

Policy Brief

UCD Environmental Health Sciences Center

Environmental Health Impacts from Hazardous Waste Landfill

Problem Statement: State guidelines for toxins do not appropriately take into account cumulative exposure of pollution near landfills. Indirect pathways of toxins and co-location of hazards are not considered in policy at the correct scale leading to health risks for communities. Additional monitoring resources need to be allocated in order to correctly assess cumulative impacts of toxic landfills.

Kettleman City Study: Our study, in collaboration with Greenaction for Health and Environmental Justice and EL Pueblo para el Aire y Agua Limpia, centers in Kettleman City, a rural farmworker community that consists mostly of Latino workers. Kettleman city is home to the largest toxic waste dump in the west. In a recent study, we analyzed the current health impacts of both the toxic waste landfill as a point source of air pollution in the context of other pollutant sources such as contaminated drinking water, pesticides, and diesel pollution. Our research analyzed air quality for particulate matter and VOCs, our household water quality study analyzed samples for THMs and HAAs, and our biological monitoring study looked for PCBs. Though more sampling is needed to find representative results our study flagged multiple concerns for the Kettleman City community. Our findings in all three components of our study point to a greater need for cumulative impact studies.

Need for Cumulative Study

Our multipronged study has shown that Kettleman City faces pollutant risks stemming from the landfill but from many environmental sources. It is necessary to invest in cumulative exposure studies near toxic landfills where pollution from multiple sources have the potential to cause negative health impacts. California continues to lead in monitoring environmental justice and community exposure to toxins. However, in order to support communities avoid health impacts cumulative impact studies must be added to the state's current monitoring and regulation. Today there are insufficient funds and capacity to conduct these studies and communities may be at risk because of this lack of data.

Options for funding:

Department of Toxic Substance Control should prioritize grants for Cumulative Impacts: Funding should be made available for researchers and communities looking to conduct cumulative impact studies. By prioritizing these projects in allocating funds the state will create better baseline data around community health and toxics. Without this state investments may miss important impacts of environmental toxins.

Public-academic partnerships should be formed: Collaborations between public agencies and universities can increase both partners' capacities to address cumulative impacts more effectively. Often, communities can lose trust with state officials and collaborations with trusted University partners and institutions can help rebuild trust in order to address the issue.

Legislation- polluting landfills: Building on CalEnviroScreen's data on exposure to environmental exposure, a comprehensive evaluation of landfills needs to be done in order to understand where risk and exposure could be mitigated. Many landfills have expanded their licenses without updating their infrastructure to comply with current best practices in pollution mitigation. This cannot continue and all current landfills should be evaluated to comply with current regulations. This will require a comprehensive audit of landfill infrastructure, and pollution output. Doing this will help the state mitigate pollution exposure by ensuring that existing landfills are not creating outsized risk for communities because of outdated infrastructure.