October 30, 2015

Ryan McCarthy, Science & Technology Policy Advisor

David Mehl, Manager, Energy Section

California Air Resources Board

1001 “I” Street

Sacramento, CA, 95814

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

Mr. McCarthy and Mr. Mehl:

The undersigned organizations would like to commend the California Air Resources Board for taking an aggressive 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 to preventing the generation of landfill methane through organics diversion, we also encourage the adoption of strong regulations to reduce the emissions that will continue to be generated at landfills for decades to come.

**Eliminate the Disposal of Organic Waste**

We strongly support the organic waste diversion goals proposed in the Draft Strategy, and we specifically support the adoption of regulations to prohibit the disposal of organics.

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 it is removed. When managed outside the landfill, these same materials can be composted and/or digested under controlled conditions, which not only prevents the generation of landfill methane but also creates products that reduce greenhouse gas emissions when they are used.

The Draft 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 (with an interim goal of 75% reduction by 2020). As the plan describes, the only way to achieve these goals is to prohibit the disposal of organic waste in landfills.

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. Moreover, various cities like Seattle, New York, and Vancouver (British Columbia) have required organics diversion, and, within California, San Francisco has prohibited the disposal of all organic waste and Alameda County has instituted a plant debris ban. The experience of these programs has consistently demonstrated that the shift away from voluntary and towards mandatory requirements yields significant increases in organics recovery.

In addition to avoiding landfill methane emissions, the diversion of organic waste from landfills allows it to be better utilized either to feed hungry people or animals (in the case of edible food rescue) or to make compost or other soil amendment, which (according to a recent analysis by CalRecycle) can create 14,000 more California jobs by 2020 than landfilling the same material.

If this composted material is used as a soil amendment, it can improve soil structure and texture, while allowing the soil to hold more moisture and prevent erosion. Applying compost increases the water holding capacity of soils by up to 30% and stimulates healthy root development and increased biomass which can result in drastic increases in soil carbon sequestration. Compost application also reduces the need for synthetic fertilizers and pesticides, and acts as a natural filter to reduce ground water contamination. Rather than being immediately composted much of the diverted material can alternatively be used as a feedstock for anaerobic digestion, to generate Low Carbon Fuels or Renewable Energy.

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

* **Timeline.** The 2020 and 2025 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. We suggest that the requirement to separate organic waste go into effect no later than to 2020, 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. In order for this program to be successful, the state must take an active role in funding the development of these facilities, and we support the effort to dedicate $100 million/year to this effort. In addition, the prohibition on landfilling this material will directly spur the expansion of this infrastructure, allowing facilities to make investments based on guaranteed feedstocks.
* **Food Waste.** Food waste is the most prevalent item in our landfills, and nearly 2 out of every 5 lbs of food generated 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 recovery (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 this goal and to address the systemic causes of food waste.

**Landfill Gas Emission Reductions**

The SLCP Concept Paper that was released in May identified the need to adopt stricter landfill control strategies:

“*Even if we eliminate new organics in landfills, existing organic waste in landfills will remain a source of methane emissions for years to come. In developing the Strategy, ARB will work with CalRecycle, stakeholders, and experts to identify research needs and other efforts to develop potential measures to expand the use of best management practices and further reduce methane emissions from landfills by 2020 and through 2030. These measures could include upgrading landfill gas collection systems, improved post-closure maintenance, improved monitoring, and phased closure.*” [[1]](#footnote-1)

This commitment to reduce these methane emissions by 2020 has subsequently been replaced with a much less aggressive plan to study landfill emissions before reevaluating the need for regulations in 2025:

*“By 2020, ARB will consider the latest science and whether adjustments to emissions accounting in the inventory or other programs is warranted. Based on this information, ARB, in collaboration with CalRecycle, may consider additional actions to further reduce and capture methane emissions from landfills in the future.”* [[2]](#footnote-2)

We believe that this change prematurely forecloses on opportunities to reduce the emissions that will continue to be released for decades after the cessation of landfilling organic waste. 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 (as was identified in the May draft).

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 insure that the implementation of this plan fully capitalizes on this opportunity.

Sincerely,

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Californians Against Waste

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Will Bakx

California Organics Recycling Council

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CC: Secretary Matt Rodriquez, California Environmental Protection Agency

Director Scott Smithline, CalRecycle

1. cf: pp20-21, Short-Lived Climate Pollutant Reduction Strategy Concept Paper, May 2015. [↑](#footnote-ref-1)
2. cf: p51, Draft Short-Lived Climate Pollutant Reduction Strategy, Sep 2015. [↑](#footnote-ref-2)