



# Oregon

Kate Brown, Governor

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June 8, 2022

Hollingsworth & Vose Fiber Company  
1551 Crystal Lake Drive  
Corvallis, OR 97333

Sent via email only

Anita Ragan,

DEQ received the submittal of the Cleaner Air Oregon (CAO) Emissions Inventory (Inventory) for the Hollingsworth & Vose Fiber Company (H&V) in Corvallis, OR on April 11, 2022 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 July 8 in order to approve the Inventory:

1. Update the chromium VI (CAS # 18540-29-9) emission factors for glass plant processes (TEUs RF, RC, FB, and GM) to use total chromium emissions data from the May, June, and August 2018 source tests, and assume one hundred percent of total chromium is chromium VI.
2. Glass fiber emissions could be classified as one or more Oregon Toxic Air Contaminants (TACs). Please provide emissions estimates for the following TACs, or provide a demonstration that the glass fibers produced and potentially emitted by H&V do not meet the criteria to be classified as TACs:
  - a. Glasswool fibers (DEQ ID 352). According to the Agency for Toxic Substances and Disease Registry's [Toxicological Profile for Synthetic Vitreous Fibers](#), special purpose fibers (including those produced by flame attenuation) are included in the "glass wool" category of Synthetic Vitreous Fibers; and
  - b. Mineral Fibers (fine mineral fibers which are man-made, and are airborne particles of a respirable size greater than 5 microns in length, less than or equal to 3.5 microns in diameter, with a length to diameter ratio of 3:1 (DEQ ID 350)).If the fibers from H&V do not fall into the categories described in 2a. or 2b., please describe the fibers produced/potentially emitted (for example, list dimensions).
3. The potential for fugitive emissions from manufacturing and collection areas must also be considered and such emissions included in the Inventory. Please provide substantiation for the reported capture efficiency of 100 percent, including control device or design specifications, as applicable, for the following TEUs, or update their reported capture efficiencies:
  - a. Raw material handling (RMH\_BA and RMH\_ZN); and
  - b. Glass plant processes (RF, RC, FB, and GM).

4. Provide the May 2015 source test that was used to develop the benzene (CAS # 71-43-2), hexane (CAS # 110-54-3), and toluene (CAS # 108-88-3) emission factors for glass plant processes (TEUs RF, RC, and FB).
5. Provide a detailed narrative supporting the representativeness of emission factors used in the development of organic compound TAC emissions estimates for glass plant process TEUs RF, RC, and FB, and GM. The discussion should address the potential impacts of:
  - a. Changes in control equipment related to emission factors derived from the 2015 source test; and
  - b. The use of non-typical combustion conditions in glass plant processes, for emission factors derived from AP-42.
6. Update the Table 14 footnotes to clarify that emissions from combustion of natural gas in the forehearth burners have been included as "non-production" natural gas emissions, and that these are standard burners that can be considered to operate under typical combustion conditions.
7. Update the formaldehyde (CAS #50-00-0) emission factor for the Flameblown process TEU FB to 0.465 pounds per ton for consistency with the April and June 2018 source test results.
8. For the emergency generator TEUs, EGEN1 and EGEN2:
  - a. Update assumed load factor to 100 percent; and
  - b. Provide manufacturer's documentation of reported fuel usage rates at 100 percent load.
9. Update the table headings in Tables 7 through 11 (for example, "Maximum VOC concentration", "VOC emissions rate", "VOC emissions estimate" and "VOC weight fraction") to clarify that the concentrations and estimates presented are based on the sum of the concentrations of selected sampled TACs, if this data is not based on a measurement of Total VOCs. Alternatively, provide the Total VOC data used.
10. Provide the following documentation to support the emissions calculations:
  - a. Calculations in native database format showing emission factor derivation from: source tests for glass plant process TEUs RF, RC, FB, and GM; and from analytical data for the TCE Remediation System TEUs (i.e., REMSYS, LEAKS\_SVE, LEAKS\_SS, LEAKS\_CV1, and LEAKS\_CV2);
  - b. Documentation of the stack flow rates used in the emissions calculations for the TCE remediation system TEU REMSYS;
  - c. Manufacturer's specification sheets or data used to select parameters for cooling tower emissions calculations for TEUs CT1\_2, CT3, and CT4, including drift loss, dosage range, and water circulation rate; and
  - d. Safety Data Sheets and/or analytical data for all raw materials used – for example, sand and minerals used in the glass processes.
11. Activity levels used to model risk under Cleaner Air Oregon could become new permitted limits. Please confirm that the production value used in requested Potential to Emit calculations for rotary coarse and ultra rotary coarse fiber production (17,424 pounds, combined) reflects the facility's desired capacity.

DEQ is requesting that you submit additional information to complete your Emissions 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 or [Julia.degagne@deq.oregon.gov](mailto: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: Chad Darby, Maul Foster Alongi  
Amy DeVita-McBride, Maul Foster Alongi  
Tom Wood, Stoel Rives  
Mike Eisele, DEQ  
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