



February 11, 2021

**E-mail**

Sarah France  
Director of Regulatory Affairs  
The Willamette Valley Company, LLC  
P.O. Box 2280  
Eugene, OR 97402

Re: Cleaner Air Oregon Emissions Inventory Submittal

Dear Sarah France:

LRAPA has completed a preliminary review of the Cleaner Air Oregon Emissions Inventory submitted by the facility on June 22, 2020 with the additional information requested by LRAPA and received on July 17, 2020.

In general, LRAPA agrees with the emissions estimation approaches for the variety of toxic emissions units at the facility. During our review of the information received, we cataloged the following list of concerns that will need clarification or additional information:

Process	Comments
Rail Loadout Fugitive MDI	Please clarify the process for determining the daily or annual hours of operation for the "leaks."
PMDI Bulk Storage Tank	Lacking information on the tank design, please include additional details such as, but not limited to: <ul style="list-style-type: none"><li>• Roof type</li><li>• Tank height</li><li>• Tank diameter</li><li>• Tank color</li><li>• Vent settings</li><li>• Access hatches</li><li>• Tank temperature measurement method</li></ul>
PMDI Bulk Storage Tank	Please provide justification for using 80% as the average percentage of the tank filled, as this greatly affects working losses.
All Blend Worksheets	The duration of the batch in the "Blend" product worksheets, all listed as 24 hours, do not match the listed batch durations in Table 2 – Input Mixing Vessels. Please provide the reasoning behind setting batches to run 24 hours.

Process	Comments
PTE Summary	This worksheet does not include the emissions contributions from the Rail Loadout, PMDI Bulk Storage, Raytech Tank or PMDI Pump. Please address the reasoning behind this omission.
Overall - Fugitives	The leaks associated with the valves, seals and open-ended lines have only been included for the rail loadout of MDI. Please verify there are no other valves, connectors, or other chemical pumps that may be sources of fugitive emissions.
Overall	Solid-fill worksheets includes 99.9% removal efficiency for dust collectors, referencing manufacturer-provided information. Please provide a copy of this documentation.
Overall	The use of an average daily temperature of 17.4°C for emissions calculations needs further explanation and justification.
Overall	Please provide a justification for neglecting to include emissions from cleaning parts, mixers, or tanks.

LRAPA also identified the following list of errors in the emissions inventory file that will need to be addressed and/or corrected:

Process	Comments
Rail Loadout Fugitive MDI	The equation constant (b) for the liquid light valves should be 0.787 rather than 0.797.
Rail Loadout Fugitive MDI	The equation used to determine the modified correction factor is incorrect. The equation should be $a \cdot SV^b$ rather than $a \cdot b \cdot SV$ .
PMDI Bulk Storage Tank	The daily working loss for the requested PTE is incorrect. It is a copy and paste of the 2018 actual working loss.
PMDI Pump	Total throughput for 2018 Actual and Requested PTE are exactly the same in ft <sup>3</sup> /day (410) but are different in gal/day (3,065 vs. 9,195).
PMDI Pump	The number of totes filled (daily/annual) does not line up with the total throughput in gallons. It appears that all throughputs should be multiples of 435 gallons.
Coatings-Fill	Although reference (9) states how the vapor pressure of ammonia was derived, throughout the spreadsheet the vapor pressure is listed as "0."
Coatings-Blend	Daily average high temperature is listed as 37.8°C.
2018 SUM Worksheet	TAC summations for "Coatings" are incorrect. The values do not match the 2018 total emissions listed for Coatings in the "COATINGS-2018 SUM" worksheet.

It was noted during review of Table 1 – Input Process Rates and Parameters that the requested PTE for certain products were listed in lower quantities than the amounts reported for 2018. Specifically, the daily PTE requested for Coatings, Epoxies, Patch SF-ISO and Spikefast Resin and the annual PTE requested for Patch SF-ISO. LRAPA would like to clarify if it is the intent of the facility to place production limits on manufacturing as a part of this risk assessment process. The hourly production rate was also increased to 24 hours a day for the requested PTE, for

which LRAPA would like an explanation if this is a feasible operating scenario or if an 8-hour operating day is more reasonable for predicting daily emissions.

Finally, we understand the need to protect the CBI nature of the information provided to LRAPA, but as a final check on the emissions inventory LRAPA is requesting submission of an Emissions Inventory Excel file that has the in-cell calculation equations visible and verifiable. This information will be kept as CBI, if that is the continued request of the facility.

Please let me know if you need any further information or assistance.

Sincerely,

*Kathleen H Eagleson*

Katie Eagleson, PE  
Environmental Engineer

cc: Max Hueftle, LRAPA (via email)  
Meagan Tkach, The Willamette Valley Company, Inc. (via email)  
Andrew Rogers, Maul Foster & Alongi, Inc (via email)