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Rep. Doudera, Senator Tepler, and the Committee on the Environment and Natural Resources, thank you for the opportunity to speak in opposition to LD 231. My name is Bill Pluecker, and I represent House District 44, consisting of Warren, Hope, and Union.

Our current law regarding the solid waste management hierarchy, which aligns with regional recommendations, does not require amendment for many reasons, as I'm sure others will elaborate on today. However, I want to highlight the particular danger of burning materials that contain PFAS. The risk that PFAS pose to our ground and surface waters is not new to this committee, but I would like to focus on the danger of incinerating PFAS-containing waste and its impact on our water sources.

Incinerating waste that contains PFAS compounds is not a viable solution for disposing of these chemicals. In fact, it leads to the release of harmful byproducts into the atmosphere. The U.S. Environmental Protection Agency (EPA) recognizes the risks associated with the incineration of PFAS waste, as the process does not guarantee complete destruction of these substances. PFAS compounds are known for their extremely stable carbon-fluorine bonds, which require temperatures above 1000°C for effective breakdown. Even at these high temperatures, incomplete combustion can create harmful byproducts, including smaller fluorinated compounds, known as Partially Incinerated Compounds (PICs), that may be even more toxic than the original PFAS.

Additionally, metal catalytic surfaces in incinerators can speed up reactions that release PFAS and their derivatives into the air. Research has shown that emissions from PFAS incineration are often inadequately identified, making it difficult to

fully assess the associated risks. One of the most concerning issues is the formation of ultrafine particles (UFPs) that can transport PFAS across vast distances. These particles carry PFAS precursors, which condense or react with other compounds in the atmosphere, creating new particles that can spread PFAS contamination over wide areas, ultimately increasing exposure to humans and wildlife through rainfall.

Given these risks, it is essential to explore alternatives to incineration, such as safer disposal or advanced treatment methods, to prevent further environmental contamination of PFAS. Protecting public health and the environment requires a comprehensive approach that goes beyond just reducing PFAS levels in drinking water.

Thank you, and I am happy to answer any questions you may have.

1. Lin H, Lao JY, Wang Q, Ruan Y, He Y, Lee PKH, Leung KMY, Lam PKS. Per- and polyfluoroalkyl substances in the atmosphere of waste management infrastructures: Uncovering secondary fluorotelomer alcohols, particle size distribution, and human inhalation exposure. *Environ Int.* 2022;167:107434. doi:10.1016/j.envint.2022.107434

2. U.S. Environmental Protection Agency. Per- and Polyfluoroalkyl Substances (PFAS): Incineration to Manage PFAS Waste Streams. EPA Technical Brief. February 2020. Accessed 22 January 2025, [https://www.epa.gov/sites/default/files/2019-09/documents/technical\\_brie...](https://www.epa.gov/sites/default/files/2019-09/documents/technical_brie...)

