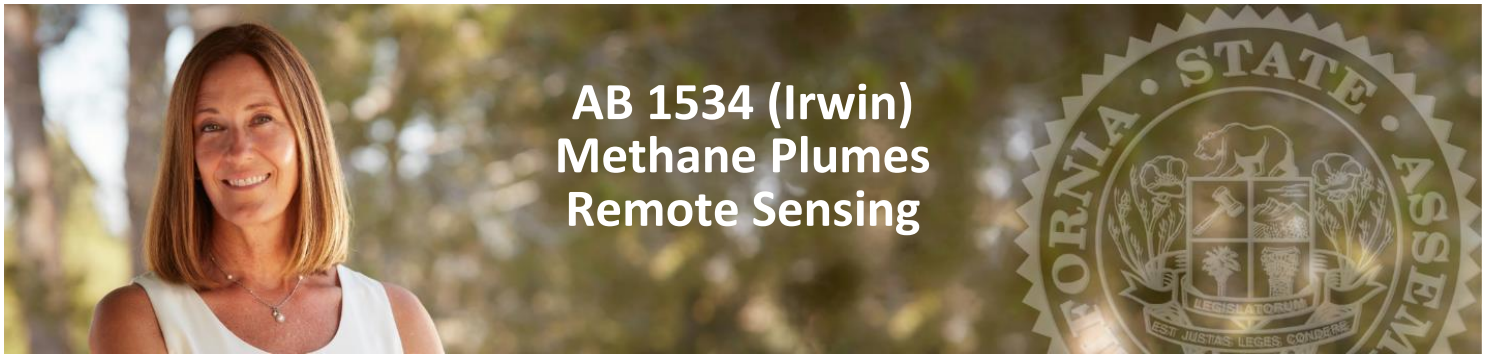

Summary

AB 1534 would assist the California Air Resources Board (CARB) with identifying and capturing significant methane emissions by using remote sensing technology, ultimately reducing contributions to climate change.

Background

SB 32 (Pavley, Ch. 249. Statutes of 2006) directed CARB to ensure that statewide greenhouse gas emissions are reduced to 40% below the 1990 level by 2030. Methane is responsible for, nearly a third of greenhouse gas emissions, second only to carbon dioxide. In contrast to carbon dioxide, methane has greater potential to trap heat in the atmosphere.

Methane plumes occur when significant amounts of organic matter decay in landfills or from agricultural waste, and during the production processes of oil and gas facilities. The California Landfill Methane (CLM) Regulation requires municipal solid waste landfills to reduce methane and other air pollutant emissions through emissions monitoring and through capturing fugitive methane. The Short-lived Climate Pollutants (SLCP) Reduction Strategy established a goal of reducing fugitive methane emissions from oil and gas by 40 percent below current levels in 2025 and a minimum 45 percent in 2030, and from all other sources by 40 percent in 2030.

Currently enforcement relies upon Surface Emission Monitoring (SEM) methods that are cumbersome and inefficient. In the current manual method for SEM, operators will walk up to 10 miles a day and average 14-18 miles per 100 inspected acres. [1]

A new method has been developed, remote sensing which includes remote sensing via satellite, drone, or airplane flyovers. Drone Emissions Monitoring (DEM) specifically refers to remote sensing via drone flyovers.

The California Methane Survey, a jointly funded project by the CARB, the California Energy Commission (CEC), and the National Aeronautics and Space Administration (NASA), used DEM and flagged major emissions coming from California landfills from 2016 to 2017. [2] Once the landfill operators were notified by CARB, they were able to identify and address the plume sources. Subsequent flyovers showed decreased emissions. [3]

Need for the Bill

Landfills make up 20% of California's total methane emissions. Action to address methane plumes at landfills is necessary to reach California's greenhouse gas goals.

New remote sensing methods have proven to accelerate the timeline for discovery and remediation of methane plumes when compared to traditional SEM methods. Integrating this new technology into CARB's toolbox follows national trends. As of January 2023 DEM has been implemented in 28 states. [4]

Without remote sensing, California risks allowing significant methane plumes from going undetected and unresolved for far longer than necessary, resulting in needless harm to the environment and surrounding communities. Failure to incorporate DEM will also hamper the State's progress towards achieving SB 32's 2030 emissions reduction target.

This Bill

AB 1534 would grant CARB the authority to incorporate remote sensing data into their enforcement efforts to reduce methane from municipal solid waste landfills.

The deadline for the Board to evaluate and revise regulations to incorporate these new means of monitoring is June 30, 2026.

Support

Californians Against Waste (Sponsor)

Contact

Krystal Raynes
Office of Assemblymember Jacqui Irwin
(916) 319-2042
Krystal.Raynes@asm.ca.gov

[1] https://www.mswmanagement.com/home/article/21292584/drones-for-surface-emission-monitoring-the-new-epa-alt150-and-why-it-matters
[2] https://ww2.arb.ca.gov/our-work/programs/california-satellite-partnership/california-methane-surveys
[3] https://www.nature.com/articles/s41586-019-1720-3
[4] https://ehsdailyadvisor.blr.com/2023/01/epa-approves-drone-based-landfill-methane-emissions-monitoring/