

# Public Notice

## DEQ Requests Comments on Arauco North America, Inc.'s Proposed Air Quality Permit

The Oregon Department of Environmental Quality invites the public to submit written comments on the conditions of Arauco Northwest, Inc.'s proposed air quality permit, known officially as a Simple Air Contaminant Discharge Permit.

### Summary

The proposed permit is a renewal of the facility's existing permit. The proposed permit is to replace an existing permit that was issued on Oct. 26, 2013. There are no new conditions in this proposed permit.

### How do I participate?

To submit your comments for the public record, send them by mail, fax, or email:

Suzy Luttrell  
Air Quality Permit Coordinator  
4026 Fairview Industrial Dr. SE  
Salem, OR 97302

**Fax:** 503-378-4196

**Email:** [luttrell.suzy@deq.state.or.us](mailto:luttrell.suzy@deq.state.or.us)

Written comments are due by 5 p.m. June 28, 2019.

### About the facility

Arauco North America, Inc., in Albany, Oregon is seeking to renew the air quality permit for the operation of its composite wood overlaying facility at 3030 Calapooia Street SW, in Albany.

This manufacturing facility coats thick paper with melamine-formaldehyde and/or urea-formaldehyde resins. The resin-saturated paper is then either thermally fused to composite wood substrates, or is sold by the roll on the open market. Natural gas-fired hot oil heaters provide the necessary heat to hot presses used to fuse the resin-treated paper onto the wood fiber boards. Once cured, the overlaid composite boards are trimmed and cut to size. Baghouses are employed to control particulate matter generated by edge-routing operations.

Air pollutants generated by this facility include hazardous air pollutants (methanol and formaldehyde), volatile organic compounds (primarily diethylene glycol), particulate matter, and gaseous byproducts from natural gas

combustion (primarily carbon monoxide and nitrogen oxides).

### What air pollutants would the permit regulate?

This permit regulates emissions of the pollutants listed in the table at the end of this document.

### How does DEQ determine permit requirements?

DEQ evaluates types and amounts of pollutants and the facility's location, and determines permit requirements according to state and federal regulations.

### What special conditions are in this permit?

There are no special conditions contained within this proposed permit.

### How does DEQ monitor compliance with the permit requirements?

This permit would require the facility to monitor pollutants using federally approved monitoring practices and standards.

The facility is required to track and record the facility's actual emissions on both a monthly and annual basis.

Using permit-required calculations, the facility determines its facility-wide emissions, and submit an annual emissions summary report to the DEQ. These reports are reviewed for emissions compliance determination. In addition, DEQ will conduct onsite inspections to both observe facility operations, air control equipment, and permit required monitoring and recordkeeping documentation.

### What happens after the public comment period ends?

DEQ will consider and provide responses to all comments received by the close of the comment period. DEQ may modify the proposed permit based on the comments received, but DEQ can only modify conditions of the permit in accordance with the rules and statutes under the authority given to the DEQ. If the facility meets all legal requirements, DEQ will issue the facility's air quality permit.



State of Oregon  
Department of  
Environmental  
Quality

Western Region  
Air Quality Program  
381 N. 2<sup>nd</sup> Street  
Coos Bay, OR 97420  
Phone: 541-269-2721  
Fax: 541-269-7984  
Contact: Martin Abts

[www.oregon.gov/DEQ](http://www.oregon.gov/DEQ)

**Where can I get more information?**

Find out more and view the proposed permit at <http://www.oregon.gov/deq/Get-Involved/Pages/Public-Notices.aspx>.

upon request. Call DEQ at 800-452-4011 or email [deqinfo@deq.state.or.us](mailto:deqinfo@deq.state.or.us).

View the proposed permit and related documents in person at the DEQ office in Coos Bay or at the Albany Public Library at 2450 14th Ave SE, Albany, OR 97322. For a review appointment, call Suzy Luttrell at 503-378-5305.

**Alternative Formats**

DEQ can provide documents in an alternate format or in another language other than English

**Emissions limits**

**Criteria Pollutants:** Table 1 below presents maximum allowable emissions of criteria pollutants for the facility. The current emission limit reflects maximum emissions the facility can emit under the existing permit. The proposed emission limit reflects maximum emissions the facility would be able to emit under the proposed permit. Typically, a facility's actual emissions are less than maximum limits established in a permit; however, actual emissions can increase up to the permitted limit.

**Table 1**

Criteria Pollutant	Current Limit (tons/year)	Proposed Limit (tons/year)
Particulate matter	24	24
Small particulate matter	14	14
Fine particulate matter	9	9
Nitrogen oxides	39	39
Carbon monoxide	99	99
Volatile organic compounds	39	39
Greenhouse gases	74,000	74,000

For more information about criteria pollutants, go to: [www.epa.gov/criteria-air-pollutants](http://www.epa.gov/criteria-air-pollutants)

**Hazardous air pollutants:** Arauco North America, Inc., in Albany, Oregon is not a major source of hazardous air pollutants. Further information regarding hazardous air pollutants from this source can be found in the Review Report.

**Table 2**

Hazardous Air Pollutants	Potential Emissions (tons/year)	Actual Emissions (tons/year)
Formaldehyde	7.7	1.2
Methanol	0.6	0.1

For more information about hazardous air pollutants, go to: [www.epa.gov/haps/health-effects-notebook-hazardous-air-pollutants](http://www.epa.gov/haps/health-effects-notebook-hazardous-air-pollutants)



# SIMPLE AIR CONTAMINANT DISCHARGE PERMIT

Department of Environmental Quality  
Western Region  
4026 Fairview Industrial Drive SE  
Salem, Oregon 97302  
503-378-8240

This permit is being issued in accordance with the provisions of ORS 468A.040 and based on the land use compatibility findings included in the permit record.

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**ISSUED TO:**

Arauco North America, Inc.  
PO Box 428  
Albany, OR 97321

**INFORMATION RELIED UPON:**

Application No.: 29246  
Date Received: 08/31/2017

**PLANT SITE LOCATION:**

ATLF  
3030 Calapooia St. SW  
Albany, OR 97321

**LAND USE COMPATIBILITY FINDING:**

Approving Authority: City of Albany  
Approval Date: 07/17/1996

**PERMIT PREVIOUSLY ISSUED TO:**

Flakeboard America Limited

**ISSUED BY THE DEPARTMENT OF ENVIRONMENTAL QUALITY**

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Claudia Davis, Western Region Air Quality Manager

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Dated

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Source(s) Permitted to Discharge Air Contaminants (OAR 340-216-8010):

Table 1 Code	Source Description	SIC
Part B, 85	All other sources, both stationary and portable, not listed herein which would have actual emissions, if the source were to operate uncontrolled, of 5 or more tons per year of direct PM <sub>2.5</sub> or PM <sub>10</sub> if located in a PM <sub>2.5</sub> or PM <sub>10</sub> nonattainment or maintenance area, or 10 or more tons per year of any single criteria pollutant if located in any part of the state.	2499 / 321999

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## 1.0 GENERAL EMISSION STANDARDS AND LIMITS

- 1.1. Visible Emissions** The permittee must comply with the following visible emission limits from air contaminant sources other than fugitive emission sources, as applicable:
- a. Emissions from any air contaminant source must not equal or exceed 20% opacity;
  - b. Opacity must be measured as a six-minute block average using EPA Method 9, a continuous opacity monitoring system (COMS) installed and operated in accordance with the DEQ Continuous Monitoring Manual or 40 CFR part 60, or an alternative monitoring method approved by DEQ that is equivalent to EPA Method 9.
- 1.2. Particulate Matter Emissions** The permittee must comply with the following particulate matter emission limits, as applicable:
- a. Particulate matter emissions from any fuel burning equipment installed, constructed, or modified on or after June 1, 1970 but before April 16, 2015 must not exceed 0.14 grains per dry standard cubic foot, corrected to 12% CO<sub>2</sub> or 50% excess air;
  - b. Particulate matter emissions from any air contaminant source installed, constructed, or modified before April 16, 2015 other than fuel burning equipment and fugitive emission sources must not exceed 0.14 grains per dry standard cubic foot.
- 1.3. Fugitive Emissions** The permittee must take reasonable precautions to prevent fugitive dust emissions, as measured by EPA method 22, by:
- a. Using, where possible, water or chemicals for control of dust in the demolition of existing buildings or structures, construction operations, the grading of roads or the clearing of land;
  - b. Applying water or other suitable chemicals on unpaved roads, materials stockpiles, and other surfaces which can create airborne dusts;
  - c. Enclosing (full or partial) materials stockpiles in cases where application of water or other suitable chemicals are not sufficient to prevent particulate matter from becoming airborne;
  - d. Installing and using hoods, fans, and fabric filters to enclose and vent the handling of dusty materials;
  - e. Installing adequate containment during sandblasting or other similar operations;
  - f. Covering, at all times when in motion, open bodied trucks transporting materials likely to become airborne;

- g. Promptly removing earth or other material that does or may become airborne from paved streets; and
- h. Developing a DEQ approved fugitive emission control plan upon request by DEQ if the above precautions are not adequate and implementing the plan whenever fugitive emissions leave the property for more than 18 seconds in a six-minute period.

- 1.4. Particulate Matter Fallout** The permittee must not cause or permit the deposition of any particulate matter larger than 250 microns in size at sufficient duration or quantity, as to create an observable deposition upon the real property of another person.
- 1.5. Nuisance and Odors** The permittee must not cause or allow air contaminants from any source to cause a nuisance. Nuisance conditions will be verified by DEQ personnel.
- 1.6. Fuels and Fuel Sulfur Content**
- a. If the permittee burns any of the fuels listed below, the sulfur content cannot exceed:
    - i. 0.0015% sulfur by weight for ultra-low sulfur diesel.
    - ii. 0.3% sulfur by weight for ASTM Grade 1 distillate oil.
    - iii. 0.5% sulfur by weight for ASTM Grade 2 distillate oil.
    - iv. 1.75% sulfur by weight for residual oil.
  - b. The permittee is allowed to use on-specification used oil as fuel which contains no more than 0.5% sulfur by weight. The permittee must obtain analyses from the marketer or, if generated on site, have the used oil analyzed, so that it can be demonstrated that each shipment of oil does not exceed the used oil specifications contained in 40 CFR Part 279.11, Table 1.

## **2.0 OPERATION AND MAINTENANCE REQUIREMENTS**

- 2.1. Operation of Pollution Control Devices and Processes** The permittee must operate and maintain air pollution control devices and emission reduction processes at the highest reasonable efficiency and effectiveness to minimize emissions. Air pollution control devices and components must be in operation and functioning properly at all times when the associated emission source is operating. OAR 340-226-0120

### 3.0 PLANT SITE EMISSION LIMITS

- 3.1. **Plant Site Emission Limits (PSEL)** The permittee must not cause or allow plant site emissions to exceed the following:

Pollutant	Limit	Units
PM	24	tons per year
PM <sub>10</sub>	14	tons per year
PM <sub>2.5</sub>	9	tons per year
NO <sub>x</sub>	39	tons per year
CO	99	tons per year
VOC	39	tons per year
GHGs (CO <sub>2</sub> e)	74,000	tons per year
Single HAP	9	tons per year
Combined HAPs	24	tons per year

- 3.2. **Annual Period** The annual plant site emissions limits apply to any 12-consecutive calendar month period.

### 4.0 COMPLIANCE DEMONSTRATION

- 4.1. **PSEL Compliance Monitoring** The permittee must demonstrate compliance with the PSEL for each 12-consecutive calendar month period based on the following calculation for each pollutant except GHGs:

$$E = \Sigma(EF \times P) / 2000 \text{ lbs}$$

where:

- E = pollutant emissions (ton/yr);
- EF = pollutant emission factor (see Condition 11.0);
- P = process production (see Condition 12.0)

- 4.2. **Emission Factors** The permittee must use the default emission factors provided in Condition 11.0 for calculating pollutant emissions, unless alternative emission factors are approved in writing by DEQ. The permittee may request or DEQ may require using alternative emission factors provided they are based on actual test data or other documentation (e.g., AP-42 compilation of emission factors) that has been reviewed and approved by DEQ.

## 5.0 RECORDKEEPING REQUIREMENTS

- 5.1. **Operation and Maintenance** The permittee must maintain records of the process/production parameters contained in Condition 12.0.
- 5.2. **Excess Emissions** The permittee must maintain records of excess emissions as defined in OAR 340-214-0300 through 340-214-0340 (recorded on occurrence). Typically, excess emissions are caused by process upsets, startups, shutdowns, or scheduled maintenance. In many cases, excess emissions are evident when visible emissions are greater than 20% opacity as a six-minute block average. If there is an ongoing excess emission caused by an upset or breakdown, the permittee must cease operation of the equipment or facility no later than 48 hours after the beginning of the excess emissions, unless continued operation is approved by DEQ in accordance with OAR 340-214-0330(4).
- 5.3. **Complaint Log** The permittee must maintain a log of all written complaints and complaints received via telephone that specifically refer to air pollution concerns associated to the permitted facility. The log must include a record of the permittee's actions to investigate the validity of each complaint and a record of actions taken for complaint resolution.
- 5.4. **Retention of Records** Unless otherwise specified, the permittee must retain all records for a period of at least five (5) years from the date of the monitoring sample, measurement, report, or application and make them available to DEQ upon request. The permittee must maintain the two (2) most recent years of records onsite.

## 6.0 REPORTING REQUIREMENTS

- 6.1. **Excess Emissions** The permittee must notify DEQ of excess emissions events if the excess emission is of a nature that could endanger public health.
- a. Such notice must be provided as soon as possible, but never more than one hour after becoming aware of the problem. Notice must be made to the regional office identified in Condition 9.0 by e-mail, telephone, facsimile, or in person;
  - b. If the excess emissions occur during non-business hours, the permittee must notify DEQ by calling the Oregon Emergency Response System (OERS). The current number is 1-800-452-0311;
  - c. The permittee must also submit follow-up reports when required by DEQ.
- 6.2. **Annual Report** For each year this permit is in effect, the permittee must submit to DEQ by **February 15** two (2) copies of the following information for the previous calendar year:



- a. Annual process or production parameters as shown in Condition 12.0;
  - b. Actual emissions calculated according to Condition 4.1 by summing the emissions for each month of the reporting period by pollutant, and comparing the resulting totals to the annual PSEs listed in Condition 3.1;
  - c. Records of all planned and unplanned excess emissions events;
  - d. Summary of complaints relating to air quality received by permittee during the year;
  - e. List permanent changes made in plant process, production levels, and pollution control equipment which affected air contaminant emissions;
  - f. List of major maintenance performed on pollution control equipment.
- 6.3. Greenhouse Gas Registration and Reporting** If the calendar year emission rate of greenhouse gases (CO<sub>2</sub>e) is greater than or equal to 2,756 tons (2,500 metric tons), the permittee must register and report its greenhouse gas emissions with DEQ in accordance with OAR 340-215.
- 6.4. Notice of Change of Ownership or Company Name** The permittee must notify DEQ in writing using a Departmental “Transfer Application Form” within 60 days after the following:
- a. Legal change of the name of the company as registered with the Corporations Division of the State of Oregon; or
  - b. Sale or exchange of the activity or facility.
- 6.5. Construction or Modification Notices** The permittee must notify DEQ in writing using a Departmental “Notice of Intent to Construct Form,” or other permit application form and obtain approval in accordance with OAR 340-210-0205 through 340-210-0250 before:
- a. Constructing, installing, or establishing a new stationary source that will cause an increase in any regulated pollutant emissions;
  - b. Making any physical change or change in operation of an existing stationary source that will cause an increase, on an hourly basis at full production, in any regulated pollutant emissions; or
  - c. Constructing or modifying any air pollution control equipment.

## 7.0 ADMINISTRATIVE REQUIREMENTS

- 7.1. **Permit Renewal Application** The permittee must submit the completed application package for renewal of this permit by December 1, 2023. The permittee must submit two (2) copies of the application to the DEQ Permit Coordinator listed in Condition 9.0.
- 7.2. **Permit Modifications** The permittee must submit an application for a modification of this permit not less than **60** days prior to the source modification. A special activity fee must be submitted with an application for the permit modification. The fees and two (2) copies of the application must be submitted to the Business Office of DEQ.

## 8.0 FEES

- 8.1. **Annual Compliance Fee** The permittee must pay the Annual Fee specified in OAR 340-216-8020, Table 2, Part 2 for a Simple ACDP by **December 1** of each year this permit is in effect. An invoice indicating the amount, as determined by DEQ regulations, will be mailed prior to the above date. **Late fees in accordance with Part 4 of the table will be assessed as appropriate.**
- 8.2. **Change of Ownership or Company Name Fee** The permittee must pay the non-technical permit modification fee specified in OAR 340-216-8020, Table 2, Part 3(a) with an application for changing the ownership or the name of the company.
- 8.3. **Special Activity Fees** The permittee must pay the special activity fees specified in OAR 340-216-8020, Table 2, Part 3 (b through k) with an application to modify the permit.

## 9.0 DEQ CONTACTS / ADDRESSES

- 9.1. **Business Office** The permittee must submit payments for invoices, applications to modify the permit, and any other payments to DEQ's Business Office:  
Department of Environmental Quality  
Accounting / Revenue  
700 NE Multnomah St, Suite 600  
Portland, Oregon 97232

- 9.2. Permit Coordinator** The permittee must submit all Notices and applications that do not include payment to the Western Region's Permit Coordinator:  
Western Region  
4026 Fairview Industrial Drive SE  
Salem, OR 97302  
503-378-8240
- 9.3. Report Submittals** Unless otherwise notified, the permittee must submit all reports (annual reports, source test plans and reports, etc.) to DEQ's Western Region. If you know the name of the Air Quality staff member responsible for your permit, please include it.  
  
Western Region  
4026 Fairview Industrial Drive SE  
Salem, OR 97302  
503-378-8240
- 9.4. Permit Writer/Inspector** The permit writer/inspector can be reached at the following office:  
DEQ Salem  
4026 Fairview Industrial Drive SE  
Salem, OR 97302  
503-378-8240
- 9.5. Web Site** Information about air quality permits and DEQ's regulations may be obtained from the DEQ web page at [www.deq.state.or.us](http://www.deq.state.or.us)

## **10.0 GENERAL CONDITIONS AND DISCLAIMERS**

- 10.1. Permitted Activities** This permit allows the permittee to discharge air contaminants from processes and activities related to the air contaminant source(s) listed on the first page of this permit until this permit expires, is modified, or is revoked.
- 10.2. Other Regulations** In addition to the specific requirements listed in this permit, the permittee must comply with all other legal requirements enforceable by DEQ.
- 10.3. Conflicting Conditions** In any instance in which there is an apparent conflict relative to conditions in this permit, the most stringent conditions apply.
- 10.4. Masking of Emissions** The permittee must not cause or permit the installation of any device or use any means designed to mask the emissions of an air contaminant that causes or is likely to cause detriment to health, safety, or welfare of any person or otherwise violate any other regulation or requirement.
- 10.5. DEQ Access** The permittee must allow DEQ's representatives access to the plant site and pertinent records at all reasonable times for the purposes of performing inspections, surveys, collecting samples, obtaining data, reviewing and copying air contaminant emissions discharge records and

conducting all necessary functions related to this permit in accordance with ORS 468-095.

- 10.6. Permit Availability** The permittee must have a copy of the permit available at the facility at all times.
- 10.7. Open Burning** The permittee may not conduct any open burning except as allowed by OAR 340, division 264.
- 10.8. Asbestos** The permittee must comply with the asbestos abatement requirements in OAR 340, Division 248 for all activities involving asbestos-containing materials, including, but not limited to, demolition, renovation, repair, construction, and maintenance.
- 10.9. Property Rights** The issuance of this permit does not convey any property rights in either real or personal property, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of federal, state, or local laws or regulations.
- 10.10. Permit Expiration**
- a. A source may not be operated after the expiration date of the permit, unless any of the following occur prior to the expiration date of the permit:
    - i. A timely and complete application for renewal or for an Oregon Title V Operating Permit has been submitted, or
    - ii. Another type of permit (ACDP or Oregon Title V Operating Permit) has been issued authorizing operation of the source.
  - b. For a source operating under an ACDP or Oregon Title V Operating Permit, a requirement established in an earlier ACDP remains in effect notwithstanding expiration of the ACDP, unless the provision expires by its terms or unless the provision is modified or terminated according to the procedures used to establish the requirement initially.
- 10.11. Permit Termination, Revocation, or Modification** DEQ may modify or revoke this permit pursuant to OAR 340-216-0082 and 340-216-0084.

## 11.0 EMISSION FACTORS

Emissions device or activity	Pollutant	Emission Factor (EF)	EF units	EF reference
Natural Gas Usage	PM/PM <sub>10</sub> /PM <sub>2.5</sub>	2.5	lbs/MM ft <sup>3</sup>	DEQ AQ-EF05
	NO <sub>x</sub>	100		
	CO	84		
	VOC	5.5		
Baghouses	PM/PM <sub>10</sub> /PM <sub>2.5</sub>	0.01	lb/ lb	Source Engineering Estimate
Paper Coating Lines	Formaldehyde	0.22	lbs/lb used	1999 ST
	Methanol	0.021	lbs/lb used	1999 ST
	Diethylene Glycol (VOC)	0.021	lbs/lb glycol used	1999 ST

## 12.0 PROCESS/PRODUCTION RECORDS

Emissions device or activity	Process or production parameter	Frequency
Treated Paper Production	Square Feet (ft <sup>2</sup> )	Monthly & Annually
Thermofused Melamine Production	Square Feet (ft <sup>2</sup> )	Monthly & Annually
Melamine-Formaldehyde Resin Usage	Pounds (lbs)	Monthly & Annually
Urea-Formaldehyde Resin Usage	Pounds (lbs)	Monthly & Annually
Natural Gas Usage	Million Cubic Feet (MM ft <sup>3</sup> )	Monthly & Annually
Baghouses	Bone Dry Pounds Captured	Monthly & Annually
	Visual Baghouse Inspection	Annually
Paper Coating Lines*	Pounds of Formaldehyde Used	Monthly & Annually
	Pounds of Methanol Used	Monthly & Annually
	Pounds of Diethylene Glycol Used	Monthly & Annually

\*Use manufacturers SDS values for formaldehyde, methanol, and diethylene glycol content.

### 13.0 ABBREVIATIONS, ACRONYMS, AND DEFINITIONS

ACDP	Air Contaminant Discharge Permit	NSR	New Source Review
ASTM	American Society for Testing and Materials	O <sub>2</sub>	oxygen
AQMA	Air Quality Maintenance Area	OAR	Oregon Administrative Rules
calendar year	The 12-month period beginning January 1st and ending December 31 <sup>st</sup>	ORS	Oregon Revised Statutes
CFR	Code of Federal Regulations	O&M	operation and maintenance
CO	carbon monoxide	Pb	lead
CO <sub>2e</sub>	carbon dioxide equivalent	PCD	pollution control device
DEQ	Oregon Department of Environmental Quality	PM	particulate matter
dscf	dry standard cubic foot	PM <sub>10</sub>	particulate matter less than 10 microns in size
EPA	US Environmental Protection Agency	PM <sub>2.5</sub>	particulate matter less than 2.5 microns in size
FCAA	Federal Clean Air Act	ppm	part per million
Gal	gallon(s)	PSD	Prevention of Significant Deterioration
GHG	greenhouse gas	PSEL	Plant Site Emission Limit
gr/dscf	grains per dry standard cubic foot	PTE	Potential to Emit
HAP	Hazardous Air Pollutant as defined by OAR 340-244-0040	RACT	Reasonably Available Control Technology
I&M	inspection and maintenance	scf	standard cubic foot
lb	pound(s)	SER	Significant Emission Rate
MMBtu	million British thermal units	SIC	Standard Industrial Code
NA	not applicable	SIP	State Implementation Plan
NESHAP	National Emissions Standards for Hazardous Air Pollutants	SO <sub>2</sub>	sulfur dioxide
NO <sub>x</sub>	nitrogen oxides	Special Control Area	as defined in OAR 340-204-0070
NSPS	New Source Performance Standard	VE	visible emissions
		VOC	volatile organic compound
		year	A period consisting of any 12-consecutive calendar months



State of Oregon  
Department of  
Environmental  
Quality

## SIMPLE AIR CONTAMINANT DISCHARGE PERMIT REVIEW REPORT

Department of Environmental Quality  
Western Region

### Source Information:

SIC	2499
NAICS	321999

Source Categories	Table 1 Part B #85
Public Notice Category	II

### Compliance and Emissions Monitoring Requirements:

FCE	
Compliance schedule	
Unassigned emissions	
Emission credits	
Special Conditions	

Source test [date(s)]	
COMS	
CEMS	
PEMS	
Ambient monitoring	

### Reporting Requirements

Annual report (due date)	February 15
Quarterly report (due dates)	

Monthly report (due dates)	
Excess emissions report	
Other (specify)	

### Air Programs

Synthetic Minor (SM)	
SM -80	
NSPS (list subparts)	
NESHAP (list subparts)	
Part 68 Risk Management	

CFC	
NSR	
PSD	
RACT	
TACT	
Other (specify)	



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## **PERMITTING**

### PERMITTEE IDENTIFICATION

1. Arauco North America – Durflake, is located at 3030 Calapooia Street SW, in Albany, Oregon.

### PERMITTING ACTION

2. The proposed permit is a renewal of an existing Air Contaminant Discharge Permit (ACDP) that was issued on 10/26/2012 and was originally scheduled to expire on 11/01/2017. The existing ACDP remains in effect until the proposed permit is issued because the permittee submitted a timely and complete application for renewal.

### OTHER PERMITS

3. Other permits issued or required by the DEQ for this source include the following water quality permits: Stormwater discharge Permit 1200-Z; Non-contact cooling water permit 100-J.

### ATTAINMENT STATUS

4. The source is located in an attainment area for all pollutants.
5. The source is not located within 10 kilometers of any Class I Air Quality Protection Areas.

## **SOURCE DESCRIPTION**

### OVERVIEW

6. The permittee operates a composite wood overlaying facility, where paper is saturated with either Melamine-Formaldehyde resin and/or Urea-Formaldehyde resin. The resin-saturated paper is then either thermally fused to composite wood substrates via hot presses, or the saturated paper is dried and sold by the roll. The facility was built in 1988 and was significantly expanded in 1997.
7. There have been no reported equipment or process changes to this facility that have caused a net increase in plant-wide air emissions.

### PROCESS AND CONTROL DEVICES

8. Existing air contaminant sources at the facility consist of the following:
  - a. Three natural gas-fired hot oil heaters with the following heat input capacities: 7.8 MM Btu/hr (American); 9.8 MM Btu/hr (Konus); 2.32 MM Btu/hr (HTT). Two were installed in 1988 and one in 1997. All three devices have no installed air controls;

- b. Two Carter-Day baghouses, controlling paper trim emissions from the two presses; installed in 1990 and 1997. The two hot presses are manufactured by SCM and Hymmen. SCM will be placed out of service sometime during 2019.
- c. Two paper coating lines and drying ovens (VITS and Tocchio); installed in 1988 and 1997. Air emissions from the drying ovens are vented through a 75 foot stack;
- d. One MITM Corp model HG-3004-1203 natural gas fired pressure washer with a heat input capacity of 0.4 MM Btu/hr. This unit was installed November 2010, and is considered a categorically insignificant activity.
- e. One Rheem-Rudd model G100-200 natural gas fired process water heater with a 0.4 MM Btu/hr heat input capacity. This unit was installed in 1999, and is considered a categorically insignificant activity.
- f. Fugitive emissions from materials handling and vehicular traffic;

#### CONTINUOUS MONITORING DEVICES

- 9. The facility has the following continuous monitoring devices:
  - a. Natural gas usage for all natural gas-fired equipment.

#### **COMPLIANCE**

- 10. The facility was last inspected on 5/18/2016 and found to be in compliance with permit conditions.
- 11. During the prior permit period there were no complaints recorded for this facility.
- 12. No enforcement actions have been taken against this source since the last permit renewal.

## EMISSIONS

### 13. Proposed PSEL information:

Pollutant	Baseline Emission Rate (tons/yr)	Netting Basis		Plant Site Emission Limits (PSEL)		
		Previous (tons/yr)	Proposed (tons/yr)	Previous PSEL (tons/yr)	Proposed PSEL (tons/yr)	PSEL Increase (tons/yr)
PM	0.0	0.0	0.0	24	24	0.0
PM <sub>10</sub>	0.0	0.0	0.0	14	14	0.0
PM <sub>2.5</sub>	0.0	0.0	0.0	9	9	0.0
NO <sub>x</sub>	0.0	0.0	0.0	39	39	0.0
CO	0.0	0.0	0.0	99	99	0.0
VOC	0.0	0.0	0.0	39	39	0.0
Single HAP	0.0	0.0	0.0	9	9	0.0
Combined HAP	0.0	0.0	0.0	24	24	0.0
GHG (CO <sub>2</sub> e)	0.0	0.0	0.0	74,000	74,000	0.0

- a. A baseline emission rate has not been set for this facility, since it was built in 1988. Baseline emission rates were established for sources operating previous to, and including, the years of 1977-1978.
- b. The previous PSEL is the PSEL in the last permit.
- c. See the detailed emissions calculations in the Appendix of this review report.
- d. The PSEL is a federally enforceable limit on the potential to emit.
- e. For Simple ACDPs, the proposed PSELs for all pollutants are equal to the Generic PSEL in accordance with OAR 340-216-0064(3)(b).
- f. The netting basis is zero for Simple ACDPs in accordance with OAR 340-222-0040(3).
- g. The facilities' potential to emit SO<sub>2</sub> is less than the de minimis level in OAR 340-0200-0020, Table 4, thus this pollutant is not included in the PSEL.

### SIGNIFICANT EMISSION RATE ANALYSIS

14. For each pollutant, the proposed Plant Site Emission Limit (PSEL) is less than the Netting Basis plus the significant emission rate, thus no further air quality analysis is required.

## TITLE V MAJOR SOURCE APPLICABILITY

15. A major source is a facility that has the potential to emit 100 tons/yr or more of any criteria pollutant or 10 tons/yr or more of any single HAP or 25 tons/yr or more of combined HAPs. This facility is not a major source of emissions. The basis for this determination is found in the Appendix of this Review Report.

16. A source that has the potential to emit at the major source levels but accepts a PSEL below major source levels is called a synthetic minor (SM). This source does not have the potential to emit at major source levels. Therefore, this source is not a synthetic minor. The basis for this determination is found in the Appendix of this Review Report.
17. A source that has the potential to emit at major source levels, has permit limits below major source levels, and actual emissions are at least 80% of major source thresholds is called a synthetic minor 80 (SM-80). The source does not have the potential to emit at major source levels nor does it have actual emissions of at least 80% of the major source level. The basis for this determination is found in the Appendix of this Review Report.
18. A source that has the potential to emit less than major source thresholds is called a true minor. This source is a true minor. The basis for this determination can be found in the Appendix of this Review Report.

### CRITERIA POLLUTANTS

19. This facility is not a major source of criteria pollutant emissions.

### HAZARDOUS AIR POLLUTANTS

20. A major source is a facility that has the potential to emit 10 tons/yr or more of any single HAP or 25 tons/yr or more of combined HAPs. This source is not a major source of HAP. The HAP emissions detail is provided in the Appendix of this Review Report. Provided below is a summary of the HAP emissions.

Hazardous Air Pollutant	Potential to Emit (tons/year)
Formaldehyde	7.71
Methanol	0.64
All other HAPs	0.186
Total	8.54

## **ADDITIONAL REQUIREMENTS**

### NSPS APPLICABILITY

21. There are no sources at this facility for which NSPS standards have been promulgated.

NESHAPS/MACT APPLICABILITY

22. There are no sources at this facility for which NESHAPS/MACT standards have been promulgated. The gas-fired water heater meets the specific definition of hot water heater in 40 CFR 63.11237 and is exempt from the area source NESHAP for boilers per 40 CFR.11195(f).

RACT APPLICABILITY

23. The RACT rules are not applicable to this source because it is not in the Portland AQMA, Medford AQMA, or Salem SKATS.

**SOURCE TESTING**PRIOR TESTING RESULTS

24. The results of the most recent source tests are listed below:

Emission Device	Test Date	Production Rate	Pollutant	Measured Value
Combined Paper Treater Exhaust	5/13/1999	89 lb/Mft <sup>2</sup> liquid resin applied 87 Mft <sup>2</sup> paper treated 2,407 lbs liquid resin applied 154 lbs total glycols applied 2.2 lbs methanol applied	Formaldehyde	0.22 lbs emitted/lb applied
			Methanol	0.02 lbs emitted/lb applied
			VOC	0.0208 lbs glycol applied

**PUBLIC NOTICE**

25. Pursuant to OAR 340-216-0064(3)(a), issuance of Simple Air Contaminant Discharge Permits require public notice in accordance with OAR 340-209-0030(3)(b), which requires DEQ to provide notice of the proposed permit action and a minimum of 30 days for interested persons to submit written comments. **The public notice was emailed/mailed on May 22, 2019 and the comment period will end on June 28, 2019.**

MAA:wk

## APPENDIX

### Maximum Projected Emissions

NG-Fired Hot Oil Heaters and Hot Press Baghouses						
Emissions Unit	Pollutant	Annual Production Rate	Emission Factors		Emissions (ton/yr)	
			Rate	Reference		
Natural Gas Combustion	PM	204.6 MM ft <sup>3</sup>	2.5	lb/MM ft <sup>3</sup>	DEQ AQ-EF05	0.26
	PM <sub>10</sub>		2.5			0.26
	PM <sub>2.5</sub>		2.5			0.26
	SO <sub>2</sub>		1.7			0.17
	NO <sub>x</sub>		100			10.23
	CO		84			8.59
	VOC		5.5			0.56
Baghouses	PM	336 BDT	0.01	lb/lb	Source Engineering Estimate	3.36
	PM <sub>10</sub>					3.36
	PM <sub>2.5</sub>					3.36

**Note:** Baghouses capture router dust from the laminating lines. This dust consists of particle board and laminated paper. Approximately 1/16 inch bevel is routed from each top edge.

Maximum Projected Emissions

Paper Coating Lines					
Pollutant	Emission Factor from 1999 Stack Testing	Type of Resin/Chemical*	Quantity of Resin/Chemical	Total Pollutant Emitted	
<b>HAP Formaldehyde</b>	0.22 $\frac{\text{lbs Formaldehyde Emissions}}{\text{lbs Formaldehyde Input}}$	Melamine Resin	13,080,000 lbs	1,726.6 lbs	<b>7.7 tons</b>
		Urea Resin	12,727,631 lbs**	13,720.4 lbs	
<b>HAP Methanol</b>	0.02 $\frac{\text{lbs Methanol Emissions}}{\text{lbs Methanol Input}}$	Melamine Resin	13,080,000 lbs	507.5 lbs	<b>0.6 tons</b>
		Urea Resin	12,727,631 lbs**	763.7 lbs	
<b>VOC Diethylene Glycol</b>	0.0208 $\frac{\text{lbs VOC Emissions}}{\text{lbs Glycol Input}}$	Melamine Resin	13,080,000 lbs	11,293.4 lbs	<b>17.5 tons</b>
		Urea Resin	12,727,631 lbs**	5,061.7 lbs	
		DEG	822,683 lbs**	17,111.8 lbs	
		Catalyst #1 (Melamine Resin)	150,000 lbs	468.0 lbs	
		Catalyst #2 (Urea Resin)	261,096 lbs**	1,048.1 lbs	

\*Melamine resin contains 0.06% Formaldehyde; Urea resin contains 0.49%. Melamine resin contains 0.194% Methanol; Urea resin contains 0.3%.

Diethylene Glycol content:

CHEMICAL	PRE-2005	2005 +
Melamine Resin	4.15%	4.15%
Urea Resin	1.91%	1.91%
DEG	100%	100%
Catalyst #1	15%	0%
Catalyst #2	19.3%	0%

\*\*Values derived by proportions based on averaged values from production years 2000 through 2017.



## Maximum Projected Emissions

<b>HAP Emissions - Natural Gas Combustion</b>				
<b>Pollutant</b>	<b>CAS No.</b>	<b>Emission Factor (lb/MMBtu)</b>	<b>N.G. Usage (MMft<sup>3</sup>)</b>	<b>Emissions (tons/yr)</b>
2-Methylnaphthalene	91-57-6	2.40E-05	204.6	2.46E-06
3-Methylchloranthrene	56-49-5	1.80E-06	204.6	1.84E-07
7,12-Dimethylbenzene(a)anthracene		1.60E-05	204.6	1.64E-06
Acenaphthene	83-32-9	1.80E-06	204.6	1.84E-07
Acenaphthylene	203-96-8	1.80E-06	204.6	1.84E-07
Anthracene	120-12-7	2.40E-03	204.6	2.46E-04
Benz(a)anthracene	56-55-3	1.80E-06	204.6	1.84E-07
Benzene	71432	2.1E-03	204.6	2.15E-04
Benzo(a)pyrene	50328	1.2E-06	204.6	1.23E-07
Benzo(b)fluoranthene	205-99-2	1.80E-06	204.6	1.84E-07
Benzo(g,h,i)perylene	191-24-2	1.20E-06	204.6	1.23E-07
Benzo(k)fluoranthene	207-08-9	1.80E-06	204.6	1.84E-07
Chrysene	218-01-9	1.80E-06	204.6	1.84E-07
Dibenzo(a,h)anthracene	53-70-3	1.20E-06	204.6	1.23E-07
Dichlorobenzene	25321-22-6	1.20E-03	204.6	1.23E-04
Fluoranthene	206-44-0	3.00E-06	204.6	3.07E-07
Fluorene	86-73-7	2.80E-06	204.6	2.86E-07
Formaldehyde	50-00-0	7.50E-02	204.6	7.67E-03
Hexane	110-54-3	1.80E+00	204.6	1.84E-01
Indeno(1,2,3-cd)pyrene	193-39-5	1.80E-06	204.6	1.84E-07
Naphthalene	91-20-3	6.10E-04	204.6	6.24E-05
Phenanthrene	85-01-8	1.70E-05	204.6	1.74E-06
Pyrene	129-00-0	5.00E-06	204.6	5.12E-07
Arsenic	7440-38-2	2.0E-04	204.6	2.05E-05
Beryllium	7440-41-7	1.2E-05	204.6	1.23E-06
Cadmium	7440-43-9	1.1E-03	204.6	1.13E-04
Chromium	7440-47-3	1.4E-03	204.6	1.43E-04
Cobalt	7440-48-4	8.4E-05	204.6	8.59E-06
Manganese	7439-96-5	3.8E-04	204.6	3.89E-05
Mercury	7439-97-6	2.6E-04	204.6	2.66E-05
Nickel	7440-02-0	2.1E-03	204.6	2.15E-04
Selenium	7782-49-2	2.4E-05	204.6	2.46E-06
Toluene	108-88-3	3.4E-03	204.6	3.48E-04
<b>Total</b>		<b>1.9E+00</b>		<b>0.19</b>

Emission factors taken from AP-42 Chapter 1, Table 1.4-3.

## Greenhouse Gas Emissions (GHG) Calculations

### GHG Equation:

$$\text{GHG Emission Rate (tons/yr)} = [\text{Fuel Usage}^{(1)}] \times [\text{HHV}^{(2)}] \times [\text{EF}^{(3)}] \times [\text{CF}^{(4)}] \times [\text{CF}^{(5)}] \times [\text{GWP}^{(6)}]$$

- (1) in cubic feet per year
- (2) HHV = High Heat Value (MMBtu/ft<sup>3</sup>)
- (3) EF = Emission Factor (kg GHG/MM Btu)
- (4) CF (Conversion Factor - kg to metric tons) = 0.001
- (5) CF (Conversion Factor – metric tons to tons) = 1.1025
- (6) GWP = Global Warming Potential

### Constants:

NG HHV	=	1.028 x 10 <sup>-3</sup> MMBtu/ft <sup>3</sup>
1 Metric Ton	=	1000 kg = 2205 lb = 1.1025 ton
EF for CO <sub>2</sub>	=	53.02 kg CO <sub>2</sub> /MMBtu
EF for CH <sub>4</sub>	=	1.0 x 10 <sup>-3</sup> kg CH <sub>4</sub> /MMBtu
EF for N <sub>2</sub> O	=	1.0 x 10 <sup>-4</sup> kg N <sub>2</sub> O/MMBtu
GWP CH <sub>4</sub>	=	21
GWP N <sub>2</sub> O	=	310

### Thermal Oil Boiler (NG-Fired)

$$\text{Fuel Usage} = 204.6 \text{ MMft}^3 \text{ NG/yr}$$

### GHG Emission Rates

CO <sub>2</sub>	=	11,152 tons mtCO <sub>2e</sub> /yr
CH <sub>4</sub>	=	4 tons mtCO <sub>2e</sub> /yr
N <sub>2</sub> O	=	7 tons mtCO <sub>2e</sub> /yr

$$\text{Total GHG} = 12,305^* \text{ tons CO}_{2e}/\text{yr}$$

\*Rounded to nearest 10 tons