



Oregon

Tina Kotek, Governor

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August 21, 2023

Quinn Burke-Anderson
Stimson Lumber Company
49800 SW Scoggins Valley Rd
Gaston, OR 97119-9132
Sent via email only

Quinn Burke-Anderson,

DEQ received the submittals of the Cleaner Air Oregon (CAO) Modeling Protocol (Protocol) and Risk Assessment Work Plan (Work Plan) for the Stimson Lumber facility in Gaston, OR on April 27, 2023, and May 18, 2023, respectively. Stimson also submitted a revised Emissions Inventory (Inventory) on May 15, 2023, which contained minor corrections to the Emissions Inventory approved by DEQ on March 29, 2023.

DEQ has completed an initial review of the Protocol and Work Plan and, in accordance with [Oregon Administrative Rule \(OAR\) 340-245-0030\(2\)](#), has determined that the following additional information, corrections, and updates are required by **September 20, 2023**, in order to approve the Emissions Inventory, Protocol and Work Plan:

1. Confirm that the Requested Potential to Emit throughput of 960 thousand board feet per day provided in the Inventory for the kilns (LBR-KILN_DF, LBR-KILN_HL, and LBR-KILN_TF Toxics Emissions Units) represents the maximum total amount of lumber that Stimson would start drying in the kilns in any given 24-hour period.
2. Submit a revised Modeling Protocol with the following changes, along with any additional information or forms as indicated:
 - a. In Table 3-4, update the exit velocities and flowrates for Model IDs FIRE and BGEN to reflect the correct values in meters per second and cubic meters per second;
 - b. In Tables 3-1, 3-2, and 3-3, add a footnote clarifying that the numbers in the “Kiln 1” and “Kilns 2-6” columns represent individual volume sources for each kiln, rather than total emissions from these kilns;
 - c. In Tables 3-1, 3-2, and 3-3, update the “Facility Total” columns for the following TACs to correctly total emissions or risk (due to the inclusion of Kiln 1 and Kilns 2-6 as separate columns for individual volume sources, some emissions are double-counted in Tables 3-1 and 3-2, and some risk is excluded from Table 3-3):
 - i. Acetaldehyde (CASRN 75-07-0);
 - ii. Acrolein (CASRN 107-02-8);
 - iii. Formaldehyde (CASRN 50-00-0);
 - iv. Methanol (CASRN 67-56-1); and
 - v. Propionaldehyde (CASRN 123-38-6);
 - d. In Table 3-2, update the column header to “Daily Emission Estimates” instead of “Annual Emission Estimates;”
 - e. Update Table 4-5 as follows:

- i. Correct the 30-Year Climate Precipitation Data statistics to reflect the dataset cited – currently the Lower 30th Percentile is higher than the Average for annual precipitation;
 - ii. Update the Station ID in footnote 1 to “352325” to match the Station description (“Dilley 2 S, OR”);
 - iii. Add a footnote describing the reasons the Dilley station was chosen; and
 - iv. Update footnote 3 to remove reference to the “1-year modeling period;”
 - f. In Figure 4-3, update the legend and scale to reflect that the green crosses are UTM 200-meter (not 500-meter) grid marks;
 - g. It is recommended, although not required, that Figures 4-10 and 4-6 be combined (that is, the closer-in exposure categories be shown graphically along with the receptors);
 - h. Exclusive Farm Use (EFU) zoning in Oregon allows for the siting of a dwelling and an accessory dwelling; therefore, for tax lots designated as EFU which do not currently have a dwelling established, either assess the receptors on those lots as residential and acute exposure locations, or submit the following to allow for designating those receptors as nonresidential adult (worker) exposure locations rather than residential:
 - i. [AQ521 Exposure Location Change Request Form](#); and
 - ii. [AQ522 Exposure Location Change Request Table](#); and
 - i. Identify all houses near Old Highway 47 near Scroggins Creek as locations to be evaluated for residential exposure in Table 4-8.
- 3. Submit a revised Work Plan with the following changes:
 - a. In Section 2, update the reference to “OAR 340-245-0210(2)” to “OAR 340-245-0210(1)” to reflect the rule relating to modeling protocol requirements;
 - b. In Section 2.2, remove the parenthetical reference to “de minimis source determination,” because Stimson has chosen to model emissions at their requested potential to emit rather than at capacity. Facilities with estimated risk below the source permit level are de minimis only if they have modeled emissions at capacity; [[OAR 340-245-0020\(14\)](#)]
 - c. Remove or revise this sentence to be consistent with Oregon rule: “For compliance demonstration, only calculated risks associated with Significant TEUs will be compared with the applicable RALs.” Per [OAR 340-245-0020\(54\)](#), “‘Source risk’ means the cumulative risk from all toxic air contaminants emitted by all significant and aggregated TEUs at a source.” Under [OAR 340-245-0060\(2\)\(b\)](#), sources have two options for how they may assign risk for Aggregated TEUs, but total source risk must include risk from aggregated TEUs;
 - d. In section 5, remove references to “maximum capacity” – this language may be replaced with “maximum potential to emit”. Based on Stimson’s Inventory submittal, DEQ has evaluated the modeled emissions as requested potential to emit and has not confirmed that emissions reflect maximum design capacity; and
 - e. Update the uncertainty analysis (Section 5) to include discussion of the following for the kilns:
 - i. Expected temporal variability in source characteristics (including exhaust flow rates and temperatures over the course of batch drying) and ambient conditions (including temperatures and windspeeds), and how this variability was considered in the development of modeled assumptions about thermal buoyancy effects (as presented in Table 3-5 of the Modeling Protocol); and
 - ii. Potential uncertainty in predicted ambient Toxic Air Contaminant concentrations and health risk related to the variability in thermal buoyancy effects over time.

DEQ is requesting that you submit additional information to complete your Protocol and Work Plan. 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 this 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 or julia.degagne@deq.oregon.gov, and I look forward to your continued assistance with this process.

Sincerely,

A handwritten signature in cursive script that reads "Julia DeGagne".

Julia DeGagné
Air Toxics Project Manager

Cc: Brian Bartlett, Stimson Lumber Company
Andrew Rogers, Maul Foster and Alongi
Owen Rudloff, DEQ
Mike Poulsen, DEQ
Patty Jacobs, DEQ
JR Giska, DEQ
Josh Alexander, DEQ
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