

From: [Patrick Anderson](#)
To: [Lauren Whybrew](#)
Cc: [Heather Hillaker](#)
Subject: HAP Deficiencies in Pacific Northwest Renewable Energy's Air Permit Application
Date: Monday, January 8, 2024 1:17:17 PM
Attachments: [SELC letter on PNWRE HAPs.pdf](#)

Ms. Whybrew,

Thank you for speaking with me this afternoon. As discussed, the letter regarding HAP emissions is attached. Please let me know if you have any further questions, and I'll be on the lookout for a OneDrive link.

Best,

Patrick Anderson

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January 8, 2024

Via Electronic Mail: lauren.whybrew@orcca.org

Lauren Whybrew
Olympic Region Clean Air Agency
2940 Limited Lane NW
Olympia, WA 98502

RE: Hazardous Air Pollutant (HAP) Deficiencies in Preliminary Determination for Pacific Northwest Renewable Energy, LLC (PNWRE)

Dear Ms. Whybrew:

In July 2023, Pacific Northwest Renewable Energy, LLC (PNWRE) submitted an air permit application for a 440,800 tpy wood pellet manufacturing facility to be located in Hoquiam, Washington. Although this industry has been operating in US South for more than a decade, this would be the first industrial-scale, export-based wood pellet plant in the US Pacific Northwest.

As attorneys with the Southern Environmental Law Center and Environmental Integrity Project, we have worked extensively on air quality issues at wood pellet plants since 2017, reviewing permits and applications for more than 35 pellet plants located in a dozen states. We have also compiled a database of more than 50 stack tests from these facilities and discovered thousands of tons of excess VOC and HAP emissions, resulting in more than \$6 million in environmental penalties and the installation of new pollution control technology at numerous plants.¹

We write now because PNWRE has **vastly underestimated HAP emissions**. The company claims the facility will emit only 1.3 tons of HAPs per year; this estimate is deeply flawed and based on incorrect or inappropriate emission factors—mostly AP-42 emission factors that are not specific to wood pellet plants. Recent stack tests and air permit applications that are specific to this industry show that a facility this size and with the controls proposed by PNWRE will emit 40 tons or more of total HAPs per year, including more than 20 tons of methanol and a significant amount of the particularly toxic HAP acrolein.

As just one example, the pellet manufacturer Drax, which operates 18 industrial-scale pellet plants, recently applied for an air permit for a 496,000 tpy facility in Longview, Washington. Drax estimates that its facility—which is comparable in scale, control technology, and feedstock to PNWRE—will emit 49 tons of HAPs.² This is well in line with numerous other recent

¹ See, e.g., https://www.nola.com/news/environment/british-company-agrees-to-pay-3-2-million-for-air-pollution-at-louisiana-wood-pellet/article_c451e610-4352-11ed-8a54-43df54e33cd5.html.

² Letter from Trinity Consultants, on behalf of Drax, to Danny Phipps, Air Quality Engineer, Southwest Clean Air Agency, at Attachment 2: Updated Potential Emission Calculations and Stack Test Data, Table C-2b (Mar. 29, 2023) (Attachment A). Available via Sharefile link at: <https://southernenvironment.sharefile.com/d-sa745e15d0ed64ba0bcb8a6fe2cc87102>.

applications and stack tests at wood pellet plants,³ and suggests PNWRE will have the potential to emit about 43 tons of HAPs per year.

Additionally, PNWRE intends to operate wet (aka green) hammermills that will not be vented to any VOC controls and has improperly listed these units as not emitting any VOCs and HAPs. Most comparable mills vent these units to the furnace or dryer RTO for VOC and HAP control, and stack tests on uncontrolled wet hammermills⁴ show PNWRE's wet hammermills will emit up to 60 tons of VOCs and six tons of HAPs (in addition to the emission rates calculated above).

Given the foregoing, PNWRE's application is deficient and incomplete. Specifically, as a major source of HAPs, the company must submit a case-by-case Maximum Achievable Control Technology analysis. Additionally, the company's air toxics Ambient Impact Review is wholly irrelevant as it is based on inaccurate HAP emission rates. Finally, the company's BACT analysis for the wet hammermills is incomplete for failing to assess VOC controls.

These are only the most significant issues identified in PNWRE's application. We believe, however, that at minimum ORCAA must withdraw PNWRE's application from notice and comment until the company revises its application to address these issues. Finally, we are happy to share any of the resources that we have gathered concerning this industry.

Respectfully,

/s/ Patrick Anderson

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³ See, e.g. Enviva Pellets Waycross, Application for Title V Permit Significant Modification Without Construction, at Appendix C (Oct. 2021) (Attachment B) (Showing that at a production capacity of 920,000 tpy, the facility emits 79 tons of HAPs. This ratio equates to 38 tons of HAPs at PNWRE. Enviva, which operates 10 pellet plants, has used these same emission factors in recent applications in Alabama and Mississippi as well); see also Drax Amite BioEnergy, Title V Air Permit Application, at Appendix B (Feb. 2022) (Attachment C) (Showing 40 tons of HAPs emitted by the facility). These applications and related stack tests are available on Sharefile at: <https://southernenvironment.sharefile.com/d-sa745e15d0ed64ba0bcb8a6fe2cc87102>.

⁴ Enviva Pellets Wiggins, LLC, Air Emission Test Report (Oct. 31, 2013) (Attachment D); Enviva Pellets Amory, LLC, Air Emission Test Report (Oct. 31, 2013) (Attachment E). Available on Sharefile at: <https://southernenvironment.sharefile.com/d-sa745e15d0ed64ba0bcb8a6fe2cc87102>.