Legislative Concept to Address Methane Emissions, a Major Climate Driver, and Associated Pollution from Landfills

LC 866: Monitoring Methane Emissions

Chief Sponsors: Senator Gelser Blouin

Advocates: A coalition of organizations Beyond Toxics, Environment Oregon, Energy Justice Network and others

Main Purpose: To strengthen Oregon's 2022 rules to monitor landfill methane by allowing the use of drone-based and other advanced technology that surveys the entire landfill surface area and detects and pinpoints methane plume concentrations. Monitoring data is shared with the DEQ in a spatial data format.

Climate problem we are solving: Landfills across Oregon and the country are causing massive amounts of global warming through methane: a super-GHG pollutant that is approximately 80 times more potent than carbon dioxide in causing climate warming in the short term. Landfills are the third largest source of human-related methane emissions in the United States, according to the U.S EPA. Oregon landfills reported a total estimate of 2 million metric tons of carbon dioxide equivalent of methane emitted in 2022 (Source: EPA Greenhouse Gas Reporting Program). Science tells us that drastically reducing methane is the most impactful action we can take now to slow climate change – and as Oregon's largest source of methane emissions, monitoring and reducing landfill emissions is a key action to take. Methane plumes can also release <u>other pollutants</u> such as volatile organic compounds (VOCs) that react in the sunlight to form smog. Unfortunately, private landfill operators have used legal loopholes to omit 50% of landfill surface areas from surface emissions monitoring. U.S. EPA inspections revealed troubling methane exceedances at several landfills in Oregon. In fact, EPA inspectors found <u>"explosive" levels of methane leaks at Benton County's Coffin Butte landfill</u> that exceeded 10,000 parts per million.

Solutions: LC 866 takes action to reduce potent GHG's emissions emitted from landfills. It expands monitoring technology with accurate spatial data formats to quickly identify and repair broken gas collection systems. Providing consistent spatial data formats to the DEQ increases the agency's efficiency to verify surface emissions monitoring findings. Addressing methane leaks at landfills is crucial to combating climate change and preventing near term climate tipping points.