

RE: Weyerhaeuser - Information Needed to Complete NOC Application 23NOC1614

Nancy Liang <NLiang@trinityconsultants.com>

Thu 12/21/2023 3:15 PM

To: Beth Ryder <bRyder@trinityconsultants.com>; Aaron Manley <aaron.manley@orca.org>

Cc: Carter, Jack <Jack.Carter@weyerhaeuser.com>; Cameron, Angela <Angela.Cameron@weyerhaeuser.com>; Nolan, Michael <Michael.Nolan@weyerhaeuser.com>; Headley, Spencer <spencer.headley@weyerhaeuser.com>; Debbie Moody <debbie.moody@orca.org>

Hi Aaron- Following up on my VM, I'm checking to see how the draft permit is coming along. Thanks!

Nancy Liang (she/her)

Please Note New Phone Number

P 253.867.5600 x4819 D 425.966.2973

From: Beth Ryder <bRyder@trinityconsultants.com>

Sent: Tuesday, November 28, 2023 11:23 PM

To: Nancy Liang <NLiang@trinityconsultants.com>; Aaron Manley <aaron.manley@orca.org>

Cc: Carter, Jack <Jack.Carter@weyerhaeuser.com>; Cameron, Angela <Angela.Cameron@weyerhaeuser.com>; Nolan, Michael <Michael.Nolan@weyerhaeuser.com>; Headley, Spencer <spencer.headley@weyerhaeuser.com>; Debbie Moody <debbie.moody@orca.org>

Subject: RE: Weyerhaeuser - Information Needed to Complete NOC Application 23NOC1614

Aaron,

Attached are the responses to ORCAA's questions regarding modeling and details of updates made to the modeling evaluation.

All model files are available for download at this link:

<https://files.trinityconsultants.com/link/OR6X7JAEsnStmvMg29IXtB> (Expires 5/26/24). A directory of model files is provided in Attachment B of the *.pdf file.

It may be helpful to schedule a call to discuss these updates and any other questions that have arisen out of the previous memo review. Is there a good time over the next couple weeks that would work for your team?

Best,
Beth

Beth Ryder

Principal Consultant

P 458.206.6770

8705 SW Nimbus Ave, Suite 350, Beaverton, OR 97008

Email: bryder@trinityconsultants.com

Upcoming Events:

[12/12/23 – EPA TSCA Rule Targets PFAS Consumer Goods Importers and Industrial Manufacturers with Retroactive Reporting Requirement \(ONLINE\)](#).

[12/14/23 – Complimentary Webinar: Environmental Regulatory Outlook in Oregon – Hot Topics and Annual Compliance Reporting Updates for Planning Your 2024 \(ONLINE\)](#).

From: Beth Ryder

Sent: Wednesday, November 15, 2023 8:09 PM

To: Nancy Liang <NLiang@trinityconsultants.com>; Aaron Manley <aaron.manley@orca.org>
Cc: Carter, Jack <Jack.Carter@weyerhaeuser.com>; Cameron, Angela <Angela.Cameron@weyerhaeuser.com>; Nolan, Michael <Michael.Nolan@weyerhaeuser.com>; Headley, Spencer <spencer.headley@weyerhaeuser.com>; Debbie Moody <debbie.moody@orca.org>
Subject: RE: Weyerhaeuser - Information Needed to Complete NOC Application 23NOC1614

Aaron,

Please see the attached letter with responses to ORCAA's questions for our meeting tomorrow. Responses to the modeling questions will be provided separately.

Best,
Beth

Beth Ryder
Principal Consultant

P 458.206.6770
8705 SW Nimbus Ave, Suite 350, Beaverton, OR 97008
Email: bryder@trinityconsultants.com

Upcoming Events:

[12/12/23 – EPA TSCA Rule Targets PFAS Consumer Goods Importers and Industrial Manufacturers with Retroactive Reporting Requirement \(ONLINE\)](#)

[12/14/23 – Complimentary Webinar: Environmental Regulatory Outlook in Oregon – Hot Topics and Annual Compliance Reporting Updates for Planning Your 2024 \(ONLINE\)](#)

From: Nancy Liang <NLiang@trinityconsultants.com>

Sent: Tuesday, November 7, 2023 10:39 AM

To: Aaron Manley <aaron.manley@orca.org>

Cc: Carter, Jack <Jack.Carter@weyerhaeuser.com>; Cameron, Angela <Angela.Cameron@weyerhaeuser.com>; Beth Ryder <bRyder@trinityconsultants.com>; Nolan, Michael <Michael.Nolan@weyerhaeuser.com>; Headley, Spencer <spencer.headley@weyerhaeuser.com>; Debbie Moody <debbie.moody@orca.org>

Subject: RE: Weyerhaeuser - Information Needed to Complete NOC Application 23NOC1614

Thanks Aaron- Just sent out a meeting invite to connect at noon on 11/16.

Nancy Liang (she/her)

Please Note New Phone Number

P 253.867.5600 x4819 D 425.966.2973

From: Aaron Manley <aaron.manley@orca.org>

Sent: Tuesday, November 7, 2023 10:27 AM

To: Nancy Liang <NLiang@trinityconsultants.com>

Cc: Carter, Jack <Jack.Carter@weyerhaeuser.com>; Cameron, Angela <Angela.Cameron@weyerhaeuser.com>; Beth Ryder <bRyder@trinityconsultants.com>; Nolan, Michael <Michael.Nolan@weyerhaeuser.com>; Headley, Spencer <spencer.headley@weyerhaeuser.com>; Debbie Moody <debbie.moody@orca.org>

Subject: Re: Weyerhaeuser - Information Needed to Complete NOC Application 23NOC1614

Hi, Nancy. Yes, I'm available either of those times Thursday; whatever works best for you.

Sincerely,

Aaron Manley, P.E.

Engineer II

+++++

Olympic Region Clean Air Agency

[2940 Limited Lane NW](#)

[Olympia, WA 98502](#)

[\(360\) 539-7610 x 104](#)

www.orcaa.org

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From: Nancy Liang <NLiang@trinityconsultants.com>

Sent: Tuesday, November 7, 2023 10:15 AM

To: Aaron Manley <aaron.manley@orcaa.org>

Cc: Carter, Jack <Jack.Carter@weyerhaeuser.com>; Cameron, Angela <Angela.Cameron@weyerhaeuser.com>; Beth Ryder <bRyder@trinityconsultants.com>; Nolan, Michael <Michael.Nolan@weyerhaeuser.com>; Headley, Spencer <Spencer.Headley@weyerhaeuser.com>; Debbie Moody <debbie.moody@orcaa.org>

Subject: RE: Weyerhaeuser - Information Needed to Complete NOC Application 23NOC1614

Hi Aaron- Hope you are doing well. I'd like to give you an update that we've been working on the response to ORCAA's questions. We are hoping to submit the response along with the calculation spreadsheet before the end of this week. Also, we'd like to request a call with you to go over the updates. Will you please let us know if you are available on Thursday 11/16 between noon and 1pm or after 3.30pm?

Thanks!

Nancy Liang (she/her)

Please Note New Phone Number

P 253.867.5600 x4819 D 425.966.2973

From: Aaron Manley <aaron.manley@orcaa.org>

Sent: Thursday, October 12, 2023 13:10

To: Cameron, Angela <Angela.Cameron@weyerhaeuser.com>

Cc: Headley, Spencer <Spencer.Headley@weyerhaeuser.com>; Carter, Jack <Jack.Carter@weyerhaeuser.com>; Debbie Moody <debbie.moody@orcaa.org>

Subject: [EXTERNAL] Re: Weyerhaeuser - Information Needed to Complete NOC Application 23NOC1614

Hello, Angela. Apologies for sending this request for clarification after the initial data request, but a coworker had a comment: Sections 5.2.1 and 5.2.2 of the application state, "Upon further analysis, all add-on control technologies were deemed to be technically infeasible." However, no explanations were provided to support these conclusions for either VOC or particulate emissions controls listed as "Other Controls" in the application. An explanation needs to be provided for all control technologies used in practice for drying (lumber, veneer, wood chips) even if the control technology does not show up on the RBL clearinghouse list. For example, veneer dryers

are a similar drying operation where presumed BACT is an add-on control device. The CDKs proposed by Weyerhaeuser will be equipped with exhaust capture systems, which will capture and exhaust emissions through two sets of stacks. Therefore, it is technically feasible to duct these emissions to an add-on control system. Therefore, for each "Other Control" listed in the application, provide either:

1. A sound basis or explanation why the add-on control is technically infeasible; or,
2. A cost feasibility analysis for the add-on control.

Sincerely,

Aaron Manley, P.E.

Engineer II

+++++

Olympic Region Clean Air Agency

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From: Aaron Manley

Sent: Tuesday, October 10, 2023 9:36 AM

To: Cameron, Angela(Southern Design Services, Inc) <Angela.Cameron@weyerhaeuser.com>

Cc: spencer.headley@weyerhaeuser.com <spencer.headley@weyerhaeuser.com>; Carter, Jack <Jack.Carter@weyerhaeuser.com>; Debbie Moody <debbie.moody@orcaa.org>

Subject: Weyerhaeuser - Information Needed to Complete NOC Application 23NOC1614

Dear Angela,

Additional information is needed to complete the Notice of Construction (NOC) application submitted by Weyerhaeuser NR Company for approval to install a CDK at 51 Ellis Rd in Raymond, WA. The information necessary to complete the application is described in the following attachment.

The requested information should be submitted as an application addendum and should indicate the NOC application # (23NOC1614), your name, your company name, and the current date on the cover page. Once we have received a complete application, ORCAA will review the proposal for compliance with the criteria for approval in ORCAA Rule 6.1 before issuing a Final Determination and Order of Approval.

Please be advised that an Order of Approval issued by ORCAA is required prior commencing construction of the CDK. Not securing ORCAA's approval prior to commencing construction would be a violation of ORCAA Rule 6.1 and could be subject to penalty. Commencing the project includes (but is not limited to) preparatory work to facilitate the project such as electrical, plumbing, or foundation work, or moving equipment to the project site. Also, ORCAA recommends not committing to purchasing any equipment that emits air pollution or air pollution

control devices until an Order of Approval has been issued. ORCAA's Order of Approval may include specific design requirements for equipment or air pollution control.

If any of the information you are submitting is confidential, please submit a Request for Confidentiality of Records and a public (redacted) copy of the document. See www.orcaa.org/forms-documents/ for an ORCAA Fact Sheet on Confidential Business Information and the Request for Confidentiality Form.

Information Needed to Complete NOC Application 23NOC1614 October 10, 2023

1. Potential To Emit (PTE) Calculations. The emissions calculations in the permit application did not appear to assume true PTE (i.e. continuous 8,760 hours per year) operation for all aspects of the operation. ORCAA can limit or cap the facility's operations and emissions to the production levels proposed in the application. However, if your facility decides to operate more than at the rates proposed in the application, it would require a permit modification prior to making those operational changes. If Weyerhaeuser would like to operate more than the hours proposed in the permit application, please recalculate emissions at the desired level of production (up to 8,760 hours per year) and resubmit PTE calculations and modeling. Otherwise, ORCAA will assume you're satisfied with the operational hours and material usage rates proposed in the permit application and include the appropriate additional monitoring, record keeping, and reporting requirements in the permit.
2. Electronic copies of the spreadsheets used to calculate criteria, TAP and GHG emissions provided in the application. The electronic spreadsheets must be in an unprotected format to enable equations, linkages, emissions factors, and assumptions to be seen.
3. Modeling Comments & Questions.
 - a. The application states an outdated version of AERMET was used, (V.19191) and we require confirmation the current version of AERMET was used (V. 22112) or that the modeling scenario be re-run using the current version of AERMET.
 - b. The application needs to use the most recent 5 calendar years of met data, or be amended to address/justify why 2016-2020 was used and not 2018-2022.
 - c. Table G-4, footnote 1 states that the two merged CDK stacks (North and South) are based on guidance from "*Practical Guide to Atmospheric Dispersion Modeling*" (Turner and Shulze). Please provide the relevant excerpts from this reference, in the context of how the merged pseudo stacks' exit velocity and stack diameter were determined.
 - d. Please provide an evaluation of ORCAA Rule 8.6(b), ORCAA's ambient formaldehyde standard.
 - e. Please provide access to the modeling input/output files via DVD, a SharePoint link, or something similar (please note that we do not accept DropBox).
 - f. Section 7.1, paragraph 2 of the NOC application states that all TAPs, except NO₂, were modeled at 1 g/s and scaled using the project emission increase per WAC 173-460-080." Please provide the "post processing" worksheet used to scale TAP modeling results at 1 g/s by the TAP emissions rates of each source modeled. **Why needed:** Because the NOC application states that 1 g/s was used, the modeling results must have been post-processed. ORCAA needs to review these calculations because it is a critical part of the impacts analysis.
 - g. Please provide the "front-end" calculations of criteria pollutants that converts the appropriate emission rates to the g/s used for each release point in the model. **Why needed:** ORCAA needs to review these calculations because they are a critical preliminary step in the impacts analysis.

4. Addressing Startup/Shutdown. The application indicates there will be two (2) ten hour shifts operating 5 days a week. Will the CDK shut down during non-shift hours, on the weekend, or will it continue operating continuously, except for during annual/planned maintenance? Also, do you plan to meet BACT limits during Startup/Shutdown?
5. Pollutants typically associated with hogged fuel combustion such as Mercury, Hydrochloric Acid, Chromium III, and Chromium VI were not addressed in the application. Please use the AP-42 emissions factors or similar and complete the associated Chapter 173-460 WAC toxics review for those TAP.
6. Did the application 'net out' or 'offset' any pollutants? It did not appear so, but we mentioned it may be an option in the pre-meeting and we are verifying those techniques were not used.
7. CDK BACT for PM. Please provide a narrative for why add-on controls for PM are technically infeasible or update the CDK BACT determination for PM.

Please contact me if you have any questions at 360-539-7610 or aaron.manley@orca.org.

Sincerely,

Aaron Manley, P.E.

Engineer II

+++++

Olympic Region Clean Air Agency

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