



Oregon

Kate Brown, Governor

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Sent via email only

March 1, 2022

Stimson Lumber Company
49800 SW Scoggins Valley Rd
Gaston, OR 97119-9132

Steven Petrin,

DEQ received the submittal of the Cleaner Air Oregon (CAO) Emissions Inventory (Inventory) for the Stimson Lumber Mill (Stimson Lumber) in Gaston, OR on April 23, 2021 and has completed an initial review.

In accordance with Oregon Administrative Rule (OAR) 340-245-0030(2), DEQ has determined that the following additional information, corrections, and updates are required by April 18, 2022 in order to approve the Inventory:

1. Provide a current detailed process flow diagram (PFD) showing all emissions producing activities, which includes expected points of release for all fugitive and non-fugitive emissions, as well as all air pollution control devices.
2. All Toxic Emissions Units (TEUs) must be included in the Inventory. If Toxic Air Contaminants (TACs) are not likely to be emitted from a TEU, justification must be provided for exemption per [OAR 340-245-0060\(3\)\(a\)](#). Please revise the Inventory to include TAC emissions from activities where emission factors are available from wood product facilities – for example, chipping, sawing and sanding activities at hardboard, medium density fiberboard, and/or particleboard facilities. For these processes, provide justification for use of the selected emission factors.
3. Revise the Inventory to include fugitive emissions associated with hardboard production, including but not limited to the following process units:
 - a. Refiners (#1, #2, and #4);
 - b. Machine (mix) chest;
 - c. Header boxes;
 - d. Forming machine; and
 - e. Wax and resin tanks.
4. Provide a narrative description of any changes to the hardboard production process, vent configurations, fugitive emissions points, and magnitude of fugitive emissions relative to total emissions since the completion of the source testing performed on the refiners and forming line in July, 2007.
5. Update the PRESS TEU emissions to include acetone (CAS Number 67-64-1) and acetaldehyde (CAS Number 75-07-0), using the emission factors from AP-42, Chapter 10.6.4, Table 10.6.4-6 (2002).
6. For the REFINER and FORMER TEU emissions:

- a. Include emissions for acetone (CAS Number 67-64-1) from both units, using the emission factors from AP-42, Chapter 10.6.4, Table 10.6.4-9 (2002); and
 - b. Provide calculations showing the development of emission factors from the 2007 Source Test results.
7. Make the following updates to calculations and documentation for the FDRYER TEU:
 - a. Update fuel dryer maximum hourly throughput to 7.2 oven-dried tons (ODT) for consistency with the standard definition of one “unit” of bone dry wood chips (2,400 pounds)¹ and the capacity of 6 units per hour. Alternatively, provide quantitative documentation substantiating the maximum hourly throughput assumption of 6 ODT.
 - b. Review available NCASI emission factors for rotary fuel dryers and provide justification and reference material for the FDRYER emission factor set selected. Alternatively, select the highest rotary fuel dryer emission factor listed in the NCASI database for a conservative estimate of emissions for each TAC.
8. Make the following updates to calculations and documentation for the BLR_ESP and BLR_SCR TEUs:
 - a. Update the boiler emission factors to the most recent available NCASI emission factors for wood-fired boilers, and cite original source of the emission factors (NCASI Technical Bulletin or database name and date). Alternatively, if Stimson Lumber is aware of more applicable emission factors for the boilers in use at this facility, provide these emission factors, references, and justification for their use.
 - b. Update ‘Fuel Heat Input to Steam Output Ratio’ to 2.06, for consistency with the most recent set of source test data.
9. Update the KILN_DF and KILN_HL emission factors to match those in AQ-EF09 (<https://www.oregon.gov/deq/FilterPermitsDocs/AQ-EF09.pdf>).
10. Provide current Safety Data Sheets (SDSs) and include emissions for all TAC-containing materials used or requested to be used in the future, including but not limited to:
 - a. Mycostat P50 + Diamulse T;
 - b. Akzo Nobel 621-C020-232 (topcoat);
 - c. Akzo Nobel 631-W020-1601 (basecoat);
 - d. Amres HP-100E Wet Strength Resin;
 - e. Amres AntiBlu IP-75; and
 - f. Amres AntiBlu XP-64.
11. Update ‘Actual’ activity levels provided in the Inventory to be consistent with production values listed in the 2019 Annual Report for the following TEUs:
 - a. BLR_ESP;
 - b. BLR_SCR;
 - c. KILN_DF;
 - d. KILN_HL;
 - e. RF12;
 - f. FORMER;
 - g. PL_BASE (basecoat); and
 - h. MB_P51.
12. Provide the following documentation to support the WASTEWATER emissions estimate:
 - a. Native WATER9 model input file;
 - b. Laboratory data or other justification for influent TAC concentrations used;

¹ University of California Agriculture and Natural Resources, Woody Biomass Utilization InfoGuide IG003, “Woody Biomass Definitions and Conversion Factors”, https://ucanr.edu/sites/WoodyBiomass/newsletters/IG003_-_Woody_Biomass_Definitions_and_Conversions_Factors31510.pdf

- c. Laboratory data or other justification for biomass concentrations used;
 - d. A figure showing locations of the units included in WATER9 and the influent sampling point;
 - e. Methods used to determine throughput data (2019 and potential, annual and maximum flows); and
 - f. Update sludge pit emissions in the Inventory to match WATER9 output.
13. Complete and submit the attached form, "Categorically Exempt Toxics Emissions Units" (AQ523).
 14. Revise the Inventory to include emission estimates for any TEUs associated with categorically insignificant activities which are not exempt TEUs per OAR 340-245-0060(3)(b). For convenience, the attached Categorically Insignificant Activities form (ED601) has been edited to highlight the activities which are considered categorically insignificant but are not exempt from CAO reporting.
 15. Submit a revised Emission Inventory form (AQ520).

DEQ is requesting that you submit additional information to complete your Emission Inventory. If you think that any of that information is confidential, trade secret or otherwise exempt from disclosure, in whole or in part, you must comply with the requirements in OAR 340-214-0130 to identify this information. This includes clearly marking each page of the writing with a request for exemption from disclosure and stating the specific statutory provision under which you claim exemption. Emissions data is not exempt from disclosure.

DEQ remains available to discuss the information request with you and answer any questions you may have. Failure to provide additional information, corrections, or updates to DEQ by the deadlines above may result in a violation of OAR 340-245-0030(1).

If you have any questions regarding this letter please contact me directly at (503-866-9643, Julia.degagne@deq.oregon.gov), and I look forward to your continued assistance with this process.

Sincerely,



Julia DeGagné
Air Toxics Project Manager

Cc: Brian Bartlett, Stimson Lumber Company
Andrew Rogers, Maul Foster and Alongi
Patty Jacobs, DEQ
Matt Davis, DEQ
Melissa Hovey, DEQ
JR Giska, DEQ
Keith Johnson, DEQ
File

Enclosures: (2) ED601 form (highlighted) and AQ523 form



Title V Operation Permit Program
CATEGORICALLY INSIGNIFICANT ACTIVITIES

FORM ED601
Answer Sheet

Facility name: _____ Permit Number: _____

Indicate which of the following categorically insignificant activities are present at the facility by placing an "X" in the "Yes" or "No" column.

Yes	No	Type of activity	Categorically Insignificant Activities
<input type="checkbox"/>	<input type="checkbox"/>		Constituents of a chemical mixture present at less than 1 percent by weight of any chemical or compound regulated under divisions 200 through 268 excluding divisions 248 and 262 of this chapter, or less than 0.1 percent by weight of any carcinogen listed in the U.S. Department of Health and Human Service's Annual Report on Carcinogens when usage of the chemical mixture is less than 100,000 pounds/year
<input type="checkbox"/>	<input type="checkbox"/>		Evaporative and tail pipe emissions from on-site motor vehicle operation
<input type="checkbox"/>	<input type="checkbox"/>		Distillate oil, kerosene, gasoline, natural gas or propane burning equipment, provided the aggregate expected actual emissions of the equipment identified as categorically insignificant do not exceed the de minimis level for any regulated pollutant, based on the expected maximum annual operation of the equipment. If a source's expected emissions from all such equipment exceed the de minimis levels, then the source may identify a subgroup of such equipment as categorically insignificant with the remainder not categorically insignificant. The following equipment may never be included as categorically insignificant: A. Any individual distillate oil, kerosene or gasoline burning equipment with a rating greater than 0.4 million Btu/hour; B. Any individual natural gas or propane burning equipment with a rating greater than 2.0 million Btu/hour
<input type="checkbox"/>	<input type="checkbox"/>		Distillate oil, kerosene, gasoline, natural gas or propane burning equipment brought on site for six months or less for maintenance, construction or similar purposes, such as but not limited to generators, pumps, hot water pressure washers and space heaters, provided that any such equipment that performs the same function as the permanent equipment, must be operated within the source's existing PSEL
<input type="checkbox"/>	<input type="checkbox"/>		Office activities
<input type="checkbox"/>	<input type="checkbox"/>		Food service activities
<input type="checkbox"/>	<input type="checkbox"/>		Janitorial activities
<input type="checkbox"/>	<input type="checkbox"/>		Personal care activities
<input type="checkbox"/>	<input type="checkbox"/>		Grounds keeping activities, including, but not limited to building painting and road and parking lot maintenance
<input type="checkbox"/>	<input type="checkbox"/>		On-site laundry activities
<input type="checkbox"/>	<input type="checkbox"/>		On-site recreation facilities
<input type="checkbox"/>	<input type="checkbox"/>		Instrument calibration
<input type="checkbox"/>	<input type="checkbox"/>		Maintenance and repair shop
<input type="checkbox"/>	<input type="checkbox"/>		Automotive repair shops or storage garages;
<input type="checkbox"/>	<input type="checkbox"/>		Air cooling or ventilating equipment not designed to remove air contaminants generated by or released from associated equipment
<input type="checkbox"/>	<input type="checkbox"/>		Refrigeration systems with less than 50 pounds of charge of ozone depleting substances regulated under Title VI, including pressure tanks used in refrigeration systems but excluding any combustion equipment associated with such systems
<input type="checkbox"/>	<input type="checkbox"/>		Bench scale laboratory equipment and laboratory equipment used exclusively for chemical and physical analysis, including associated vacuum producing devices but excluding research and development facilities



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FORM ED601
Answer Sheet

Yes	No	Type of activity
<input type="checkbox"/>	<input type="checkbox"/>	Temporary construction activities
<input type="checkbox"/>	<input type="checkbox"/>	Warehouse activities
<input type="checkbox"/>	<input type="checkbox"/>	Accidental fires
<input type="checkbox"/>	<input type="checkbox"/>	Air vents from air compressors
<input type="checkbox"/>	<input type="checkbox"/>	Air purification systems
<input type="checkbox"/>	<input type="checkbox"/>	Continuous emissions monitoring vent lines
<input type="checkbox"/>	<input type="checkbox"/>	Demineralized water tanks
<input type="checkbox"/>	<input type="checkbox"/>	Pre-treatment of municipal water, including use of deionized water purification systems
<input type="checkbox"/>	<input type="checkbox"/>	Electrical charging stations
<input type="checkbox"/>	<input type="checkbox"/>	Fire brigade training
<input type="checkbox"/>	<input type="checkbox"/>	Instrument air dryers and distribution
<input type="checkbox"/>	<input type="checkbox"/>	Process raw water filtration systems
<input type="checkbox"/>	<input type="checkbox"/>	Pharmaceutical packaging
<input type="checkbox"/>	<input type="checkbox"/>	Fire suppression
<input type="checkbox"/>	<input type="checkbox"/>	Blueprint making
<input type="checkbox"/>	<input type="checkbox"/>	Routine maintenance, repair, and replacement such as anticipated activities most often associated with and performed during regularly scheduled equipment outages to maintain a plant and its equipment in good operating condition, including but not limited to steam cleaning, abrasive use, and woodworking
<input type="checkbox"/>	<input type="checkbox"/>	Electric motors
<input type="checkbox"/>	<input type="checkbox"/>	Storage tanks, reservoirs, transfer and lubricating equipment used for ASTM grade distillate or residual fuels, lubricants, and hydraulic fluids
<input type="checkbox"/>	<input type="checkbox"/>	On-site storage tanks not subject to any New Source Performance Standard (NSPS), including underground storage tanks (UST), storing gasoline or diesel used exclusively for fueling of the facility's fleet of vehicles
<input type="checkbox"/>	<input type="checkbox"/>	Natural gas, propane, and liquefied petroleum gas (LPG) storage tanks and transfer equipment
<input type="checkbox"/>	<input type="checkbox"/>	Pressurized tanks containing gaseous compounds
<input type="checkbox"/>	<input type="checkbox"/>	Vacuum sheet stacker vents
<input type="checkbox"/>	<input type="checkbox"/>	Emissions from wastewater discharges to publicly owned treatment works (POTW) provided the source is authorized to discharge to the POTW, not including on-site wastewater treatment and/or holding facilities
<input type="checkbox"/>	<input type="checkbox"/>	Log ponds
<input type="checkbox"/>	<input type="checkbox"/>	Storm water settling basins
<input type="checkbox"/>	<input type="checkbox"/>	Fire suppression and training
<input type="checkbox"/>	<input type="checkbox"/>	Paved roads and paved parking lots within an urban growth boundary
<input type="checkbox"/>	<input type="checkbox"/>	Hazardous air pollutant emissions in fugitive dust from paved and unpaved roads except for those sources that have processes or activities that contribute to the deposition and entrainment of hazardous air pollutants from surface soils
<input type="checkbox"/>	<input type="checkbox"/>	Health, safety, and emergency response activities



Title V Operation Permit Program
CATEGORICALLY INSIGNIFICANT ACTIVITIES

FORM ED601
Answer Sheet

Yes	No	Type of activity
<input type="checkbox"/>	<input type="checkbox"/>	Emergency generators and pumps used only during loss of primary equipment or utility service due to circumstances beyond the reasonable control of the owner or operator, or to address a power emergency, provided that the aggregate horsepower rating of all stationary emergency generator and pump engines is not more than 3,000 horsepower. If the aggregate horsepower rating of all stationary emergency generator and pump engines is more than 3,000 horsepower, then no emergency generators and pumps at the source may be considered categorically insignificant
<input type="checkbox"/>	<input type="checkbox"/>	Non-contact steam vents and leaks and safety and relief valves for boiler steam distribution systems
<input type="checkbox"/>	<input type="checkbox"/>	Non-contact steam condensate flash tanks
<input type="checkbox"/>	<input type="checkbox"/>	Non-contact steam vents on condensate receivers, deaerators and similar equipment
<input type="checkbox"/>	<input type="checkbox"/>	Boiler blow down tanks
<input type="checkbox"/>	<input type="checkbox"/>	Industrial cooling towers that do not use chromium-based water treatment chemicals
<input type="checkbox"/>	<input type="checkbox"/>	Ash piles maintained in a wetted condition and associated handling systems and activities
<input type="checkbox"/>	<input type="checkbox"/>	Uncontrolled oil/water separators in effluent treatment systems, excluding systems with a throughput of more than 400,000 gallons per year of effluent located at the following sources: A. Petroleum refineries; B. Sources that perform petroleum refining and re-refining of lubricating oils and greases including asphalt production by distillation and the reprocessing of oils and/or solvents for fuels; or C. Bulk gasoline plants, bulk gasoline terminals, and pipeline facilities
<input type="checkbox"/>	<input type="checkbox"/>	Combustion source flame safety purging on startup
<input type="checkbox"/>	<input type="checkbox"/>	Broke beaters, pulp and repulping tanks, stock chests and pulp handling equipment, excluding thickening equipment and repulpers
<input type="checkbox"/>	<input type="checkbox"/>	Stock cleaning and pressurized pulp washing, excluding open stock washing systems
<input type="checkbox"/>	<input type="checkbox"/>	White water storage tanks



CATEGORICALLY EXEMPT TOXICS EMISSIONS UNITS

ANSWER SHEET

Facility name: _____ Permit Number: _____

Indicate which of the following categorically exempt activities occur at this facility by checking the appropriate columns below. Submit this form electronically with your Cleaner Air Oregon (CAO) Emissions Inventory AQ520 form to meet the reporting requirements in [OAR 340-245-0040\(4\)\(a\)\(A\)](#) for categorically exempt Toxics Emissions Units (TEUs). This form is the complete list of categorically exempt TEUs, which can be found in the division 245 rules under [OAR 340-245-0060\(3\)\(b\)](#).

Yes	No	Categorically Exempt TEU Activities
<input type="checkbox"/>	<input type="checkbox"/>	Evaporative and tail pipe emissions from on-site motor vehicle operation.
<input type="checkbox"/>	<input type="checkbox"/>	Distillate oil, kerosene, gasoline, natural gas or propane burning equipment, provided the aggregate expected actual emissions of the equipment identified does not exceed the de minimis level for any regulated pollutant, based on the expected maximum annual operation of the equipment. If a source's expected emissions from all such equipment exceed the de minimis levels, then the source may identify a subgroup of such equipment as categorically exempt with the remainder not designated as an exempt TEU. The following equipment may never be included as part of the exempt TEU: A. Any individual distillate oil, kerosene or gasoline burning equipment with a rating greater than 0.4 million Btu/hour; and B. Any individual natural gas or propane burning equipment with a rating greater than 2.0 million Btu/hour.
<input type="checkbox"/>	<input type="checkbox"/>	Distillate oil, kerosene, gasoline, natural gas or propane burning equipment brought on site for six months or less for maintenance, construction or similar purposes, such as but not limited to generators, pumps, hot water pressure washers and space heaters, provided that any such equipment that performs the same function as the permanent equipment, must be operated within the source's existing PSEL.
<input type="checkbox"/>	<input type="checkbox"/>	Office activities.
<input type="checkbox"/>	<input type="checkbox"/>	Food service activities.
<input type="checkbox"/>	<input type="checkbox"/>	Janitorial activities.
<input type="checkbox"/>	<input type="checkbox"/>	Personal care activities.
<input type="checkbox"/>	<input type="checkbox"/>	Grounds keeping activities, including, but not limited to building painting and road and parking lot maintenance.
<input type="checkbox"/>	<input type="checkbox"/>	On-site laundry activities.
<input type="checkbox"/>	<input type="checkbox"/>	On-site recreation facilities.
<input type="checkbox"/>	<input type="checkbox"/>	Instrument calibration.
<input type="checkbox"/>	<input type="checkbox"/>	Automotive storage garages.

<input type="checkbox"/>	<input type="checkbox"/>	Refrigeration systems with less than 50 pounds of charge of ozone depleting substances regulated under Title VI, including pressure tanks used in refrigeration systems but excluding any combustion equipment associated with such systems.
<input type="checkbox"/>	<input type="checkbox"/>	Temporary construction activities.
<input type="checkbox"/>	<input type="checkbox"/>	Warehouse activities.
<input type="checkbox"/>	<input type="checkbox"/>	Accidental fires and fire suppression.
<input type="checkbox"/>	<input type="checkbox"/>	Air vents from compressors.
<input type="checkbox"/>	<input type="checkbox"/>	Air purification systems.
<input type="checkbox"/>	<input type="checkbox"/>	Continuous emissions monitoring lines.
<input type="checkbox"/>	<input type="checkbox"/>	Demineralized water tanks.
<input type="checkbox"/>	<input type="checkbox"/>	Pre-treatment of municipal water, including use of deionized water purification systems.
<input type="checkbox"/>	<input type="checkbox"/>	Electrical charging stations.
<input type="checkbox"/>	<input type="checkbox"/>	Fire brigade training.
<input type="checkbox"/>	<input type="checkbox"/>	Instrument air dryers and distribution.
<input type="checkbox"/>	<input type="checkbox"/>	Fully enclosed process raw water filtration systems.
<input type="checkbox"/>	<input type="checkbox"/>	Electric motors.
<input type="checkbox"/>	<input type="checkbox"/>	Pressurized tanks containing gaseous compounds that do not contain toxic air contaminants.
<input type="checkbox"/>	<input type="checkbox"/>	Vacuum sheet stacker vents.
<input type="checkbox"/>	<input type="checkbox"/>	Emissions from wastewater discharges to publicly owned treatment works (POTW) provided the source is authorized to discharge to the POTW, not including on-site wastewater treatment and/or holding facilities.
<input type="checkbox"/>	<input type="checkbox"/>	Log ponds.
<input type="checkbox"/>	<input type="checkbox"/>	Stormwater settling basins.
<input type="checkbox"/>	<input type="checkbox"/>	Paved roads and paved parking lots within an urban growth boundary.
<input type="checkbox"/>	<input type="checkbox"/>	Hazardous air pollutant emissions in fugitive dust from paved and unpaved roads except for those sources that have processes or activities that contribute to the deposition and entrainment of hazardous air pollutants from surface soils.
<input type="checkbox"/>	<input type="checkbox"/>	Health, safety, and emergency response activities.
<input type="checkbox"/>	<input type="checkbox"/>	Non-diesel, compression ignition emergency generators and pumps used only during loss of primary equipment or utility service due to circumstances beyond the

		reasonable control of the owner or operator, or to address a power emergency, provided that the aggregate horsepower rating of all stationary emergency generator and pump engines is not more than 3,000 horsepower. If the aggregate horsepower rating of all the stationary emergency generator and pump engines is more than 3,000 horsepower, then no emergency generators and pumps at the source may be considered categorically exempt.
<input type="checkbox"/>	<input type="checkbox"/>	Non-contact steam vents and leaks and safety and relief valves for boiler steam distribution systems.
<input type="checkbox"/>	<input type="checkbox"/>	Non-contact steam condensate flash tanks.
<input type="checkbox"/>	<input type="checkbox"/>	Non-contact steam vents on condensate receivers, deaerators and similar equipment.
<input type="checkbox"/>	<input type="checkbox"/>	Boiler blowdown tanks.
<input type="checkbox"/>	<input type="checkbox"/>	Ash piles maintained in a wetted condition and associated handling systems and activities.