



State of Oregon Department of Environmental Quality

Addendum – NPS Comment

Regional Haze 2018-2028 State Implementation Plan Cover Letter

Summary

This document contains comments DEQ received from the National Park Service in response to the proposed Regional Haze Plan. This comment was inadvertently omitted from the SIP originally put out on public notice but DEQ will include the comment from Aug. 2, 2021, in the final 2018 - 2028 Regional Haze Plan. DEQ will submit the final Regional Haze Plan to EPA after responding to public comments and upon receiving direction from the Environmental Quality Commission in January 2022.

From: [Shepherd, Don](#)
To: [WILLIAMS Karen * DEQ](#); [ORMAN Michael](#)
Cc: [Cummins, Jalyn C](#); [King, Kirsten L](#); [Miller, Debra C](#); [Stacy, Andrea](#); [Peters, Melanie](#); ["Hunt, Jeff"](#); [Zach Hedgpeth](#); [Devore, Lisa M](#)
Subject: Re: NPS/Oregon RH Consultation
Date: Monday, August 2, 2021 10:08:33 AM
Attachments:

Good morning, Karen and Michael,

I am following up on Melanie's message with some additional feedback that I hope will facilitate your progress on your draft RH SIP. I have been focusing on the cost-effectiveness of adding Selective Catalytic Reduction (SCR) to reduce NOx emissions from the power boilers at the pulp & paper mills.

In OR DEQ's review of the power boilers at Georgia Pacific's (GP) Toledo mill, OR DEQ changed GP's 1.5 retrofit factor "to 1 because there is no vendor data" which is consistent with EPA's Control Cost Manual (CCM) spreadsheet which advises "You must document why a retrofit factor of (>1.0) is appropriate for the proposed project." We agree with this decision by OR DEQ for GP-Toledo but are concerned that OR DEQ accepted the 1.5 retrofit factor contained in the cost-effectiveness analyses submitted by the paper mills for the other power boilers with none of the required documentation. Application of this un-documented maximum retrofit factor significantly inflates the capital cost of SCR.

The reagent (ammonia) cost/gallon used by the paper mills in their SCR spreadsheets is an order of magnitude greater than the default value contained in the CCM SCR spreadsheet. The higher reagent cost should be documented or revised to be consistent with the CCM default cost/gal.

The operating times calculated by the CCM spreadsheets were over-ridden by the paper mills and higher values were substituted. This resulted in significant overestimation of operating costs that are based upon hours of operation.

The paper mills included costs for reheating the boiler outlet gas streams to facilitate application of SCR. While reheat may be necessary if the SCR is applied downstream of emission control devices that reduce the temperature of the gas stream, it would not be necessary for SCR applied to the natural gas-fired power boilers common to these mills.

Where reheat is appropriate, e.g., for a biomass-fired boiler with particulate controls, the amount of natural gas needed to reheat the gas stream should be explained and justified.

When these corrections are made, the costs of adding SCR will be greatly reduced.

Please feel free to contact me with any questions or comments.

thanks,

From: Peters, Melanie <Melanie_Peters@nps.gov>

Sent: Thursday, July 29, 2021 9:31 AM

To: WILLIAMS Karen DEQ <karen.williams@deq.state.or.us>

Cc: Cummings, Jalyn C <Jalyn_Cummings@nps.gov>; King, Kirsten L <kirsten_king@nps.gov>; Shepherd, Don <Don_Shepherd@nps.gov>; Miller, Debra C <Debra_Miller@nps.gov>; Stacy, Andrea <Andrea_Stacy@nps.gov>

Subject: NPS/Oregon RH Consultation

Hello Karen,

Thank you for sharing the updated Oregon four-factor analysis files. As you know, there is a ton of information there to review. We very much appreciate the work Oregon is undertaking to reduce haze causing emissions affecting Class I areas, especially Crater Lake NP. That said, we are concerned about the apparent backing off from requiring the most stringent of the cost-effective controls identified through the four-factor analysis.

Given the substantive changes that have occurred since you first shared an Oregon Draft RH SIP with us, and the still incomplete nature of the SIP, we are unable to conclude our formal consultation at this time. As we conclude reviews of individual sources, we will continue to share those with you. We ask that you please share your updated SIP chapters explaining the control determinations and long-term strategy as they are completed.

We still expect to be given time to respond to those chapters in writing so that you can (minimally) include our feedback or (ideally) respond to our feedback in your public review draft. Thank you for working with us through the SIP development process. As always, we are happy to talk and would welcome a conversation about developments as they occur. I will be out of the office next week, please work with Jalyn to coordinate a call if needed.

Best,
Melanie

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Melanie V. Peters
NPS, Air Resources Division