



November 29, 2023

Mr. Tim Johnson
Hampton Lumber Mills - WA, Inc. Randle Facility
PO Box 189
Randle, WA 98377

RE: Final Air Discharge Permit for Modification of CO Averaging Period

Dear Mr. Johnson:

The public comment period for the preliminary determination to issue Air Discharge Permit (ADP) 23-3602 concluded on November 12, 2023. The Southwest Clean Air Agency (SWCAA) did not receive any adverse comment from the public relative to the preliminary determination. Therefore, a final determination to issue ADP 23-3602 has been made pursuant to Section 400-110(4) of SWCAA's General Regulations for Air Pollution Sources. Electronic copies of ADP 23-3602 and the associated Technical Support Document are available for public review in the "Recent Air Discharge Permits" section under the "Air Permits" link on SWCAA's website (<http://www.swcleanair.gov>). Original copies are enclosed for your files.

If you have any questions or comments, or desire additional information, please contact me or Vanessa McClelland at (360) 574-3058, extension 129.

Sincerely,

Uri Papish
Executive Director

UP:vm

Enclosure: Technical Support Document and Air Discharge Permit 23-3602

cc: US EPA Region 10
R10_Air_Permits@epa.gov





SWCAA
Southwest Clean Air Agency

**AIR DISCHARGE PERMIT
23-3602**

Issued: November 29, 2023

Hampton Lumber Mills - WA, Inc. Randle Facility
10166 US Highway 12
Randle, WA

SWCAA ID – 350



REVIEWED BY:

Clinton Lamoreaux

Clinton Lamoreaux, Chief Engineer

APPROVED BY:

Uri Papish

Uri Papish, Executive Director

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1. Equipment/Activity Identification

ID No.	Equipment/Activity	Control Equipment/Measure
1	Log yard	Water truck – low pressure water spray
2	Sawmill/Planer	Building enclosures, Sawdust cyclone, Baghouse #1, Knock-out boxes
3	Spray Technologies anti-stain system	Spray Technologies mist eliminator
4	Five chip bunkers	None
5	Sawdust bunker	Wind shrouds
6	Shavings bunker	Wet suppression system, Wind shrouds
7	Hog fuel/bark bunker	None
8	Wellons hog fuel boiler	One multiclone followed by a two-field ESP and SNCR
9	Eight dry kilns	Process temperature limit
10	Emergency generator diesel engine	Low sulfur fuel, limited hours
11	Fire pump emergency diesel engine	Low sulfur fuel, limited hours

2. Permit Requirements

The following tables detail the specific requirements of this Air Discharge Permit (ADP). In addition to the requirements listed below, equipment at this facility may be subject to other federal, state, and local regulations. The requirement number is identified in the left-hand column. The text of the requirement is contained in the middle column. The emission unit, equipment, or activity to which the requirement applies is listed in the right-hand column.

ADP 23-3602 supersedes ADP 06-2691R2 in its entirety.

Emission Limits

Req. No.	Emission Limits	Equipment/ Activity ID No.				
1.	<p>Emissions from Baghouse #1 must not exceed the following:</p> <table><tr><td><u>Pollutant</u></td><td><u>Emission Limit</u></td></tr><tr><td>PM/PM₁₀</td><td>7.92 tpy, 0.005 gr/dscf (1-hr avg)</td></tr></table> <p>Emissions must be calculated based on the most recent source test and actual annual hours of operation consistent with the methodology in Section 6 of the Technical Support Document (TSD) for this ADP.</p>	<u>Pollutant</u>	<u>Emission Limit</u>	PM/PM ₁₀	7.92 tpy, 0.005 gr/dscf (1-hr avg)	2
<u>Pollutant</u>	<u>Emission Limit</u>					
PM/PM ₁₀	7.92 tpy, 0.005 gr/dscf (1-hr avg)					

Req. No.	Emission Limits	Equipment/ Activity ID No.								
2.	<p>Emissions from the Sawdust Cyclone must not exceed the following:</p> <table><tr><td><u>Pollutant</u></td><td><u>Emission Limit</u></td></tr><tr><td>PM/PM₁₀</td><td>1.84 tpy, 0.030 gr/dscf (1-hr avg)</td></tr></table> <p>Emissions must be calculated based on the most recent source test and actual annual hours of operation consistent with the methodology in Section 6 of the TSD for this ADP. If source emissions test data is not available, annual emissions must be calculated assuming the maximum allowed emission concentration identified in the TSD for this ADP.</p>	<u>Pollutant</u>	<u>Emission Limit</u>	PM/PM ₁₀	1.84 tpy, 0.030 gr/dscf (1-hr avg)	2				
<u>Pollutant</u>	<u>Emission Limit</u>									
PM/PM ₁₀	1.84 tpy, 0.030 gr/dscf (1-hr avg)									
3.	<p>Emissions from the knock-out boxes must not exceed the following:</p> <table><tr><td><u>Pollutant</u></td><td><u>Emission Limit</u></td></tr><tr><td>PM/PM₁₀</td><td>1.86 tpy, 0.010 gr/dscf (1-hr avg)</td></tr></table> <p>Emissions must be calculated based on the most recent source test and actual annual hours of operation consistent with the methodology in Section 6 of the TSD for this ADP. If source emissions test data is not available, annual emissions must be calculated assuming the maximum allowed emission concentration identified in the TSD for this ADP.</p>	<u>Pollutant</u>	<u>Emission Limit</u>	PM/PM ₁₀	1.86 tpy, 0.010 gr/dscf (1-hr avg)	2				
<u>Pollutant</u>	<u>Emission Limit</u>									
PM/PM ₁₀	1.86 tpy, 0.010 gr/dscf (1-hr avg)									
4.	<p>Emissions from all bin unloading must not exceed the following:</p> <table><tr><td><u>Pollutant</u></td><td><u>Emission Limit</u></td></tr><tr><td>PM</td><td>30.43 tpy</td></tr><tr><td>PM₁₀</td><td>18.09 tpy</td></tr><tr><td>PM_{2.5}</td><td>7.00 tpy</td></tr></table> <p>Emissions must be calculated based on the actual annual throughput and emission factors consistent with the methodology in Section 6 of the TSD for this ADP or alternate emission factors approved by SWCAA.</p>	<u>Pollutant</u>	<u>Emission Limit</u>	PM	30.43 tpy	PM ₁₀	18.09 tpy	PM _{2.5}	7.00 tpy	4-7
<u>Pollutant</u>	<u>Emission Limit</u>									
PM	30.43 tpy									
PM ₁₀	18.09 tpy									
PM _{2.5}	7.00 tpy									
5.	<p>Emissions from the anti-stain treatment must not exceed the following:</p> <table><tr><td><u>Pollutant</u></td><td><u>Emission Limit</u></td></tr><tr><td>VOC</td><td>0.007 tpy</td></tr></table> <p>Emissions must be calculated based on actual material throughput consistent with the methodology in Section 6 of the TSD for this ADP.</p>	<u>Pollutant</u>	<u>Emission Limit</u>	VOC	0.007 tpy	3				
<u>Pollutant</u>	<u>Emission Limit</u>									
VOC	0.007 tpy									

Req. No.	Emission Limits	Equipment/ Activity ID No.																
6.	<p>Emissions from the Wellons hog fuel boiler emitted through the multiclone, ESP and SNCR must not exceed the following:</p> <table><tr><th>Pollutant</th><th>Emission Limit</th></tr><tr><td>NO_x</td><td>108.70 tpy, 90 ppmvd @ 7% O₂ (24-hr avg)</td></tr><tr><td>CO</td><td>181.32 tpy, 225 ppmvd @ 7% O₂ (30-day avg)</td></tr><tr><td>PM/PM₁₀</td><td>16.52 tpy, 0.010 gr/dscf @ 7% O₂ (1-hr avg) (filterable only)</td></tr><tr><td>Ammonia</td><td>10.83 tpy, 25 ppm @ 7% O₂ (24-hr avg)</td></tr><tr><td>Acetaldehyde</td><td>0.12 tpy</td></tr><tr><td>Acrolein</td><td>0.02 tpy</td></tr><tr><td>Formaldehyde</td><td>1.24 tpy</td></tr></table> <p>Emissions must be calculated using the most recent source test for PM, ammonia, HAPs, VOC and SO₂, CEMs data for NO_x and CO, and actual annual hours of operation consistent with the methodology in Section 6 of the TSD for this ADP. If source emissions test data is not available for HAPs, VOC, or SO₂, annual emissions must be calculated using the listed emission factors identified in the TSD for this ADP. Emissions from start-up (normal and during refractory curing) and shutdown processes are included in these annual limits.</p> <p>Compliance with the PM₁₀ and ammonia short-term limits above must be demonstrated based on the methodology listed in Appendix A of this ADP. Compliance with the NO_x and CO short-term limit must be demonstrated using the CEMS.</p> <p>The short-term emission limits identified above (hourly, 24-hr, or 30-day averaging time) do not apply during boiler start up and shutdown periods, but emissions during those periods must be included in the annual totals. The boiler must be operated consistent with good operating practices for minimizing emissions during the start-up, and start-up duration must be minimized.</p> <p>An hour is an operating hour, and a day is an operating day. <i>Operating hour</i> means any 60-minute period commencing on the hour containing at least 45 minutes of monitoring data to be reduced to a 1-hour average. <i>Operating day</i> means a "24-hour period between 12 midnight and the following midnight during which any fuel is combusted at any time in the boiler or process heater unit. It is not necessary for fuel to be combusted for the entire 24-hour period. For calculating [short-term] rolling average emissions, an operating day does not include the hours of operation during start-up (normal and during refractory curing) or shutdown."</p>	Pollutant	Emission Limit	NO _x	108.70 tpy, 90 ppmvd @ 7% O ₂ (24-hr avg)	CO	181.32 tpy, 225 ppmvd @ 7% O ₂ (30-day avg)	PM/PM ₁₀	16.52 tpy, 0.010 gr/dscf @ 7% O ₂ (1-hr avg) (filterable only)	Ammonia	10.83 tpy, 25 ppm @ 7% O ₂ (24-hr avg)	Acetaldehyde	0.12 tpy	Acrolein	0.02 tpy	Formaldehyde	1.24 tpy	8
Pollutant	Emission Limit																	
NO _x	108.70 tpy, 90 ppmvd @ 7% O ₂ (24-hr avg)																	
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Acetaldehyde	0.12 tpy																	
Acrolein	0.02 tpy																	
Formaldehyde	1.24 tpy																	

Req. No.	Emission Limits	Equipment/ Activity ID No.														
7.	<p>Emissions from lumber drying must not exceed the following:</p> <table><tr><th><u>Pollutant</u></th><th><u>Emission Limit</u></th></tr><tr><td>VOC</td><td>135.00 tpy</td></tr><tr><td>PM/PM₁₀</td><td>6.80 tpy</td></tr><tr><td>Acetaldehyde</td><td>15.00 tpy</td></tr><tr><td>Acrolein</td><td>0.25 tpy</td></tr><tr><td>Formaldehyde</td><td>0.35 tpy</td></tr><tr><td>Methanol</td><td>15.70 tpy</td></tr></table> <p>Emissions must be calculated using actual annual material throughput and emission factors from Section 6 of the TSD for this ADP.</p>	<u>Pollutant</u>	<u>Emission Limit</u>	VOC	135.00 tpy	PM/PM ₁₀	6.80 tpy	Acetaldehyde	15.00 tpy	Acrolein	0.25 tpy	Formaldehyde	0.35 tpy	Methanol	15.70 tpy	9
<u>Pollutant</u>	<u>Emission Limit</u>															
VOC	135.00 tpy															
PM/PM ₁₀	6.80 tpy															
Acetaldehyde	15.00 tpy															
Acrolein	0.25 tpy															
Formaldehyde	0.35 tpy															
Methanol	15.70 tpy															

Req. No.	Emission Limits	Equipment/ Activity ID No.												
8.	<p>Visible emissions must not exceed the following values for more than three (3) minutes in any 1-hour period as determined by the following methods:</p> <p><u>Continuous Opacity Monitoring System (COMS)</u></p> <table><tr><td><u>Equipment</u></td><td><u>Opacity Limit</u></td></tr><tr><td>Wellons Hog Fuel Boiler</td><td>10%</td></tr></table> <p><u>SWCAA Method 9 (See Appendix A of SWCAA 400)</u></p> <table><tr><td><u>Equipment</u></td><td><u>Opacity Limit</u></td></tr><tr><td>Dry Kilns</td><td>5%</td></tr><tr><td>Hog</td><td>5%</td></tr><tr><td>All other approved equipment (except engines)</td><td>0%</td></tr></table> <ul style="list-style-type: none">• Start-up and shutdown operations for the hog fuel boiler are defined in the TSD Section 11.• When visible emissions occur due to soot blowing/grate cleaning of the Wellons boiler, visible emissions must not exceed forty percent opacity (40%) for more than fifteen (15) minutes in any eight (8) consecutive hours.• When visible emissions occur due to start-up and shutdown of the Wellons boiler, visible emissions must not exceed forty percent opacity (40%) for more than three (3) minutes in any hour, or the facility must follow the start-up and shutdown procedures established in Requirement 22.• When visible emissions occur due to start-up following refractory work, visible emissions must not exceed forty percent opacity (40%) for more than three (3) minutes in any hour, if the unit is started on only clean fuel identified in 5.b. in Table 3 in 40 CFR Part 63, Subpart DDDDD. The total duration of refractory curing must not exceed thirty-six hours.• Any COMS recorded 1-minute or 6-minute block average opacity value which has a 1-minute or 6-minute block average ESP exhaust gas temperature value (for the same time block) that is 175 °F or greater is valid opacity data. Opacity values measured when the ESP exhaust gas temperature is under 175 °F are invalid due to the potential for the presence of condensed moisture in the stack.	<u>Equipment</u>	<u>Opacity Limit</u>	Wellons Hog Fuel Boiler	10%	<u>Equipment</u>	<u>Opacity Limit</u>	Dry Kilns	5%	Hog	5%	All other approved equipment (except engines)	0%	1 – 9
<u>Equipment</u>	<u>Opacity Limit</u>													
Wellons Hog Fuel Boiler	10%													
<u>Equipment</u>	<u>Opacity Limit</u>													
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All other approved equipment (except engines)	0%													
9.	<p>Visible emissions from the emergency generator engine and fire pump engine must not exceed the following for more than three (3) minutes in any 1-hour period as determined in accordance with SWCAA Method 9:</p> <p>(a) Twenty percent (20%) during start-up or shutdown; and</p> <p>(b) Ten percent (10%) at all other times.</p> <p>The start-up period is defined as the first twenty (20) minutes of operation from a cold start and shutdown is defined as when fuel flow to the engine has stopped.</p>	10, 11												

Operating Limits and Requirements

Req. No.	Operating Limits and Requirements	Equipment/ Activity ID No.
10.	Reasonable precautions must be taken at all times to prevent and minimize fugitive emissions from plant operations.	Facility-wide
11.	Operations that cause or contribute to a nuisance odor must use recognized good practice and procedures to reduce these odors to a reasonable minimum.	Facility-wide
12.	Emission units and activities identified in this ADP must be maintained and operated in total and continuous conformity with the conditions identified in this ADP. SWCAA reserves the right to take any and all appropriate action to maintain the conditions of this ADP, including directing the facility to cease operations until corrective action can be completed.	1 – 11
13.	Each pollution control device must be operated whenever the processing equipment served by that air pollution control device is in operation. Control devices must be operated and maintained in accordance with the manufacturer's specifications. Furthermore, air pollution control devices must be operated in a manner that minimizes emissions.	1 – 3, 5, 6, 8
14.	Exhaust gas from approved equipment must be discharged vertically into the ambient air. Any device that obstructs or prevents vertical discharge while in operation is prohibited.	2, 3, 8
15.	The water truck must be used daily on unpaved roads when significant rainfall has not occurred for 15 days or more, or more frequently as needed to prevent fugitive dust.	1
16.	The street sweeper (or similar device) must be used weekly on paved roads when significant rainfall has not occurred for 15 days or more, or more frequently as needed to prevent fugitive dust.	1
17.	Baghouse #1 must be operated at all times when the planer is in use.	2
18.	A differential pressure gauge or a baghouse leak detector must be installed and maintained operable on Baghouse #1.	2
19.	The wet suppression system on the shavings transfer bunkers must be operated at all times during active transfer operations from the beginning of April to the end of November.	6
20.	The Wellons boiler must only be fired on wood products. The Permittee must employ work practices to ensure that only clean fuel (no rock or dirt, etc.) is combusted in the hog fuel boiler. (For purposes of this requirement, "clean fuel" is not limited to the subset of clean fuels identified in 40 CFR 63 Subpart DDDDD – "National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters".)	8
21.	A flow meter must be installed and maintained operable to measure the urea usage of the SNCR system.	8

Req. No.	Operating Limits and Requirements	Equipment/ Activity ID No.
22.	<p>Instead of meeting the 40% alternative opacity limit during start-up of the hog fuel boiler, the following is provided as an alternate operating scenario:</p> <ul style="list-style-type: none"> (a) The boiler must be operated to minimize emissions, which includes, but is not limited to, starting on clean fuels (as defined by 40 CFR 63 Subpart DDDDD "National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters."); (b) Continuous emissions monitors must be operated at all times; and (c) The ESP must be started no later than: <ul style="list-style-type: none"> (1) The boiler exhaust temperature reaching 175°F; (2) Four hours after the start of supplying useful thermal energy; and (3) Within one hour of first feeding fuels that are not clean fuels (per the above definition.) <p>Start-up periods following refractory work must not exceed 36 hours.</p> <p><i>Useful thermal energy</i> means energy (i.e., steam, hot water, or process heat) that meets the minimum operating temperature, flow, and/or pressure required by any energy use system that uses energy provided by the affected boiler or process heater.</p>	8
23.	<p>Dry kilns are approved for use with Douglas fir, western hemlock, Sitka spruce, Engelmann spruce, lodgepole pine, alpine fir, grand fir, silver fir, and noble fir. Lumber made of other wood species may be dried provided that the following information is furnished to SWCAA for review prior to the start of drying operations:</p> <ul style="list-style-type: none"> (a) Identification of wood species to be dried; (b) Emission factors for the proposed wood species; and (c) Estimated amount of wood to be dried. <p>Approval by SWCAA of additional wood species does not increase or modify in anyway the emission limit established in Requirement 7 of this ADP.</p>	9
24.	The dry-bulb set point temperature of the dry kilns must not exceed 200 °F on a 24-hr average.	9
25.	Dry kiln doors must be kept closed at all times during active drying operations.	9
26.	All containers for VOC containing materials must be kept securely closed with a lid in place except when in active use. Open containers for storage, transfer or disposal of VOC containing materials are prohibited. In addition, all VOC containing materials used to clean and/or flush spray equipment or lines during clean up must be collected and stored in a closed container.	3
27.	Operation of the emergency generator engine and fire pump emergency engine for maintenance checks and readiness testing must not exceed 100 hr/yr, per engine. Emergency operation is not limited. A nonresettable hourmeter must be installed and maintained on the emergency generator engine and fire pump engine to measure hours of unit operation.	11, 12

Req. No.	Operating Limits and Requirements	Equipment/ Activity ID No.
28.	The emergency generator engine and fire pump emergency engine must only be fired on #2 diesel or better. The sulfur content of the fuel fired in the diesel engine must not exceed 0.0015% by weight (15 ppmw). A fuel certification from the fuel supplier may be used to demonstrate compliance with this requirement.	11, 12

Monitoring and Recordkeeping Requirements

Req. No.	Monitoring and Recordkeeping Requirements	Equipment/ Activity ID No.
29.	With the exception of data logged by a computerized data acquisition system, each record required by this ADP must include the date and the name of the person making the record entry, at minimum. If a control device or process is not operating, a record must be made to that effect.	1 – 11
30.	All records required by this ADP must be kept for a minimum period of no less than five (5) years and must be maintained in a form readily available for inspection by SWCAA representatives.	1 – 11
31.	Excess emissions and upset conditions must be recorded for each occurrence.	1 – 11
32.	For each product used or produced at the facility that contains VOCs, HAPs, or TAPs, the Permittee must maintain purchase receipts for quantities, Safety Data Sheet (SDS) information, and Technical Data Sheets (TDS) in a readily accessible form.	3
33.	A continuous emission monitoring system (CEMS) and data acquisition and handling system (DAHS) must be installed to monitor emission concentrations and emission rates of NO _x , CO, and O ₂ from the hog fuel boiler. The CEMS/DAHS system must be operated and maintained as described in Appendix B of this ADP. Minimum data availability must be 90% or greater.	8
34.	Hourly, 24-hour, and 30-day averages of the following data for the hog fuel boiler must be recorded by the DAHS and kept readily available for on-site inspection: <ul style="list-style-type: none"> (a) NO_x emission concentration (ppmvd @ 7% O₂) (b) NO_x emission rate (lb/hr) (c) CO emission concentration (ppmvd @ 7% O₂) (d) CO emission rate (lb/hr) (e) O₂ concentration (dry volume percent) 	8
35.	The dates the street sweeper and water truck are used on the mill roads must be recorded for each occurrence.	1

Req. No.	Monitoring and Recordkeeping Requirements	Equipment/ Activity ID No.
36.	<p>Operational data for Baghouse #1 must be recorded as follows:</p> <p>(a) Hours of operation Recorded monthly</p> <p>(b) Filter bag replacement Recorded for each occurrence</p> <p>(c) Emission testing results Recorded for each occurrence</p> <p>(d) Maintenance and repair activities Recorded for each occurrence</p> <p>Without a baghouse leak detector installed:</p> <p>(e) Baghouse differential pressure Recorded weekly</p> <p>With a baghouse leak detector installed:</p> <p>(f) Alerts from the baghouse leak detector Recorded for each occurrence</p>	2
37.	<p>Operational data for Sawdust Cyclone and knock-out boxes must be recorded as follows:</p> <p>(a) Hours of operation Recorded monthly</p> <p>(b) Emission testing results Recorded for each occurrence</p> <p>(c) Maintenance and repair activities Recorded for each occurrence</p>	2
38.	The amount and type of anti-stain product consumed must be recorded monthly.	3
39.	The quantity and type of wood byproducts unloaded from bunkers at the facility must be recorded monthly.	4 – 7
40.	<p>Operational data for the ESP, SNCR, and Wellons boiler must be recorded as follows:</p> <p>(a) Multiclone differential pressure Recorded daily</p> <p>(b) Secondary voltage in each ESP field Recorded daily</p> <p>(c) Current level in each ESP field Recorded daily</p> <p>(d) Spark rate in each ESP field Recorded daily</p> <p>(e) Urea consumption (gallons/month) Recorded monthly</p> <p>(f) Hours of operation Recorded monthly</p> <p>(g) Hours of boiler startup operation Recorded for each occurrence</p> <p>(h) Boiler/ESP outlet temperature Recorded daily</p> <p>(i) Boiler steam flow rate Monitor continuously and record every 15-seconds</p> <p>(j) Maintenance and repair activities Recorded for each occurrence</p> <p>(k) Emission testing/monitoring results Recorded for each occurrence</p> <p>(l) Oxygen level in boiler exhaust Monitor continuously and record every 15-seconds</p> <p>(m) Periods of grate cleaning/soot blowing Recorded for each occurrence</p> <p>(n) CEMS calibration results Recorded for each occurrence</p> <p>(o) CEMS cylinder gas audit results Recorded for each occurrence</p> <p>(p) CEMS maintenance/repair activities Recorded for each occurrence</p>	8

Req. No.	Monitoring and Recordkeeping Requirements	Equipment/ Activity ID No.
41.	<p>Operational data for lumber drying activities must be recorded and monitored as follows:</p> <p>(a) Amount, species, and final moisture of dried lumber Recorded monthly</p> <p>(b) Emission testing results Recorded for each occurrence</p> <p>(c) Dry kiln average dry bulb temperature (averaged daily) Monitored continuously during operation</p>	9
42.	<p>Emergency generator engine and fire pump engine operations must be monitored and recorded as follows:</p> <p>(a) Hours of operation Recorded annually for each engine</p> <p>(b) Maintenance activities that may affect engine emissions Recorded for each occurrence</p> <p>(c) Fuel sulfur content of fuel Recorded for each fuel delivery. A fuel supplier certification or receipt may be used in lieu of actual fuel testing.</p>	10, 11

Emission Monitoring and Testing Requirements

Req. No.	Emission Monitoring and Testing Requirements	Equipment/ Activity ID No.
43.	<p>The Wellons boiler was initially emission tested on October 11, 2007. Emission testing must be conducted annually, no later than the end of October. Emission testing must be performed in accordance with Appendix A of this ADP. Annual Relative Accuracy Test Audits (RATA) must be performed no later than the end of October in accordance with Appendix B.</p> <p>If the CEMS for NO_x and CO are not used as the compliance demonstration, the annual source test for NO_x and CO must commence.</p> <p>Note: The facility is subject to additional testing required by the Boiler MACT, but that testing is not incorporated into this test requirement.</p>	8
44.	<p>Emission testing of lumber drying operations must be conducted by the end of November 2023. Subsequent emission testing must be conducted on a five-year cycle, no later than the end of November. Emission testing must be performed in accordance with Appendix C of this ADP.</p> <p>If no testing company with the ability to test emissions from wood drying in accordance with Appendix C is available, the facility should submit a letter documenting the search for a testing company and propose an alternate test schedule to SWCAA. This alternate test schedule must be approved in advance by SWCAA.</p>	9

Req. No.	Emission Monitoring and Testing Requirements	Equipment/ Activity ID No.
45.	Baghouse #1 and the Sawdust Cyclone must be emission tested by the end of November 2023 and a minimum of once every ten years thereafter no later than the end of November in accordance with Appendix D of this ADP.	2

Reporting Requirements

Req. No.	Reporting Requirements	Equipment/ Activity ID No.
46.	Upset conditions, including baghouse leak detection system alerts, must be reported to SWCAA as soon as possible after discovery. The Permittee may provide notification to SWCAA via telephone or email.	Facility-wide
47.	Excess emissions must be reported to SWCAA as follows: (a) As soon as possible, but no later than twelve (12) hours after discovery for emissions that represent a potential threat to human health or safety; (b) As soon as possible, but no later than forty-eight (48) hours after discovery for emissions which the Permittee wishes to claim as unavoidable pursuant to SWCAA 400-107(1); and (c) No later than thirty (30) calendar days after the end of the month of discovery for all other excess emissions.	Facility-wide
48.	Deviations from permit conditions must be reported no later than thirty (30) days after the end of the month during which the deviation is discovered.	Facility-wide
49.	All air quality related complaints received by the Permittee must be reported to SWCAA within three (3) calendar days of receipt. Complaint reports must include the date and time of the complaint, the name and contact information (if available) for the complainant, the nature of the complaint, and any actions taken by the Permittee to address the complaint.	Facility-wide

Req. No.	Reporting Requirements	Equipment/ Activity ID No.
50.	<p>A written report must be submitted to SWCAA at least seven (7) calendar days prior to the use of any new product that contains VOCs, TAPs, or HAPs. The report must contain the following:</p> <ul style="list-style-type: none"> (a) A description of the type of product (e.g., anti-stain) the Safety Data Sheets (SDS) and Technical Data Sheets (TDS), and the location where the product will be used; (b) The date by which the Permittee intends to begin use of the product; (c) The amount (gallons or pounds) expected to be used; (d) A quantification of the change in VOCs, HAPs, and TAPs emissions from the use of the product; and (e) A summary of any applicable requirement that would apply as a result of using the product. <p>If the new product would cause any emission limit to be exceeded, the Permittee must submit an ADP application to SWCAA to request a revision to this ADP. The Permittee must not begin using the new product until a revised ADP is issued.</p> <p>Any new product that is only to be used for testing purposes with a quantity of five (5) gallons or less of usage does not need to be reported to SWCAA prior to use.</p>	3
51.	<p>An annual emissions inventory report must be submitted in accordance with SWCAA 400-105(1). In addition to the emissions information required under SWCAA 400-105(1), each annual report must include an estimate of annual emission quantities for each TAP compound listed in the TSD of this ADP.</p>	1 – 11

Req. No.	Reporting Requirements	Equipment/ Activity ID No.
52.	<p>The following operational data must be reported to SWCAA by September 15 and March 15 for the preceding periods of January to June and July to December, respectively:</p> <ul style="list-style-type: none"> (a) Hours of operation of the Wellons boiler; (b) Hours of start-up of the Wellons boiler; (b) Amount of urea consumed; (c) Amount, species, average temperature set point and average final moisture of lumber dried in the dry kilns; (d) Hours of operation for Baghouse #1, Sawdust Cyclone, and knock-out boxes; (e) Amount and type of anti-stain used; (f) Amount and type of wood byproduct transferred from the facility; (g) Hours of operation for each emergency engine; (h) Hourly and daily (24-hr) CEMS data for: <ul style="list-style-type: none"> (i) NO_x exhaust concentration (ppmvd @ 7% O₂) (ii) NO_x emission rate (lb/hr) (iii) Oxygen concentration (% O₂) (h) Hourly and monthly (30-day) CEMS data for: <ul style="list-style-type: none"> (i) CO concentration (ppmvd @ 7% O₂) (ii) CO emission rate (lb/hr) (i) Opacity exceedance reports; (j) The results of all daily CEMS calibrations and quarterly cylinder gas audits; (k) Summary of all deviations from permit requirements; and (l) Summary of plantwide air pollutant emissions for each month in the reporting period. 	1 – 11
53.	A grate cleaning schedule for the Wellons boiler must be submitted to SWCAA annually by December 31 for the upcoming calendar year.	8
54.	The results of all emission testing required by this ADP must be reported to SWCAA within forty-five (45) calendar days of test completion.	2, 8, 9

3. General Provisions

Req. No.	General Provisions
A.	For the purpose of ensuring compliance with this ADP, duly authorized representatives of the Southwest Clean Air Agency must be permitted access to the Permittee's premises and the facilities being constructed, owned, operated and/or maintained by the Permittee for the purpose of inspecting said facilities. These inspections are required to determine the status of compliance with this ADP and applicable regulations and to perform or require such tests as may be deemed necessary.
B.	The provisions, terms, and conditions of this ADP bind the Permittee, its officers, directors, agents, servants, employees, successors and assigns, and all persons, firms, and corporations acting under or for the Permittee.

Req. No.	General Provisions
C.	The requirements of this ADP survive any transfer of ownership of the source or any portion thereof.
D.	This ADP must be posted conspicuously at or be readily available near the source.
E.	This ADP will be invalidated, in whole or in part, if construction or installation of any new or modified equipment has not commenced within eighteen (18) months from date of issuance, if construction is discontinued for a period of eighteen (18) months or more without prior SWCAA approval, or if construction is not completed within a reasonable time.
F.	This ADP does not supersede requirements of other Agencies with jurisdiction and further, this ADP does not relieve the Permittee of any requirements of any other governmental Agency. In addition to this ADP, the Permittee may be required to obtain permits or approvals from other agencies with jurisdiction.
G.	Compliance with the terms of this ADP does not relieve the Permittee from the responsibility of compliance with SWCAA General Regulations for Air Pollution Sources, previously issued Regulatory Orders, Revised Code of Washington (RCW) 70A.15, Title 173 Washington Administrative Code (WAC) or any other applicable emission control requirements, nor from the resulting liabilities and/or legal remedies for failure to comply.
H.	If any provision of this ADP is held to be invalid, all unaffected provisions of the ADP will remain in effect and be enforceable.
I.	No change in this ADP will be made or be effective except as may be specifically set forth by written order of the Southwest Clean Air Agency upon written application by the Permittee for the relief sought.
J.	The Southwest Clean Air Agency may, in accordance with RCW 70A.15, impose such conditions as are reasonably necessary to ensure the maintenance of compliance with the terms of this ADP, the Washington Clean Air Act, and the applicable rules and regulations adopted under the Washington Clean Air Act.

Air Discharge Permit 23-3602 - Appendix A
Emission Testing Requirements
Wellons Boiler

1. Introduction:

The purpose of this testing is to quantify emissions from the Wellons boiler and demonstrate compliance with the requirements of this ADP and applicable air quality regulations.

2. Testing Requirements:

- a. **Test plan.** A comprehensive test plan must be submitted to SWCAA for review and approval at least ten business days prior to each test. SWCAA personnel must be informed at least five business days prior to testing so that a representative may be present during testing.
- b. **Testing schedule.** The Wellons boiler was initially emission tested on October 11, 2007. Emission testing must be conducted annually, no later than the end of October.
- c. **Test runs/Reference test methods.** A minimum of three test runs must be performed for each constituent listed below to ensure the data are representative. Compliance must be demonstrated by averaging the results of the individual sampling runs. The sampling methods and schedules must be used unless alternate methods are approved in writing by SWCAA in advance of the emission testing.

<u>Constituent</u>	<u>Reference Test Method</u>	<u>Minimum Test Run Duration</u>
Flow rate, temperature	EPA Methods 1 and 2	N/A
O ₂ , CO ₂ content	EPA Method 3 or 3A	60 minutes
Moisture content	EPA Method 4	60 minutes
PM (filterable)	EPA Method 5	60 minutes
PM (condensable)	EPA Method 202	60 minutes
NO _x *	EPA Method 7E	60 minutes
CO *	EPA Method 10	60 minutes
Ammonia (NH ₃)	BAAQMD ST-1B/ Modified BAAQMD ST-1B	30 minutes
Opacity	SWCAA Method 9	6 minutes

* NO_x and CO are only required to be tested if the CEMS are not used as the compliance demonstration.

VOC and SO₂ were emissions tested in the initial source test.

3. Source Operation:

- a. **Source operations.** Source operations during the emission test must be representative of maximum intended operating conditions.

Air Discharge Permit 06-2691R2 - Appendix A
Emission Testing Requirements
Wellons Boiler

Page 2 of 2

- b. **Record of production parameters.** Production-related parameters and equipment operating conditions must be recorded during emission testing to correlate operating conditions with emissions. Recorded parameters must, at a minimum, include:

- (1) Boiler steam production rate,
- (2) Boiler firing rate,
- (3) Urea injection rate,
- (4) Fuel type/mixture description,
- (5) Process start ups and shutdowns, and
- (6) Plant adjustments.

All recorded production parameters must be documented in the test results report.

4. Reporting Requirements:

- a. A final emission test report must be prepared and submitted to SWCAA within 45 calendar days of test completion and, at a minimum, must contain the following information:
- (1) Description of the source including manufacturer, model number and design capacity of the equipment, the location of the sample ports or test locations, and stack parameters,
 - (2) Time and date of the test and identification and qualifications of the personnel involved,
 - (3) Summary of results, reported in units and averaging periods consistent with the applicable emissions standard or unit,
 - (4) Summary of control system or equipment operating conditions,
 - (5) Summary of production related parameters,
 - (6) A description of the test methods or procedures used, including all field data, quality assurance/quality control procedures and documentation,
 - (7) A description of the analytical procedures used, including all laboratory data, quality assurance/quality control procedures and documentation,
 - (8) Copies of field data and example calculations,
 - (9) Chain of custody information,
 - (10) Calibration documentation,
 - (11) Discussion of any abnormalities associated with the results,
 - (12) A statement signed by the senior management official of the testing firm certifying the validity of the source test report, and
 - (13) An electronic copy of the test report must be provided to SWCAA.
- b. All test results must be corrected to 7% oxygen.

5. Changes to Testing Requirements:

The source test must be conducted as specified in the sections above. The Permittee may submit a written request to SWCAA for approval of minor modifications to the requirements above or the testing schedule. Upon review of the request and in accordance with EPA delegation, SWCAA will inform the Permittee in writing of any approved modifications.

Air Discharge Permit 23-3602 - Appendix B
Continuous Emission Monitoring Requirements
Wellons Boiler

Page 1 of 1

1. Introduction:

- a. The purpose of installing and maintaining continuous emissions monitoring systems (CEMS) for NO_x, O₂, and CO is to demonstrate compliance with the requirements of this ADP.

2. Requirements:

- a. **CO, NO_x and O₂ CEMS.** The permittee must install and maintain a system for monitoring the concentration and emission rate of CO, NO_x, and O₂ from the hog fuel boiler exhaust stack in accordance with the requirements and specifications found in the following regulations:

- 40 CFR 60, Appendix B - Performance Specification 2 "Specifications and Test Procedures for Sulfur Dioxide and Nitrogen Oxides Continuous Emission Monitoring Systems in Stationary Sources."
- 40 CFR 60, Appendix B - Performance Specification 3 "Specifications and Test Procedures for Oxygen and Carbon Dioxide Continuous Emission Monitoring Systems in Stationary Sources."
- 40 CFR 60, Appendix B - Performance Specification 4A "Specifications and Test Procedures for Carbon Monoxide Continuous Emission Monitoring Systems in Stationary Sources."
- 40 CFR 60, Appendix F "Quality Assurance Procedures."

Relative Accuracy Test Audits (RATAs) must be conducted at least once for every four calendar quarters.

- b. **RATA Reports.** Relative accuracy test audit reports must be submitted to SWCAA within 45 days of test completion. An electronic copy of the test/RATA report must be provided to SWCAA.

Air Discharge Permit 23-3602 - Appendix C
Emission Testing Requirements
Lumber Drying

1. Introduction:

The purpose of this testing is to quantify emissions from lumber drying operations described in this ADP.

2. Testing Requirements:

- a. **Testing schedule.** Emission testing of the lumber drying process must be conducted no later than November 2018. Subsequent emission testing must be conducted on a five-year cycle, no later than the end of November. Unless otherwise directed by SWCAA, the testing must be conducted on the dominant species dried at the facility.
- b. **Test plan.** A comprehensive test plan must be submitted to SWCAA for review and approval at least ten business days prior to each test. SWCAA personnel must be informed at least five business days prior to testing so that a representative may be present during testing.
- c. **Test runs/Reference test methods.** The sampling methods identified below must be used unless alternate methods are approved in writing by SWCAA in advance of the emission testing.

<u>Constituent</u>	<u>Reference Test Method</u>	<u>Minimum Test¹ Run Duration</u>
Exhaust Flow	EPA Methods 1-4	See footnote 1
Volatile organic compounds ²	EPA Method 25A / 18 or 320	
Methanol	NCASI Method 105 or EPA Method 320	
Ethanol	NCASI Method 105 or EPA Method 320	
Formaldehyde	NCASI Method 105 or EPA Method 320	
Acetaldehyde	NCASI Method 105 or EPA Method 320	
Acrolein	NCASI Method 105 or EPA Method 320	
Propionaldehyde	NCASI Method 105 or EPA Method 320	
Acetic Acid	NCASI Method 105 ³ or EPA Method 320	

¹ Test duration will be as necessary to yield representative results. In some cases, multiple test runs will be conducted over the drying cycle.

² The purpose of the testing is to quantify actual VOC emissions. This might involve developing an appropriate scaling factor for Method 25A results or quantifying the individual components of the kiln exhaust without performing Method 25A.

³ Acetic acid may be collected in the NCASI Method 105 impinger train and analyzed by HPLC.

Air Discharge Permit 23-3602 - Appendix C
Emission Testing Requirements
Lumber Drying

Page 2 of 3

3. Kiln Operation:

- a. **Quality assurance.** The following quality assurance measures must be met unless otherwise approved by SWCAA in advance of the testing:
- (1) The lumber used for the source test must be preserved in a manner to ensure the freshness of the lumber. The lumber must be wrapped in plastic wrap or some other material to prevent off-gassing and contamination during storage and shipment;
 - (2) The log(s) from which lumber is taken should be newly arrived to the lumber yard;
 - (3) The lumber must be maintained below 45 °F if the lumber is stored for more than two but less than seven days prior to the commencement of testing;
 - (4) The lumber must be maintained below 10 °F if stored for seven or more days prior to testing.
 - (5) The ends of each test board must be trimmed prior to testing;
 - (6) The kiln must be operated as close as practical to the dominant drying schedule (dry bulb and wet bulb temperatures) at the subject facility for the wood species being tested; and
 - (7) The wood samples must be dried to a moisture content at or below the moisture content targeted by the subject facility.
- b. **Record of testing parameters.** Production related parameters and equipment operating conditions must be recorded during emissions testing to correlate operating conditions with emissions. Recorded parameters must include the following if reasonably attainable:
- (1) Testing kiln details including: kiln dimensions, kiln air velocity, and heating method;
 - (2) Sample size (board feet), sample weight, and lumber size (2" x 4", 4" x 8", etc.);
 - (3) Drying time;
 - (4) Wood moisture content (initial and final);
 - (5) Temperature (continuously monitored and recorded wet bulb and dry bulb temperatures);
 - (6) Lumber information including: percentage of heartwood vs. sapwood, ring count, percentage of face area that consists of knots, etc.;
 - (7) Tree information: coastal or inland tree, tree age, approximate date harvested, if log was stored in fresh or salt water, etc.; and
 - (8) Any interruptions in kiln operation.

All recorded production parameters must be documented in the test results report.

4. Reporting Requirements:

- a. A final emission test report must be prepared and submitted to SWCAA within 45 calendar days of test completion. Each report must be provided in an electronic format acceptable to SWCAA. Each report must include:
- (1) Description of the source including manufacturer, model number and design capacity of the equipment, and the location of the sample ports or test locations;
 - (2) Time and date of the test and identification and qualifications of the personnel involved;
 - (3) Summary of results, reported in units and averaging periods consistent with the application emissions standard or unit;

Air Discharge Permit 23-3602 - Appendix C
Emission Testing Requirements
Lumber Drying

4. Reporting Requirements: (con't)

- (4) Summary of control system or equipment operating conditions;
 - (5) Summary of production related parameters;
 - (6) A description of the test methods or procedures used, including all field data, quality assurance/quality control procedures and documentation;
 - (7) A description of the analytical procedures used, including all laboratory data, quality assurance/quality control procedures and documentation;
 - (8) Copies of field data and example calculations;
 - (9) Chain of custody information;
 - (10) Calibration documentation;
 - (11) Discussion of any abnormalities associated with the results; and
 - (12) A statement signed by the senior management official of the testing firm certifying the validity of the source test report.
- b. VOC emissions must be reported in pounds per thousand board feet (lb/Mbf) as VOC. Emissions of each VOC species quantified during the test must be reported in units of lb/Mbf as the individual species.

5. Changes to Testing Requirements:

The source test must be conducted as specified in the sections above. The Permittee may submit a written request to SWCAA for approval of minor modifications to the requirements above or the testing schedule. Upon review of the request and in accordance with EPA delegation, SWCAA will inform the Permittee in writing of any approved modifications.

Air Discharge Permit 23-3602 - Appendix D
Emission Testing Requirements
Baghouse #1 and Sawdust Cyclone

Page 1 of 2

1. Introduction:

The purpose of this testing is to quantify emissions from Baghouse #1 and the Sawdust Cyclone and to demonstrate compliance with the requirements of this ADP and applicable air quality regulations.

2. Testing Requirements:

- a. **Test plan.** A comprehensive test plan must be submitted to SWCAA for review and approval at least ten business days prior to each test. SWCAA personnel must be informed at least five business days prior to testing so that a representative may be present during testing.
- b. **Testing schedule.** Testing of Baghouse #1 and the Sawdust Cyclone must be performed by November 2023. Subsequent emission testing must be conducted once every ten years thereafter, no later than the end of November.
- c. **Test runs/Reference test methods.** A minimum of three (3) test runs at maximum operating conditions for a minimum of one hour must be performed for each constituent listed below to ensure the data are representative. Compliance must be demonstrated by averaging the results of the individual sampling runs. The sampling methods and schedules must be used unless alternate methods are approved in writing by SWCAA in advance of the emission testing.

<u>Constituent</u>	<u>Reference Test Method</u>	<u>Minimum Test Run Duration</u>
PM (filterable)	EPA Method 5/Method 17	60 minutes
Opacity	SWCAA Method 9	6 minutes

3. Source Operation:

- a. **Source operations.** Source operations during the emissions test must be representative of maximum intended operating conditions.
- b. **Record of production parameters.** Production related parameters and equipment operating conditions must be recorded during emissions testing to correlate operating conditions with emissions. Recorded parameters must, at a minimum, include process start ups and shutdowns, baghouse pressure drop and plant adjustments. All recorded production parameters must be documented in the test results report.

4. Reporting Requirements:

- a. A final emission test report must be prepared and submitted to SWCAA within 45 calendar days of test completion and, at a minimum, must contain the following information:
 - (1) Description of the source including manufacturer, model number and design capacity of the equipment, and the location of the sample ports or test locations;
 - (2) Time and date of the test and identification and qualifications of the personnel involved;

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Emission Testing Requirements
Baghouse and Cyclone

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4. Reporting Requirements: (con't)

- (3) Summary of results, reported in units and averaging periods consistent with the application emissions standard or unit;
- (4) Summary of control system or equipment operating conditions;
- (5) Summary of production related parameters;
- (6) A description of the test methods or procedures used, including all field data, quality assurance/quality control procedures and documentation;
- (7) A description of the analytical procedures used, including all laboratory data, quality assurance/quality control procedures and documentation;
- (8) Copies of field data and example calculations;
- (9) Chain of custody information;
- (10) Calibration documentation;
- (11) Discussion of any abnormalities associated with the results;
- (12) A statement signed by the senior management official of the testing firm certifying the validity of the source test report;
- (13) An electronic copy of the test report must be provided to SWCAA; and
- (14) Results must be reported as measured with no O₂ correction.

5. Changes to Testing Requirements:

The source test must be conducted as specified in the sections above. The Permittee may submit a written request to SWCAA for approval of minor modifications to the requirements above or the testing schedule. Upon review of the request and in accordance with EPA delegation, SWCAA will inform the Permittee in writing of any approved modifications.

