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To: [Agata McIntyre](#)
Cc: [Yohann R Misquitta](#); [Michael A Olinger](#); [Stephen M Day](#); [Matthew T Stamps](#); [Cohen, Matthew](#)
Subject: City response to Public Comments
Date: Wednesday, June 11, 2025 7:34:04 AM
Attachments: [2025-06-11 COB response to comments on draft CO limit order.pdf](#)

Agata,

As we mentioned in our last meeting, the City wanted to provide you with our response to some of the public comments that have been submitted. Please see attached PDF for our responses. I hope everything goes smoothly for you at the Public Hearing today.

Please let me know if you have any questions,
Steve

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Public Works Department City of Bellingham

June 11, 2025

Agata McIntyre, Engineering Manager
Northwest Clean Air Agency
1600 South Second Street
Mount Vernon, WA 98273

Re: Draft Regulatory Order RO-52

Dear Ms. McIntyre:

I am writing on behalf of the City of Bellingham ("the City") to respond to comments submitted on the Agency's draft Regulatory Order RO-52 ("the Draft Order") to limit carbon monoxide (CO) emissions from the City's Post Point Wastewater Treatment Plant sewage sludge incinerators ("SSIs"). The City agrees with the information the Agency provided to the public about the purpose of the Draft Order and the governing regulations.¹ The City applied for the Draft Order to limit CO emissions from the SSIs. NWCAA reviews synthetic minor order applications pursuant to NWCAA Regulations Section 121.7. That section references WAC 173-400-091 for the criteria that a synthetic minor order must satisfy. The City addressed those criteria in its October 4, 2024 application.

Two of the public comments received to date address the adequacy of the monitoring program included in the Draft Order to assure compliance with the 12-month rolling average CO limit. A May 28 email suggests that by "the placement of sensors on the roof" the Draft Order would allow the City to sample a diluted flue gas stream that may not be representative of the emission rate from the SSIs. These concerns are unfounded. Applicable EPA regulations require that "All continuous monitoring systems or monitoring devices shall be installed such that representative measurements of emissions or process parameters from the affected facility are obtained."² They further require that the Continuous Emissions Rate Monitoring System ("CERMS") be installed "at an accessible location where the pollutant concentration or emission rate measurements are directly representative or can be corrected so as to be representative of the total emissions from the affected facility."³ The term "emissions" as used in these contexts refers to emissions of an air pollutant into the outside (*i.e.*, ambient) air.

The design of each SSI includes two gas streams—furnace exhaust gas and shaft cooling air—which are mixed prior to entering the stack and being discharged to atmosphere. Sampling

¹ NWCAA, Information for the Post Point Public Hearing June 11, 2025.

² 40 CFR 60.13(f).

³ 40 CFR Part 60, Appendix B, Performance Specification 2, Section 8.1.1.

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locations downstream of this mixing zone are the location most representative of CO emissions from each SSI into the ambient air.

The new CERMS that is used to measure mass emissions of CO from each SSI at Post Point includes a gas flow meter and a CO concentration monitor. The flow meter and the concentration monitor must be, and in the City's design are, collocated; each is collecting accurate and representative measurements of the same gas stream at a single location that is directly representative of total emissions into the ambient air. Dilution is not a concern, as the emission rate is calculated by multiplying the total gas flow rate by the CO concentration: The increase in flow rate resulting from inclusion of shaft cooling air offsets the lower CO concentration rate in the combined gas stream, which ensures accurate measurement of the mass emission rate into the ambient air.

Accurate flow measurements require a laminar gas flow at the location of the flow meter. For each SSI, the sampling location selected by the City is downstream of the induced draft fan that pulls gases through the furnace and downstream of the mixing zone where furnace exhaust gas and shaft cooling air are combined. This location is accessible, and it avoids locations where there is turbulence in the stack gas flow closer to the ID fan. Even if any upstream locations were similarly representative of mass emission rate into the ambient air, those locations would not suffice for a CERMS because of turbulent gas flow.

The May 28 email also contends that 365 day rolling averages should not be used to monitor compliance with the CO limit, that EPA guidance purportedly requires a "7-day maximum block of time" to demonstrate compliance. The Draft Order establishes a rolling 12 month limit on annual CO emissions because 12 months is the interval that WAC ch. 173-401 prescribes for major source Title V applicability based on emissions of a criteria pollutant like CO. WAC 173-401-200(19)(b) (definition of major stationary source). A seven-day average would not be useful in monitoring compliance with the 90 ton per year limit in the Draft Order. Because the Order requires continuous monitoring of flow rate and CO concentrations the City will report monthly mass emission rates with a high level of precision and accuracy.

In addition to the concerns summarized above, the two comments the City reviewed contain sweeping allegations about purported new source review violations, Clean Water Act violations, improper disposal of "hazardous or special waste," and other topics that have no relevance to the criteria for approval of a synthetic minor order. While the City disagrees with all of those contentions, the City will refrain from addressing them here as they have no bearing on the subject matter of the Draft Order or the criteria that govern issuance of the Draft Order.

Please let me know if the City can provide any additional information that would be helpful in responding to public comments on the Draft Order.

Very truly yours,



Steve Bradshaw,
Superintendent of Plants