Zero Waste BC, Zero Waste Canada, and the Global Alliance for Incinerator Alternatives respond to Metro Vancouver's claims in the <u>CBC interview</u> and <u>New West Record article</u>:

- 1. Metro Vancouver claims waste is inevitable. In fact, wasting is a choice directed through system design and funding. Metro Vancouver's own stats say that 80% of what is in the waste today has existing options to avoid, recycle or compost it yet Metro Vancouver only inspects a quarter of the waste for items it has banned from disposal. However, Metro Vancouver has already proved that it can reduce waste through policy, programs and partnerships. There was over 476,000 tonnes of waste less in 2020 than there would have been if business as usual had continued from before the last solid waste plan.
- 2. **Metro Vancouver claims dioxin tests are within limits**. Testing requirements are weak. The dioxin tests are conducted once a year at times of perfect operation (not start up, shut down or malfunction, which is when they are most likely to form), on one of the three boilers (meaning it takes three years to get a full picture), at a time that is scheduled (in other places, they have may run loads with preferred materials to ensure good results) and only for chlorinated dioxins (some areas starting to worry about brominated ones as well). We recommend that the provincial government apply best practices by requiring continuous testing of the pollutants of concern, including dioxins and furans as Oregon has done.¹ The European Environment Bureau also recommends more rigorous testing.²
- 3. **Metro Vancouver claims waste-to-energy facilities today pose no health risk**. The key point, however, is not that the incinerator *can* operate to the dioxin standard but what the total risk is to the health of surrounding people and the environment. This is critical as dioxins and some other pollutants accumulate and can also transmit to people through agriculture (which is also nearby). A recent report for the International Pollutant Elimination Network includes case studies of high pollutant levels near

¹ Oregon set a new bar by requiring continuous testing for carbon monoxide, SO2, NOx, opacity, PCB, dioxin/furan, cadmium, lead, mercury, arsenic, total chromium, manganese, nickel, selenium and zinc. Source: Oregon Legislative Assembly (2023). Senate Bill 488. Accessed at https://olis.oregonlegislature.gov/liz/2023R1/Downloads/MeasureDocument/SB488#:~:text=(2)%20A%2 Omunicipal%20solid%20waste,during%20a%20single%20calendar%20year

² The European Environment Bureau (EEB) recommends long-term dioxin monitoring for waste incineration plants (EEB, 2019) and states that: "Stable emission levels cannot be determined through periodic measurements taken every six months, such as short-term sampling periods lasting 6-8hours as required by the IED. Instead, a monthly monitoring frequency using long-term sampling must be established in all cases. Only if these measurements indicate stable emissions can the authority authorize a less rigorous monitoring regime. The competent authority should request monthly monitoring for one year via long-term sampling to assess whether the PCDD/F emission levels are stable enough. This procedure may be repeated every 5 years." Jelinek, N. et al. for IPEN and Arnika (2024). Waste incineration and the environment (see page 28). Accessed at https://arnika.org/en/publications/waste-incineration-and-the-environment.

incinerators.³ Toxicowatch research has many examples where moss, pine needles and backyard chicken eggs showed high levels of dioxins (and other pollutants) near incinerators, also said to be modern and safe.⁴ Note that the Burnaby incinerator is not modern - it is 36 years old, already older than the average incinerator shutting down in the US.⁵ We recommend that the province conduct its own sampling of soil and bioindicators around the incinerator and make the results public.

For sulfur dioxide and hydrochloric acid, the incinerator emissions exceed provincial guidelines and those guidelines were set in 2011. The provincial guidelines for these and other pollutants need to be updated as they were last set in 2011 and are no longer best practice.^{6,7} We recommend the province set a new air emissions standard to ensure public and environmental safety and that Metro Vancouver be required to meet them.

- 4. **Metro Vancouver claims the incinerator is a good source of electricity.** The Burnaby incinerator is claimed to provide electricity for 16,000 homes, but in 2020, it used 70,000 gigajoules (GJ) of fossil gas to do this. One study found that waste incinerators undermine clean energy goals and emit more greenhouse gas emissions per unit of electricity produced than any other power source. Shutting down the incinerator would close one of the highest point sources of GHGs in the province.
- 5. Metro Vancouver claims the incinerator is the most cost-effective way to manage waste. This is false as reducing the waste is the most cost-effective method. When the waste is reduced as it was over the past plan, that would allow Metro Vancouver to shut down the incinerator and it would not need to send waste out of the region. The quicker this happens, the more money is saved and the longer the Vancouver Landfill will last. If waste reduction is in fact Metro Vancouver's key priority as they have stated, funding should go towards resourcing that instead of the incinerator, with the first interim goal being to decrease waste by 250,000 tonnes (the amount the incinerator burns). For a small fraction of the \$49 million annual cost used to operate the incinerator, Metro Vancouver could focus on improving the quality and frequency of inspections for banned material at their transfer stations and disposal sites. Doing this would direct resources of large haulers and municipalities toward ensuring basic waste

³ Jelinek, N. et al. for IPEN and Arnika (2024). Waste incineration and the environment (see section 3.5). Accessed at

https://arnika.org/en/publications/waste-incineration-and-the-environment.

⁴ Toxicowatch (2023). List of studies in the EU. https://www.toxicowatch.org/blank-1

⁵ U.S. Municipal Solid Waste Incinerators: An Industry in Decline. https://www.no-burn.org/resources/u-s-municipal-solid-waste-incinerators-an-industry-in-decline/

⁶ BC Ministry of Environment (2011). Combustion of Municipal Solid Waste -Air Emissions Fact Sheet. https://www2.gov.bc.ca/assets/gov/environment/waste-management/industrial-waste/industrial-waste/combustionmswfs.pdf

⁷ Steyn, D. (2024). Air Quality Standards and Municipal Solid Waste Incineration in Metro Vancouver. https://www.zerowastebc.ca/wp-content/uploads/2025/02/Review-of-Air-Quality-Standards-in-Metro-Vancouver-FINAL.pdf

⁸ Waste incinerators undermine clean energy goals (2023) https://journals.plos.org/climate/article?id=10.1371/journal.pclm.0000100

reduction and diversion practices with their commercial and residential customers. Doing this would also take advantage of the robust private recycling and compost facilities that have been established around Metro Vancouver at no cost to Metro Vancouver. Factor in all of the avoided capital costs and those are significant savings. Reducing waste will also make Metro Vancouver more resilient (including to any tariffs) and spur on the development of a circular economy.