary Sources

9VAC5-80-1605. Applicability, Permits For Major Stationary Sources and Modifications

Located in Prevention of Significant Deterioration Areas

9VAC5-80-2000. Applicability, Permits for Major Stationary Sources and Major Modifications

Locating in Nonattainment Areas

### **Asbestos Requirements**

The Virginia Department of Labor and Industry under Section 40.1-51.20 of the Code of Virginia also holds authority to enforce 40 CFR 61 Subpart M, National Emission Standards for Asbestos.

#### **STATE-ONLY ENFORCEABLE REQUIREMENTS**

None

#### **FUTURE APPLICABLE REQUIREMENTS**

None at this time.

#### **CONFIDENTIAL INFORMATION**

The permittee did not submit a request for confidentiality. All portions of the Title V application are suitable for public review.

#### **PUBLIC PARTICIPATION**

The draft permit was placed on public notice in The News and Advance from January 6, 2017 to February 6, 2017. No comments were received from the public.

The draft/proposed permit was sent to EPA for concurrent review on January 6, 2017. No comments were received.

Attachment: 2015 Annual Update – Pollutant Emissions Report