

**From:** [DEGAGNE Julia \\* DEQ](#)  
**To:** ["Steven Petrin"; "Andrew Rogers"](#)  
**Cc:** ["Brian Bartlett"; JACOBS Patty \\* DEQ](#)  
**Subject:** RE: CAO Emissions Inventory: revisions required by January 20  
**Date:** Tuesday, January 10, 2023 9:40:27 AM  
**Attachments:** [image001.png](#)  
[image006.png](#)  
[image007.png](#)

Hi Steven and Andrew,

I hope you had a great holiday and New Year. Apologies for this second email, but I neglected to include one more minor correction that needs to be made to the AQ520. Please add this to #10 in my email below:

10.h. For TEU H-BLR\_ESP on Tab 3, update the di-n-octylphthalate (CASRN 117-84-0, DEQ SEQ ID 518) emissions in columns J, K, M, and N to match the supporting calculations:

Toxic Air Contaminant	CAS	HAP? (Yes/No)	ODEQ Sequence Number	Emission Factor (lb/MMBtu)	2019 Emission Estimates		PTE Emission Estimates	
					Daily <sup>(a)</sup> (lb/day)	Annual <sup>(b)</sup> (lb/yr)	Daily <sup>(a)</sup> (lb/day)	Annual <sup>(b)</sup> (lb/yr)
Hydrogen cyanide	74-90-8	No	135	2.05E-05 <sup>(5)</sup>	0.066	12.0	0.066	18.9
di-n-octylphthalate <sup>b</sup>	117-84-0	--	518	1.10E-07 <sup>(6)</sup>	3.53E-04	0.064	3.53E-04	0.10
Ethylene dichloride (EDC; 1,2-dichloroethane)	107-06-2	Yes	224	2.92E-05 <sup>(5)</sup>	0.094	17.0	0.094	26.9
Isopropylbenzene (Cumene)	98-82-8	Yes	275	1.77E-05 <sup>(5)</sup>	0.057	10.3	0.057	16.3

Please let me know if you have any questions about the updates.

Take care,



Julia DeGagné (she/her)  
 Air Toxics Project Manager  
 Oregon Department of Environmental Quality  
 700 NE Multnomah St. Ste 600  
 Portland, OR 97232  
 Cell: 503-866-9643

**From:** DEGAGNE Julia \* DEQ  
**Sent:** Thursday, December 22, 2022 5:20 PM  
**To:** 'Steven Petrin' <spetrin@stimsonlumber.com>  
**Cc:** Brian Bartlett <bbartlett@stimsonlumber.com>; Andrew Rogers <arogers@maulfoster.com>; GISKA JR \* DEQ <JR.GISKA@deq.oregon.gov>; JACOBS Patty \* DEQ <Patty.JACOBS@deq.oregon.gov>  
**Subject:** CAO Emissions Inventory: revisions required by January 20

Hello Mr. Petrin,

Thank you for meeting with us on 12/14 to discuss remaining updates needed prior to DEQ's approval of the CAO Emissions Inventory (Inventory). As I mentioned, we've pinpointed several minor updates in addition to the items we discussed in more detail. To assist with finalizing the Inventory, I'm

providing the following list of required updates and two attachments for further information and clarification. Please submit a revised emissions inventory (AQ520 form), supporting calculations, and supporting documentation with these updates to me by no later than **January 20, 2023**. The attachments are revised versions of your most recent AQ520 and supporting calculation Excel files, with most of the updates listed below already illustrated and indicated by yellow-highlighted cells (updates have been made for the items marked with an "\*" below).

These are the required updates:

1. \*For the emergency generator (TEU BGEN\_DPM), update the emission factor for diesel particulate matter (DPM; DEQ SEQ ID 200), assuming no control of particulate matter by the catalytic converter. DEQ has determined that the documentation you provided on November 1, 2022 is insufficient to support the reported assumption of 20 percent control efficiency for particulate matter (PM). The quote provided from DCL International indicates that a control efficiency, "up to 40% (depending on fuel, engine tuning, and exhaust temperature)," applies during full load conditions with a fresh catalyst. We understand that this engine is typically run for short periods of time for testing and maintenance purposes; given the uncertainty that full load and specific temperature conditions will be achieved during typical operations, a quantitative assumption for control of PM is not appropriate in this case.
2. \*Hardboard Wastewater ("WW\_HB" tab): in Table 18 of the supporting calculations, update footnotes (b) and (d) to be consistent with the calculations.
3. \*Resin tanks (TEUs RESIN1, RESIN2, and RESIN3):
  - a. Update the daily vapor mole fraction for each component ( $y_i$ ) to use the daily maximum value for partial pressure ( $P_i$ ), and update the daily vapor weight fraction for each component ( $Z_{vi}$ ) to use the calculated daily value for  $y_i$ .
  - b. The daily vapor weight fraction ( $Z_{vi}$ ) may be capped at 1.0 to assume an upper bound equal to total estimated VOC emissions.
4. \*Boilers (TEUs H-BLR\_SCR and H-BLR\_ESP):
  - a. Update the emission factor for molybdenum trioxide (CASRN 1313-27-5).
  - b. Update references to footnotes for H-BLR\_SCR.
5. Fuel Dryer (TEU H-DRY): update emission factor references in workbook to correspond to correct footnotes.
6. Refiner (Scrubber 5) (TEU REF\_S5): Add formula and footnote description of how emission factors were developed from the source test data.
7. \*Welding (TEU WELD):
  - a. \*For the "LIN 309L, 332BLUE" product, update the emission factor to include constituent percentages for stainless steel core wire as listed in the Safety Data Sheets (SDSs).
  - b. \*For the "LIN 7018, 332E" and "LIN 7018, 532E" products, update reported constituent percentages to reflect the SDSs provided.
8. Hardboard wastewater (WHITE, MACH, and HEAD TEUs):
  - a. \*Update "Concentration (ppm)" column in the "HB\_WW" tab of the supporting calculations to accurately reflect the values modeled for acetone, phenol, and acrolein.
  - b. Update and rerun the WATER9 (Version 3.0) model as follows:
    - i. For the whitewater chest (WHITE) and machine chest (MACH), update the density and molecular weight used for the wastewater to better approximate the wastewater characteristics (e.g, if the wastewater is primarily water, the density and molecular weight of water may be assumed).
    - ii. Update the machine chest (MACH TEU) with the correct tank surface area.
    - iii. Update the emission unit inputs for the machine chest (MACH TEU) to reflect any agitation that occurs in the tank (e.g., by selecting the "open roof agitated tank", "submerged aeration tank", or "mix tank" unit types).
    - iv. Provide revised native WATER9 files, unit input summaries, and output summaries for the updated units.
9. \*For the hydroseives (HYDRO TEU): Update the "Concentration (ppm)" column in the "HB\_WW" tab of the supporting calculations to reflect the values modeled for acetone, phenol, and acrolein.

10. Update the AQ520 form as follows:

- a. \*For the TEUs BGEN and FIRE, update “Max Daily” activity values on Tab 2 to reflect the reported units of “thousand gallons” of fuel;
- b. \*For the kilns and press (TEUs LBR-KILN\_DF, LBR-KILN\_HL, LBR-KILN\_TF, H-PVUV\_STCK, and H-PVUV\_FUG), correct the typo in the activity units in Tab 2.
- c. For the WHITE, MACH, and HEAD TEUs, update annual RPTE and daily actual and daily RPTE throughputs on Tab 2 to be consistent with the supporting calculations and emissions.
- d. \*Correct the “CAS or DEQ ID” on Tab 3 for di-n-octylphthalate, phosphorus, polycyclic aromatic hydrocarbons (PAHs), DPM, and fluorides.
- e. \*Update incorrect information in the “References/Notes” column on Tab 3 for TEUs H-BLR\_SCR and H-BLR\_ESP.
- f. \*For the gasoline and resin tanks (TEUs TANK\_GAS, RESIN1, RESIN2, and RESIN3), update the “Annual - Chronic” emission factors reported in column F – this value should reflect the annual Requested Potential to Emit (RPTE) in pounds emitted per year divided by the annual RPTE activity in gallons of throughput per year.
- g. \*On Tab 5, update constituent CASRN and TAC for AntiBlu M6 – per the SDS, it is dipropylene glycol methyl ether, instead of diethylene glycol monobutyl ether.

As noted in DEQ’s October 11, 2022, Pre-Enforcement Notice, this matter is being referred to the Office of Compliance and Enforcement for formal enforcement action, which may include assessment of civil penalties. If you are unable to provide an updated Inventory by **January 20, 2023**, DEQ may make the necessary modifications to approve the Inventory. In this case, DEQ would also charge the document modification fee in OAR 340-216-8030 Table 3 [OAR 340-245-0030(4)(a)]. If you have questions or wish to provide additional information, please reach out to us to discuss via phone or email prior to submittal of the revised Inventory (note that I will be out of the office 12/23 through 12/27, and will respond to emails and calls on 12/28).

Sincerely,



Julia DeGagné (she/her)  
Air Toxics Project Manager  
Oregon Department of Environmental Quality  
700 NE Multnomah St. Ste 600  
Portland, OR 97232  
Cell: 503-866-9643