May 7, 2026

Amy DeVita-McBride
Cleaner Air Oregon Project Engineer
Oregon Department of Environmental Quality
700 NE Multnomah St., Suite 600
Portland, OR 97232-4100

Re: acpi Wood Products – 03/10/2026 CAO Emissions Inventory Review

Dear Ms. Devita-McBride,

acpi, Wood Products, LLC (acpi) received March 10, 2026, letter from Oregon Department of Environmental Quality (DEQ) commenting on the CAO Emission Inventory submitted by acpi on November 17, 2025. The letter contained several questions regarding clarification of submitted data. On behalf of acpi, HDR Engineering, Inc. (HDR) is providing the following responses to the questions and requested information. HDR responses are provided in ***bold italic*** font.

General Comments

1. Emission Unit Designations: Toxic Emission Units (TEUs) in the Inventory should match the emission units (EUs) in Cabinetworks' Title V Operating Permit (permit) where appropriate. Unless Cabinetworks would like to redefine the EUs in the permit, they should update the TEU designation to be consistent with the permit. DEQ has addressed required updates to the Inventory or supporting calculations in the proceeding "Specific Comments" section. ***TEUs in the inventory have been updated to reflect the permit emission unit IDs and grouping.***
2. Short-term variability: Cabinetworks has assumed the average annual in estimating maximum daily throughput or usage rate for the PTE basis. DEQ requires modeling of the worst-case maximum daily emissions for acute risk. Review the maximum daily PTE throughputs and usage rates and ensure they are representative of Cabinetworks' worst-case daily emissions. **For Title V Operating permit purposes, the maximum production capacity of the facility has been reported as 876,000 cabinets per year. The production capacity is based on full-time operation at 8,760 hours per year. Therefore, the maximum physical production capacity is 100 cabinets per hour. Based on actual annual production data, the facility typically operates at approximately 50% capacity (120,250 cabinets/yr / 2,258 hours/yr = 53 cabinets/hr). To represent worst-case maximum daily emissions for acute risk, the lb/hr emissions based on the annual production date are multiplied by a factor of 2. This represents an increase from 50% capacity to 100%. Also, a current review of physical production capacities indicates that the maximum cabinet production capacity is approximately 500,000 cabinets per year. Therefore, the calculations assuming 876,000 cabinets per year present a conservatively high assessment of risk.**
3. Talc: DEQ's Toxic Air Contaminant Priority List (OAR 340-247-8010 Table 1) includes "Talc containing asbestiform fibers" under DEQ ID number 358. While the CASRN for talc is not included in the Priority List, the talc content of these materials should be reported under DEQ ID 358 if it contains asbestiform fibers. DEQ has reviewed Safety Data Sheets (SDSs) for coating materials used at Cabinetworks and found multiple materials which contain talc (CASRN 14807-96-6). DEQ has addressed required updates to the Inventory or supporting calculations in the proceeding "Specific Comments" section. **Information was obtained from The Sherwin-Williams Company**

regarding products that contain talc. Based on the letters received, dated April 7, 2026, the products listed that do contain intentionally added talc, do not contain added asbestos fibers. The products listed that do not contain intentionally added talc are also not formulated with added asbestos fibers. Because no asbestiform fibers are added to the products, talc was not added to the risk analysis.

4. Solid Constituents of Coating Materials: Cabinetworks' emissions calculations apply a transfer efficiency and filter removal efficiency for metal TACs. Transfer and removal efficiencies can be applied to all solid constituents of the coating materials including non-metal TACs such as silica (CASRN 7631-86-9) and talc (CASRN 14807-96-6, DEQ ID 358). ***Revised to "Solids Flag" to reflect transfer and removal of all solid constituents, including silica.***

Specific Comments

1. **Safety Data Sheets**: DEQ reviewed both the safety data sheets (SDSs) and environmental data sheets (EDSs) for materials used at Cabinetworks. Provide the most up-to-date copies of both the SDS and EDS for the following materials. Update the Inventory as needed based on this review. ***Updated SDS and EDS provided in attachments. No changes to composition for FNEN2078/2079.***
    a. CLEAR TITAN BASE ENAMEL (FNEN2078);
    b. ENAMEL CLEAR TITAN BASE (FNEN2079);
    c. BLACK PRIMER (FNPR3100); and
    d. TONER HBRMST/GRYST/BLDR (FNTN4030).
2. **Assembly Glue (TEU-20)**: Section 15 of the G-2949 MUI material's SDS lists an ethylene oxide (CASRN 75-21-8) content of less than 0.1 percent by weight. Because ethylene oxide is a TAC of particular concern, DEQ requests additional documentation from the material's manufacturer regarding the content of this TAC in the product. Provide to DEQ the following:
    a. An updated SDS as the version provided to DEQ is dated 12/12/2022; and
    b. An EDS which includes the ethylene oxide content; or
    c. Other manufacturer documentation which includes more refined ethylene oxide content information. ***Manufacturer documentation is included in the attachments.***
3. **Chromium**: Supporting information provided by Cabinetworks indicates that none of the chromium in coating materials used at the facility is of the hexavalent form. Provide documentation from the manufacturer to support this assumption. DEQ has identified the following materials as containing chromium (CASRN 7440-47-3): ***Documentation from the manufacturer to support this assumption is attached to this response.***
    a. STAIN AMARETTO NGR (FNST4000);
    b. STAIN CHESTNUT NGR (FNST4021);
    c. STAIN EAGLE ROCK NGR (FNST4030);
    d. STAIN ESPRESSO NGR (FNST4040);
    e. STAIN FRENCH ROAST NGR (FNST4050);
    f. STAIN GINGERSNAP NGR (FNST4060);
    g. STAIN ONYX NGR (FNST4080);
    h. STAIN RUMBERRY NGR (FNST4100);
    i. STAIN SMOKE SPRAY (FNST4270);
    j. TONER HBRMST/GRYST/BLDR (FNTN4030);
    k. SHRWD UNIV DYE BLACK (FNTT3125); and
    l. SHRWD UNIV DYE RED (FNTT3130).
4. **Revised Inventory**: Submit to DEQ a revised Inventory, along with all supporting calculations in Excel format, as well as all information required under OAR 340-245-0040(4). Include the following updates to the Inventory:
    a. TEU Designations:

i. Per General Comment 1, Cabinetworks should update the TEU naming in the Inventory to be consistent with the permit. ***TEU naming in the inventory has been updated to reflect the permit.***
    1. The coating activities in TEU-1 through TEU-16 represent a single EU in the permit (EU-01). Cabinetworks may include all emissions from the coating lines in a single TEU (EU-01) and define Toxics Emissions Sub-Units (TESUs) if desired.
    2. Rename the Natural gas space heaters TEU (TEU-19) to "EU-02" to be consistent with the naming convention in the permit.

ii. The raw materials sanding and sawing TEUs (TEU-17 and TEU-18) should be combined into a single TEU. ***TEU-17 and TEU-18 were combined into a single TEU.***

b. Per General Comment 2, update PTE maximum daily throughputs or usage rates as appropriate to reflect worst-case short-term conditions. **This was addressed in the general comment 2 above.**

c. Per General Comment 3, report all talc (CASRN 14807-96-6) emissions from coating operations under DEQ ID 358. Alternatively, provide documentation from vendors certifying the talc in materials used at Cabinetworks does not contain asbestiform fibers. **This was addressed in the general comment 3 above.**

d. Per General Comment 4, if desired, update emission calculations to account for both transfer and filter removal efficiencies for all solid TACs. ***The inventory has been updated to account for transfer and filter removal efficiencies for all solid TACs.***

e. Update the Inventory as appropriate with information gathered during the review of SDSs and/or EDSs requested under Specific Comment 1. **Inventory was updated.** ***Updated SDS and EDS provided in attachments.***

f. Maximum Daily Emissions Basis: Include estimates of maximum daily usage rates and emission estimates for all materials presented in the PTE basis. **Maximum daily emission rates were included as described in the general comment 2 above.**

g. TEU-1 through TEU-16: DEQ has reviewed SDSs and EDSs for materials used at the coating lines at Cabinetworks and compared this information against information presented in the "IndependenceToxicsCalcs_V10.xlsx" workbook. DEQ found multiple discrepancies in weight percent of individual TACs and in some instances missing TACs. Note also that the revisions requested by DEQ are only for those instances where Cabinetworks had a lower composition than information presented in the SDS or EDS.
    i. WHITE TITAN BASE ENAMEL (FNEN2073):
        1. Include emission estimates for 1,3,5-trimethylbenzene (CASRN 108-67-8). The SDS reviewed by DEQ shows

a content of less than 1 percent by weight. ***Inventory was updated to include 1,3,5-trimethylbenzene for FNEN2073.***

2. The Inventory includes emission estimates for propylene glycol monomethyl ether acetate (CASRN 108-65-6), however neither the SDS nor EDS for this material lists propylene glycol monomethyl ether acetate. Unless an updated SDS or EDS is available and shows propylene glycol monomethyl ether acetate as a component of the material, exclude emissions estimates for this TAC from the Inventory. ***Inventory was updated to remove propylene glycol monomethyl ether acetate for FNEN2073.***

ii. STAIN AMARETTO NGR (FNST4000):

1. Include emission estimates for acetone (CASRN 67-64-1). The EDS reviewed by DEQ shows a content of 77 percent by weight. ***Inventory was updated to add acetone for FNST4000.***
2. The Inventory includes emission estimates for isopropyl alcohol (CASRN 67-63-0), however neither the SDS nor EDS for this material lists isopropyl alcohol. Unless an updated SDS or EDS is available and shows isopropyl alcohol as a component of the material, exclude emissions estimates for this TAC from the Inventory. ***Inventory was updated to remove isopropyl alcohol for FNST4000.***

iii. STAIN PECAN WIPE (FNST4090): Include emission estimates for cobalt (CASRN 7440-48-4). The EDS reviewed by DEQ shows a content of 0.1 percent by weight. ***Inventory was updated to add cobalt for FNST4090.***

iv. FLAT REL VAR TOPCOAT (FNTC0705): Cabinetworks is only required to report the emissions estimates for crystalline silica (CARSN 7631-86-9). Review of this material shows it contains amorphous silica. Unless an updated SDS or EDS is available and shows crystalline silica as a component of the material, exclude emissions estimates for this TAC from the Inventory. ***Inventory was updated to remove crystalline silica from FNTC0705.***

1. Include emission estimates for formaldehyde (CASRN 50-0-00) for the following materials. The SDSs for these materials shows a formaldehyde content of less than 0.1 percent by weight. ***Inventory was updated to include formaldehyde for the products listed below.***
    - ENAMEL PISTACHIO (FNEN3225);
    - ENAMEL SPANISH PAPRIKA (FNEN3200); and

- ENAMEL CAVERN (FNEN3230).

v. Include emission estimates for lead (CASRN 7439-92-1) for the following materials identified by DEQ. The SDSs for these materials list a lead content in Section 15 under the SARA 313 information. ***Inventory was updated to include lead for the products listed below.***
   1. STAIN PEPPCORN WIPE (FNST4095);
   2. STAIN HEARTH (FNST4260);
   3. TONER ISLANDER (FNTN4035);
   4. ENAMEL SPANISH PAPRIKA (FNEN3200);
   5. ENAMEL CAVERN (FNEN3230);
   6. ENAMEL HYDRANGEA (FNEN3255);
   7. ENAMEL OCEAN JADE (FNEN3260);
   8. ENAMEL SUCCULENT (FNEN3275);
   9. GLAZE TAUPE CSTAL DRY BRUSH (FNGL4020);
   10. GLAZE GREY TEXTURE BRUSH (FNGL4035);
   11. GLAZE OFF BLACK TEXTURE BRUSH (FNGL4040);
   12. GLAZE WHITE TEXTURE BRUSH (FNGL4045);
   13. PRIMER CHARCOAL FAST DRY (FNPR3125);
   14. STAIN CHESTNUT WIPE ST (FNST4026);
   15. STAIN EAGLE ROCK WIPE (FNST4035);
   16. STAIN GOSSAMER WIPE (FNST4057);
   17. STAIN RUMBERRY WIPE (FNST4105);
   18. STAIN DOCKSIDE 3 (FNST4257);
   19. TONER GOSSAMER (FNTN4060);
   20. TONER DOCKSIDE (FNTN4065);
   21. GLAZE HARVEST/EBONY SPRAY (FNGL4015);
   22. TONER HBRMST/GRYST/BLDR (FNTN4030); and
   23. STAIN HAZELNUT SPRAY (FNST4200).

vi. Include emission estimates for mercury (CASRN 7439-97-6) for the following materials identified by DEQ. The SDSs for these materials list a mercury content in Section 15 under the SARA 313 information. ***Inventory was updated to include mercury for the products listed below.***
   1. TONER ISLANDER (FNTN4035);
   2. ENAMEL SPANISH PAPRIKA (FNEN3200);
   3. GLAZE TAUPE CSTAL DRY BRUSH (FNGL4020);
   4. PRIMER CHARCOAL FAST DRY (FNPR3125);
   5. STAIN GOSSAMER WIPE (FNST4057);
   6. STAIN RUMBERRY WIPE (FNST4105);
   7. TONER GOSSAMER (FNTN4060);
   8. TONER DOCKSIDE (FNTN4065); and
   9. TONER HBRMST/GRYST/BLDR (FNTN4030).

We look forward to working with ODEQ on the completion of the risk assessment process. If you have any questions regarding the submitted information or need additional information, please do not hesitate to contact me at (763) 278-5905, or via email at graetz@hdrinc.com.

Sincerely,

HDR Engineering, Inc.



Gregory J. Raetz
Senior Professional Associate

Cc: John Hamlin, acpi
Alex Haulman, DEQ
Zach Loboy, DEQ
Thomas Rhodes, DEQ
J.R. Griska, DEQ
Emily Jackson, HDR

Attachments:
via Electronic File – IndependenceToxicsCalcs_V11.xlsx
via Electronic File – IndependenceToxicsCalcs_V11NaturalGas.xlsx
via Electronic File – IndependenceToxicsCalcs_V11Woodwork.xlsx
via Electronic File – EDS and SDS.zip
via Electronic File – Talc.zip
via Electronic File – Hexavalent Chromium.zip
via Electronic File – Ethylene Oxide.zip