



Oregon

Tina Kotek, Governor

Department of Environmental Quality
Headquarters/Portland Administrative Offices
700 NE Multnomah Street, Suite 600
Portland, OR 97232
503-229-5696
TTY 711

July 14, 2026

Hampton Lumber Mills, Inc. (dba Tillamook Lumber Company)
3111 3rd St.
Tillamook, OR 97141
Sent electronically only

Ryan Pettit,

DEQ called in Hampton Lumber Mills (dba Tillamook Lumber Company) (Hampton) in Tillamook, OR to the Cleaner Air Oregon (CAO) program on January 2, 2025. Hampton submitted a CAO Emissions Inventory (Inventory) to DEQ on May 2, 2025 (Your DEQ Online [YDO] submittal #60627). In accordance with Oregon Administrative Rule [\(OAR\) 340-245-0030\(2\)](#), DEQ issued a written request on November 14, 2025, requiring additional information and a revised Inventory to be submitted by January 13, 2026. DEQ granted a 17-day deadline extension and Hampton submitted a revised Inventory on January 30, 2026.

DEQ has reviewed the Inventory and identified additional updates that are needed before approval. In accordance with [OAR 340-245-0030\(4\)\(b\)](#), DEQ is providing Hampton with a revised deadline for submittal of a revised Inventory. Please submit the information specified below by **45 days** after the issuance date of this letter, or **August 28, 2026**.

General Comments

1. Boiler activity tracking: For the purposes of ongoing boiler activity reporting, DEQ agrees with the general proposed method of calculating boiler heat input in million British thermal units (MMBtu) using the existing continuous emission monitoring systems (CEMS). However, DEQ may require a different fuel factor parameter for ongoing compliance calculations and will make that determination when drafting permit conditions. For example, site-specific source test data may be more appropriate than the default values EPA Method 19, and short-term calculations may require the use of a different fuel factor assumption.
2. Daily kiln emissions: At this time, DEQ is requiring Hampton to revise the daily emission factors to reflect maximum emissions for a 24-hour period, meaning the active per-batch ventilation times based on the operational details provided in Hampton's response letter dated January 30, 2026. See Specific Comment #2.
3. Ash pile silt content and TAC composition: The Inventory assumes a silt content based on "log yard" unpaved road surface material (from AP-42 Table 13.2.2-1), and uses non-site-specific composition data for the TAC composition of fly ash. This data may not be representative of Hampton's ash specifically but based on available information the

assumptions are reasonable and DEQ will accept them for the purposes of the risk assessment. DEQ may require a site-specific ash analysis at the time of CAO permitting to confirm the data representativeness, particularly if these parameters could significantly impact risk.

Specific Comments

Submit to DEQ a revised AQ520 Inventory Form, supporting calculations in Excel format, and supporting information including the following:

1. Boilers:
 - a. For TEUs B1, B1 SU PRE-ESP, and TEU B1 SU POST-ESP, update the emission factor for hydrochloric acid (CASRN 7647-01-0) to include data from the September 17, 2025 source test report (2.79E-4 pounds per MMBtu heat input) in the average.¹
 - b. Update the following references for consistency with the emission factors used:
 - i. In Table 2B of the Supporting Calculations, the mercury emission factor reference for steady-state should be the site-specific source tests.
 - ii. In Worksheet 3 of the "Hampton Tillamook AQ520_BSTARTUP_Final" AQ520 form, update "Reference/Notes" column for the zinc emission factor for TEU B1 SU PRE-ESP. The note should be for mechanical collection instead of ESP/fabric filter control.
2. Kilns: Information provided in Hampton's January 30, 2026, letter, indicates that kiln vents are closed for approximately 8-12 hours during temperature ramp-up for each batch. Based on the information provided, update emission factors for maximum daily kiln emissions to capture the maximum emissions during any 24-hour period – this includes updating the "hrs/charge" used in the equations provided in Tables 1 and 2 of Hampton's January 30, 2026 letter, to:
 - a. Western Hemlock: 28 hours. Minimum total batch time of 40 hours minus the 12-hour ramp-up time when vents are closed; and
 - b. Douglas-Fir: 24 hours. Because the minimum total batch time (29 hours) minus the ramp-up time (12 hours) is less than 24-hour period for acute emissions estimates, use 24 hours.
3. Bottom ash handling (TEUs ASH2TRK, STOCKP, PILE2TRK):
 - a. Update the moisture content assumed for PILE2TRK in Table 6 of the Supporting Calculations to 1 percent (at a maximum), or provide analytical data representative of pile moisture content throughout the year to support a less conservative assumption; and
 - b. Update the composition data for molybdenum trioxide (CASRN 1313-27-5) to 22.35 milligrams per kilogram (mg/kg), to account for an assumption of 100 percent oxidation from elemental molybdenum ($14.9 \text{ mg/kg} \times 1.5$ (ratio of molecular weights of molybdenum trioxide and molybdenum) = 22.35 mg/kg);
4. Wind erosion (TEU WE_AP): Update the parameters used in the "EPA Alternate Methodology" equation in Table 14 of the Supporting Calculations:
 - a. The activity (pile area in square meters) should reflect the area of the erodible surface of the pile – please confirm that the area provided reflects the full surface

¹ The emission factor mercury (CASRN 7439-97-6) may be updated as well, but because the source test result (6.38E-07 pounds per MMBtu) was lower than emission factor in the Inventory, this is not required.

- area of the pile rather than the pile footprint and provide calculations demonstrating this; and
- b. Review the calculations for correcting wind speed at the mean pile height to wind speed at the anemometer height in the Emissions Calculations ("Wind Parameters" tab), and revise as needed: the threshold wind speed U at the anemometer height should equal the threshold wind speed at mean pile height (5.4 meters per second) $\times [\ln(\text{anemometer height} / z_o)]$ divided by $[\ln(\text{mean pile height} / z_o)]$ (see AP-42 Section 13.2.5 Equation 1 and Equation 5);
5. Unpaved Roads (TEUs UPRL and UPRA):
 - a. Correct the calculation in Table 13 of the Supporting Calculations and emissions (pounds per day and pounds per year) in the AQ520 forms – the "Daily E (lb/VMT)" column is using the value for "VMT/day" instead of the vehicle weight in tons;
 - b. In Worksheet 3 of the AQ520, update the "Reference/Notes" column for all UPRA TACs from "truck travel to log pile" to "truck travel to ash pile"; and
 - c. Hampton utilized data from the Tillamook airport meteorological station to arrive at an average 152 days of precipitation per year. DEQ has historically allowed sources to use the precipitation information in the contour diagram in AP-42 Figure 13.2.2-1, which indicates 180 days of precipitation per year. Hampton may use either 152 or 180 days in the final calculations.
 6. Welding (TEU WELD): Update emissions for consistency with the San Diego County Air Pollution Control District's (SDAPCD) "Welding Operations" document:²
 - a. FCAW E71T: Update the emission factor for chromium VI (CASRN 18540-29-9) to 0.0002 pounds per thousand pounds (lb/Mlb), to reflect a 10 percent total chromium to chromium VI conversion rate for flux-cored arc welding (FCAW);
 - b. SMAW 7018:
 - i. Include chromium VI (CASRN 18540-29-9) using an emission factor of 0.0033 lb/Mlb [chromium emission factor from AP-42 Section 12.19 with a 55 percent total chromium to chromium VI conversion rate for shielded metal arc welding (SMAW)];² and
 - ii. Update emission factors for fluorides (DEQ ID 239), aluminum (CASRN 7429-90-5), and crystalline silica (CASRN 7631-86-9) to use a particulate matter emission factor of 18.4 lb/Mlb [AP-42 Section 12.19];
 - c. GMAW E70S:
 - i. Include chromium VI (CASRN 18540-29-9) using an emission factor of 0.00005 lb/Mlb [chromium emission factor from AP-42 Section 12.19 with a 5 percent total chromium to chromium VI conversion rate for gas metal arc welding (GMAW)];² and
 - ii. Update emission factors for fluorides (DEQ ID 239), aluminum (CASRN 7429-90-5), and crystalline silica (CASRN 7631-86-9) to use a particulate matter emission factor of 5.2 lb/Mlb [AP-42 Section 12.19];
 - iii. Update the fume correction factor for crystalline silica to 0.5464 pounds metal per pound fume.
 7. Plasma cutting (TEU PLASMA):
 - a. Based on draft guidance from the South Coast Air Quality Management District:

² San Diego Air Pollution Control District, Welding Operations, Revised July 11, 2022. Available at: <https://www.sdapcd.org/content/dam/sdapcd/documents/permits/emissions-calculation/welding/APCD-Welding-Operations.pdf> [Accessed May 19, 2026).

- i. Update the hexavalent chromium emission factor to 6.22×10^{-2} pounds Cr^{6+} per pound chromium emitted (see Section 3.2.2 of the draft guidance);³ and
 - ii. Update the PM emission factor (“fume generated” in Table 8 of the Supporting Calculations) for semi-dry cutting to assume a 75 percent reduction from the dry cutting emission factor, which is equivalent to 1.25 percent of material removed (see Tables 2 and 3 of the draft guidance).
- b. For the PLASMAH-PMW TESU, review the actual usage estimates in Table 1 of the Supporting Calculations for the “Planer Millwright Shop - Plasma handheld” unit and update as needed for consistency– based on the annual value of 63 hours, the daily usage should be at least 0.173 hours.
- 8. For the Workhorse II anti-stain (TEU ANTI-S), provide documentation that the proprietary ingredients listed in the Safety Data sheet (alkyl amine, organic acid, and trialkyl nitrogen oxide compounds) do not contain TACs.
- 9. For Carton Black Ink (TEU INKS), provide documentation that the trade secret “surfactant” and “lactam” listed in the Safety Data Sheet do not contain TACs.
- 10. Include the chipper as an Exempt TEU on Worksheet 2 and provide estimated maximum daily and annual throughput in oven dried tons – this unit has some potential to emit TACs but amounts are expected to be low.
- 11. In Worksheet 2 of the AQ520 forms, populate the actual Annual and Max Daily Activity Information Columns with data from calendar year 2024.

DEQ requests that you submit additional information to complete your 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 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\(4\)\(b\)](#).

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

Sincerely,



Julia DeGagné
Cleaner Air Oregon Project Engineer

³ South Coast Air Quality Management District, Plasma Arc and Laser Metal Cutting, DRAFT June 2026 (this guideline will replace the 2025 version cited in Table 8 of the Supporting Calculations). Available online: https://www.aqmd.gov/docs/default-source/agendas/pstf/draft_plasmalasermetalcuttingguidancechapter_060926.pdf?sfvrsn=3d82667e_3 [accessed June 22, 2026]

Cc: Eric Bornhorst, Hampton Lumber Mills
Amy Peccia, Hampton Lumber Mills
Travis Quarles, Bridgewater Group
David Graiver, DEQ
Julie Layshock, DEQ
J.R. Giska, DEQ
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