

**Californians Against Waste
California Compost Coalition
California Resource Recovery Association
Center for Energy Efficiency and Renewable Technologies
City and County of San Francisco, Department of the Environment
Clean Power Campaign
Food Finders
Fresno Metro Ministry
Green Restaurants Alliance Sacramento
Natural Resources Defense Council
Sierra Club California
Solana Center for Environmental Innovations
US Composting Council**

May 26, 2016

Mary Nichols, Chairwoman
California Air Resources Board
1001 "I" Street
Sacramento, CA, 95814

Re: Waste Management in the Proposed Short-Lived Climate Pollutant Reduction Strategy

Chairwoman Nichols:

The undersigned organizations would like to commend the California Air Resources Board for taking a proactive approach to reducing the short-lived climate pollutant emissions from the waste sector. The plan places a well-warranted focus on eliminating the disposal of organic waste, which is not only low-hanging fruit for methane emissions, but will also result in significant co-benefits and help the state achieve multiple policy objectives. In addition, we strongly support the addition of food waste prevention and food rescue goals, which will utilize edible food that would have otherwise been disposed of to feed the millions of food insecure Californians.

Eliminate the Disposal of Organic Waste

We strongly support the organic waste diversion goals proposed in the SLCP strategy, and we specifically support the commitment to adopt regulations to phase out the disposal of organic waste in landfills. The Proposed Strategy lays out an effective regulatory strategy to prevent the creation of these inherently avoidable emissions by virtually eliminating the landfill disposal of organic waste by 2025.

While the state has spent a considerable amount of time debating the exact emissions that come from landfills, it is clear that the only way to truly minimize fugitive methane emissions from landfills is to divert the methane-generating organic waste to other end uses. Organic materials comprise two-thirds of the waste stream and even the best landfills only capture half to three quarters of the gas while they operate, and no gas capture system can capture emissions before it is installed or for the decades after its removal. When managed outside the landfill, these same materials can be made into a valuable soil amendment that sequesters carbon, increases soil water holding capacity, prevents erosion, and reduces the need for, and impacts of, synthetic fertilizers. According to a recent analysis by CalRecycle, the production of compost or other soil amendments can create 14,000 more California jobs by 2020 than would landfilling the same material. In addition to traditional composting, much of the diverted material

can alternatively be used as a feedstock for digestion facilities, to generate Low Carbon Fuels or Renewable Energy.

This policy is consistent with similar actions by other countries and subnational governments across the world, and has been proven to be successful. The European Commission, for instance, has limited the disposal of organic waste through an EU-wide directive, 23 U.S. states have passed prohibitions on landfilling yard trimmings and six other states have some other limitations on the disposal of organics. Many jurisdictions throughout California have implemented comprehensive organics programs, as have other cities around the country. The experience of these programs has consistently demonstrated that the shift away from voluntary and towards mandatory requirements yields significant increases in organics recovery. Establishing mandatory programs has also proven to spur the development of processing and recycling infrastructure, because composters and digester companies can compete for this material with each other, not with artificially cheap landfill prices.

Preventing food from becoming waste conserves the resources that go into growing, processing, and transporting uneaten food. Food waste prevention and rescue programs capture the value of food to be put to better use, creating a more efficient food system. In addition to avoiding landfill methane emissions, the diversion of edible food from landfills allows for a new opportunity to feed the millions of food insecure Californians. CalRecycle's food waste prevention and rescue goal of 20% food rescue by 2025 (with an interim goal of 10% by 2020) proactively addresses food waste while also focusing on the ethical issue that comes along with the disposal of healthy, edible food while millions of Californians suffer from food insecurity.

We have identified several discrete recommendations to ensure the effectiveness of the proposed regulation to prohibit the disposal of organic waste:

- **Timeline.** The targets established in the Strategy are appropriate, and will allow sufficient time for the entire state to implement the program. However, to meet these timelines the regulation needs to allow sufficient time for education and outreach needed to prepare communities. Past experience with mandatory ordinances has shown that several years of education are necessary before the majority of community members will effectively participate in this type of program. In addition, an effective enforcement program is necessary to ensure compliance with the requirements. We suggest that the requirement to separate organic waste start going into effect by 2020, in order to maximize time for local government implementation and ensure full participation by 2025.
- **Infrastructure.** We commend the staff for identifying the importance of expanding the organics recovery and recycling infrastructure and supporting the ongoing viability of existing infrastructure. While the prohibition on landfilling this material will directly spur the expansion of this infrastructure by allowing facilities to make investments based on guaranteed feedstocks, the state must also play a greater role in the development of these facilities. Accomplishing this goal will involve significant public and private sector investment, and we encourage the Board to be proactive in addressing this issue.
- **Food Waste.** Food waste is the most prevalent item in our landfills, and nearly 2 out of every 5 lbs of food produced is never eaten. While much of the organic waste that will be generated will

be composted or anaerobically digested, it is important to also proactively plan for source reduction and increased food rescue to maximize the amount of edible food that goes to address hunger relief amongst the impoverished. We suggest convening a process that includes relevant agencies, food recovery organizations and policy experts in order to develop a comprehensive strategy to achieve the goals established in the plan and to address the systemic causes of food waste.

- **Economic Analysis:** The economic analysis does not seem to accurately reflect the economics of composting. A significant portion of the economic feasibility of composting comes from the sale of compost, which appears to have been excluded entirely in the analysis. Moreover, the analysis assumes a \$45/ton tip fee, which is reasonable for greenwaste but is not an appropriate average for composting facilities that accept food scraps.
- **Learning from Communities with Existing Programs:** Many communities across the state, especially those in the Bay Area, have implemented comprehensive organics programs. We would encourage staff and board members to take the time to visit these communities to learn what has worked well and what hasn't to inform the rule making process that will follow the adoption of this plan.

Landfill Gas Emission Reductions

We encourage the adoption of strong regulations to reduce the emissions that will continue to be generated at landfills for decades to come. Immediately following the passage of AB 32, the Board developed an Early Action Measure to reduce the lowest hanging fruit of landfill emissions. While this was a good first step, and many of these requirements are now being considered for inclusion in the federal NSPS Emissions Guidelines, there are many additional opportunities to further reduce these emissions.

In fact, during the development of the EAM regulation, ARB staff proposed much stricter standards than were included in the final adopted regulation. Staff originally proposed lower emissions limits (200 ppm instead of retaining the original 500 ppm limit), applicability to smaller landfills, and more extensive monitoring requirements. Furthermore, environmental stakeholders additionally suggested the required use of advanced emissions measurement technologies and restrictions on leachate recirculation and cover types. At the time, these elements were not included in the regulation, but the Board committed to evaluate data that would be submitted by landfill operators and issue a "Phase Two" of the regulations. Several years of data have now been collected, and it is time to begin the process of developing this "Phase Two."

While the "waste sector" represents a fifth of the state's methane emissions, it clearly has an outsized impact on the release of short-lived climate pollutants and can serve as an important source of both mitigation and adaptation strategies for the other sectors of the economy. We look forward to working with staff to ensure that the implementation of this plan fully capitalizes on this opportunity.

Sincerely,

Nick Lapis
Californians Against Waste

Keith Bergthold
Fresno Metro Ministry

Neil Edgar
California Compost Coalition

David Scott
Green Restaurant Alliance Sacramento

John Dane
California Resource Recovery Association

Alex Jackson
Natural Resources Defense Council

John Shears
Center for Energy Efficiency and Renewable
Technologies

Diana Vasquez
Sierra Club California

Deborah Raphael
City and County of San Francisco, Department of
the Environment

Jessica Toth
Solana Center for Environmental Innovations

V. John White
Clean Power Campaign

Cary Oshins
US Composting Council

Patti Larson
Food Finders

CC: CARB Science & Technology Policy Advisor, Ryan McCarthy
Director Scott Smithline, CalRecycle