From: DEGAGNE Julia * DEQ
To: "Ragan, Anita"
Cc: cindy.frost@hovo.com; EISELE Michael * DEQ; RUDLOFF Owen * DEQ; GISKA JR * DEQ; Chad Darby (cdarby@maulfoster.com); Amy DeVita-McBride; Leslie Riley
Subject: RE: H&V CAO Modeling Protocol
Date: Thursday, December 14, 2023 3:51:17 PM
Attachments: image001.png

Hi Anita and team,

Thanks for making the time to meet with us on Tuesday. As we discussed, here is an updated list of the information we need to complete our review of H&V's CAO modeling protocol, and an updated due date (the first four bullets are the same as I sent on 12/7):

1. The CEMS data and analysis that was used in determining the modeled flow rates for the 400- and 600-series fans.
2. For the 200-series fans:
    a. The dates of the specific source tests used to determine the modeled flow rate
    b. A fan curve or data from the manufacturer showing the range of operating flow rates
    c. Is the flow rate of 6,263 cfm typical of the lowest rate during daily operations? If not, can you estimate how often the fan would operate below this rate?
3. H&V's ACDP and the Protocol list different CFU routings for a few of the fiberizers. Can you confirm that Table 3-7 and Figure 2-3 in the Protocol is the accurate version?

	Routing in Protocol Table 3-7 and Figure 2-3	Routing in Permit EU Table (p.4)
L1R1 and L1R2	CFU 105	CFU 105 or CFU 102
L2R2	CFU 110 or CFU 112	CFU 110 only
L2R4 and L2R9	CFU 112 only	CFU 112 or CFU 102

4. Excel versions of the modeling protocol and emissions inventory tables.
5. A narrative description and table that indicates what physical factors limit production for each fiberizer and fiber type, and how that relates to the Potential Fiber Types listed in Table 3-7 of the Modeling Protocol (for example, total fiber production limited by the capacity of the melter, URC limited by the capacity of the collection device, the remelter only able to product RF, etc.).
6. Maximum daily and annual production rates for each fiberizer and potential fiber type based on any physical limitations. If production is allocated to fiber types or fiberizers for modeling based on a worst-case risk analysis, please provide the calculations used to demonstrate this.
7. A list or table showing the modeling runs that will be submitted with the health risk assessment. Please note that modeling or risk analysis results for all modeling scenarios described as potentially possible in the modeling protocol should be addressed in the HRA submittal, including but not limited to:
    a. Annual and daily risk analysis results if L1R1, L1R2, L1R3, and L1R4 are treated as RC only
    b. Annual and daily risk analysis results if L1R1, L1R2, L1R3, and L1R4 are treated as RF only
    c. Annual and daily risk analysis results for the alternative RC/URC scenarios described in H&V's October 27, 2023 cover letter.

8. Provide documentation of the maximum daily and annual capacity of the melter or any other documentation needed to confirm capacity limitations for glass fiber production.

Please respond to these **by Friday, January 5, 2024** – if any additional clarification is needed, feel free to reach out to me or Owen Rudloff.

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

From: DEGAGNE Julia * DEQ
Sent: Thursday, December 7, 2023 12:39 PM
To: Ragan, Anita <Anita.Ragan@hovo.com>
Cc: EISELE Michael * DEQ <Michael.EISELE@deq.oregon.gov>; RUDLOFF Owen * DEQ <Owen.RUDLOFF@deq.oregon.gov>
Subject: H&V CAO Modeling Protocol

Hi Anita,

Thanks for chatting today. Here is a list of the other information we need to complete review of H&V's CAO modeling protocol (aside from the alternatives analysis that we'll discuss on Tuesday):

1. The CEMS data and analysis that was used in determining the modeled flow rates for the 400- and 600-series fans.
2. For the 200-series fans:
    a. The dates of the specific source tests used to determine the modeled flow rate
    b. A fan curve or data from the manufacturer showing the range of operating flow rates
    c. Is the flow rate of 6,263 cfm typical of the lowest rate during daily operations? If not, can you estimate how often the fan would operate below this rate?
3. H&V's ACDP and the Protocol list different CFU routings for a few of the fiberizers. Can you confirm that Table 3-7 and Figure 2-3 in the Protocol is the accurate version?

	Routing in Protocol Table 3-7 and Figure 2-3	Routing in Permit EU Table (p.4)
L1R1 and L1R2	CFU 105	CFU 105 or CFU 102
L2R2	CFU 110 or CFU 112	CFU 110 only
L2R4 and L2R9	CFU 112 only	CFU 112 or CFU 102

4. Excel versions of the modeling protocol and emissions inventory tables.

Please respond to these **by Thursday, December 14** if possible – if you need more time for any of them, let me know.

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