March 2, 2023

To the Senate Committee on Energy and the Environment:

I am a retired primary care and public health physician with decades of experience working in and advocating for public health. I am writing in support of SB 488, which would enhance regulation of waste incineration in order to better protect the environment and population health. The Covanta Marion waste incinerator is one of the top 20 polluting industries in Oregon, emitting hundreds of toxins that are known to be injurious to human health. It is an aging facility, which its owners admit is in need of substantial upgrades. Because it was built prior to 1995, it is already held to *less* strict emission standards than more modern incinerators. And due to a loophole in regulations, it is not subject to emission standards for incinerators of medical waste, but rather the lower standards applied to municipal waste incineration. SB 488 would close that loophole and permit the State to regulate the facility as a medical waste incinerator.

Why should Oregon be concerned about medical waste incineration? Emissions from medical waste are more toxic than for municipal waste, including large volumes of carbon monoxide, hydrogen chloride, sulfur dioxide and nitrogen dioxide, in addition to the heavy metals, mercury, cadmium and lead. Adverse health effects from these toxins involve every bodily system, but most worrisome are the neurodevelopmental effects in children, which can have lifelong and harmful consequences for health and well-being. A significantly larger proportion of medical waste contains PVC plastics. When PVCs are burned in the presence of organic materials, dioxins and furans are formed. These highly toxic and cancer-causing substances are "forever" chemicals, with half-lives in soil ranging from 10 to 100 years, depending on the chemical and where it is deposited. Many of the pollutants generated are not just polluting our air, but also find their way into our agricultural products, drinking water, and wildlife. They can accumulate in human and animal tissue and build up in bones or internal organs, inflicting ongoing damage over years.

Because of the toxicity of burning medical waste, most hospital systems have turned to safer waste solutions. In most states medical waste incineration is much more highly regulated. Because of the unfavorable regulatory environments elsewhere, most of the medical waste burned at Covanta is imported from other states. That means that Oregon has become a dumping ground for medical waste generated elsewhere. It's a lucrative business for the owners of Covanta Marion, but the costs, in terms of environmental degradation and harmful impacts on human health, are being borne by the neighboring communities.

Brooks, where Covanta is located, is a small agricultural town of about 500 persons. The nearby community of Gervais, also agricultural, is majority Latine and has a population of about 2500. Compared to the rest of Marion County and to the entire population of Oregon, the people living in the shadow of Covanta are significantly younger (more infants, children and teens) with a disproportionate number of Latine and non-English speakers. The EPA Environment Justice Screen for environmental indicators shows that the area around Covanta is worse off for many measures than most other locales in Oregon. This includes higher levels of ozone and diesel particulate matter. The latter, in particular, adversely affects pulmonary and cardiovascular systems and contains many carcinogens. It is a chief pollutant emitted by Covanta. Door-knock campaigns conducted by Oregon Physicians for Social Responsibility in and around Brooks suggest that most community members are unaware of the risks of living near the incinerator. There has been no meaningful involvement of these communities in decision-making around the siting and regulation of the Covanta facility. It's a classic case of environmental racism: a highly toxic and under-regulated facility sited in a rural community with a substantial population (in the case of Gervais, a majority) of non-white persons.

We have no idea how much of which toxins have been deposited into the environment surrounding Covanta Marion. That's because our regulation of emissions does not require actual measurement of toxins in soil or water, plants, animals or humans. Measurement of toxins in the air is limited to measurements at the stack of a very few of the hundreds of pollutants emitted. How much gets dispersed and how far is simply not known. No health risk assessment has ever been conducted in the communities of Brooks or Gervais. In 2022 a study funded by the non-profit Beyond Toxics sampled heavy metals in moss near three schools within a five mile radius of the incinerator. The study found the highest levels of barium, cadmium, chromium, lead and mercury at the school, Brooks Elementary, closest to the facility. The study does not prove adverse health outcomes or even where the heavy metals originated. But it does indicate that further testing is warranted.

One step in the right direction of limiting toxic exposure would be to appropriately regulate the Covanta Marion incinerator. This requires at a minimum that the facility be held to

the standards of medical waste incineration. Due to the current lax regulations, emissions from the 11,000 tons of medical waste burned each year at Covanta are five times higher than would be permitted if the facility were regulated as a medical waste incinerator. Why should Oregon take unwanted toxic waste from other states, allow it to be incinerated here, while putting Oregonians at risk for adverse health outcomes?

Respectfully submitted,

Patricia Kullberg, MD, MPH

Oregon Physicians for Social Responsibility

Selected References

Beyond Toxics. (2022) "Study Shows Higher Heavy Metal Concentrations Near Covanta Incinerator," <u>https://www.beyondtoxics.org/resources/news/study-shows-heavy-metal-</u> <u>concentrations-higher-near-covanta-incinerator/</u>

- Committee on Health Effects of Waste Incineration. (2000). Environmental Transport and Exposure Pathways of Substances Emitted from Incineration Facilities. Retrieved from National Center for Biotechnology Information: https://www.ncbi.nlm.nih.gov/books/NBK233615/
- Covanta . (2019, May 13). *Testimony before the Senate Rules Committee*. Retrieved from Oregon State Legislature: Committee Meeting Document: <u>https://olis.leg.state.or.us/liz/2019R1/Downloads/CommitteeMeetingDocument/198988</u>
- Department of Environmental Quality. (2019, March 1). Cleaner Air Oregon Facility Prioritization Results. Retrieved from Department of Environmental Quality: https://www.oregon.gov/deq/FilterDocs/caofacilityresults.pdf
- Department of Environmental Quality. (2019, October). *DEQ Requests Comments on Covanta Marion, Inc. Air Quality Permit.* Retrieved from Department of Environmental Quality: <u>https://www.oregon.gov/deq/get-involved/documents/111819Covanta.pdf</u>
- Marion and Polk Counties. (2019). *Marion-Polk Community Health Assessment*. Retrieved from Marion County: <u>https://www.co.marion.or.us/HLT/communityassessments/Documents/Marion_Polk_CH</u> <u>A 2019 Final Copy.pdf</u>

- Ollson Environmental Health Management. (2017, July 5). *Metro Health Impact AssessmentEvaluation of Landfill and Waste to Energy Options for Managing Municipal Solid Waste*. Retrieved from Oregon Metro: <u>https://www.oregonmetro.gov/sites/default/files/2017/07/06/Metro_WTE_Landfill_HIA_Final_with_appendices_20170706.pdf</u>
- Oregon Department of Environmental Quality. Incinerator Rule, <u>https://www.oregon.gov/deq/aq/aqPermits/Pages/Incinerator-Rule.aspx</u>
- US Census Bureau. (2017). *American Fact Finder: Community Facts*. Retrieved from US Census Bureau: <u>https://factfinder.census.gov/faces/nav/jsf/pages/index.xhtml</u>
- US Environmental Protection Agency. EJ Screen: Environmental Justice Screen and Mapping Tool, <u>https://www.epa.gov/ejscreen</u>
- US Environmental Protection Agency. (2006, May 10). Standards of Performance for New Stationary Sources and Emission Guidelines for Existing Sources: Large Municipal Waste Combustors; Final Rule. Retrieved from US Environmental Protection Agency: <u>https://www.govinfo.gov/content/pkg/FR-2006-05-10/pdf/06-4197.pdf</u>
- US Environmental Protection Agency. (2007). *Environmental Justice*. Retrieved from U.S. Environmental Protection Agency: <u>https://www.epa.gov/environmentaljustice</u>