



JOINT STATE OFFICE

May 26, 2016

VIA E-MAIL & U.S. POST

Clerk of the Board
California Air Resources Board
1001 I Street
Sacramento, CA 95814

RE: Proposed Short-Lived Climate Pollutant Reduction Strategy

The California Refuse Recycling Council (CRRC) is a trade association comprised of over 100 refuse and recycling companies across the State of California committed to superior management of waste resources, including composting, anaerobic digestion and renewable energy production. We thank you for the opportunity to comment on the Proposed Short-Lived Climate Pollutant (SLCP) Reduction Strategy, and for considering our previously submitted October 29, 2015 comments regarding the Draft Strategy.

CRRC supports the crucial goal of reducing California's black carbon, methane and fluorinated gas emissions in order to slow global warming and lessen the impacts of climate change. We recognize that considerable action is necessary to achieve these goals, while we continue to balance legislative and regulatory directives that both sustain and make these efforts more challenging.

The goal of a 90% reduction in organics by 2025 is remarkably ambitious at a time when building and operating facilities to manage organics and recycling is becoming increasingly more complex and even vulnerable to opposition. Several issues will need to be taken into consideration and resolved if we are to achieve the extraordinary effort laid out in the Proposed Strategy. These include but are not limited to: funding opportunities, permitting barriers, and markets.

Funding Opportunities

Varying organics management operations, from windrow composting to in-vessel composting to anaerobic digestion, mean that facility costs can fluctuate considerably depending on location, feedstock processed, and the permitted operations of a given facility. Facilities located in air districts struggling to meet federal attainment levels and other air emission limits must meet even stricter operational limits. While some communities can compost organics outdoors, others must site indoor facilities that are orders of magnitude more expensive to construct. Industry experts now suggest it will cost California at least \$4 billion to build the necessary infrastructure to meet our significant diversion goals.

CRRC is recommending the legislature double-down funding for these efforts and approve \$200M to CalRecycle for the next 5 years, demonstrating a formidable commitment to the goal of diverting

organics from California's landfills and building the obligatory infrastructure to reduce GHG emissions. This will provide the essential funding necessary to catalyze the goal of effectively eliminating organics from California landfills. And as siting and permitting a facility can take years, now is the time to invest so that we can achieve our reduction goals in the future.

Permitting

As described in our previous October 29, 2015 comments, the siting and permitting of facilities remains the number one barrier to achieving organics diversion infrastructure development. The Strategy must consider the many years it can take to permit facilities at the local level and with regional differences, especially as we approach the 2025 timeline. Moreover, it must take into consideration the education and support California agencies like CalRecycle and CARB can play in promoting development in the face of local opposition as we work toward the greater goal of tackling climate change.

Ultimately organics management facilities not only divert methane emitting material from landfills, they support crucial objectives of improving California soils and providing domestic renewable energy and fuel production. The environmental and social benefits of waste and recycling facilities must be elevated by the legislature and agencies in order to shift common perceptions around waste management. Organics are an essential resource that – when properly managed – can provide many co-benefits to California and California citizens. The need for organics management facilities should be made more apparent with easily navigable websites and education teams committed to informing local government and California citizens. Otherwise, the industry is left struggling to meet the demands of the diversion goal while simultaneously battling misconceptions about the work we are trying to do. A robust movement to educate California is indispensable.

Feedstock Markets

Organics comprise a range of materials from green waste to food waste, and have varying management techniques according to amount and type. Harder to handle feedstock such as food waste requires more heavily regulated and therefore difficult to permit facilities, and many facilities permitted to accept food waste can only accept limited amounts. Developing adequate facilities across California to manage the various feedstocks is crucial.

Furthermore, recent closures of biomass plants throughout the state is rapidly creating an insecure market for urban biomass. Compost facilities and dry anaerobic digesters can handle some green waste (leaves, grass, and smaller branches), but high lignin material is better managed as a renewable energy source at biomass facilities. Lumber does not readily produce biomethane and restricts the performance of anaerobic digestion facilities, while composters find wood chips are not readily compostable and can be cycled through the composting process for years breaking down and adding additional costs and time to the process. Agricultural areas are already employing more burn permits to manage woody material that would otherwise be sent to biomass facilities, therefore emitting black carbon. With dwindling markets for urban biomass, California may be forced to put this material in the landfill.

The Proposed Strategy should fully address these market issues, as well as the varying methane production of organic feedstocks. Lumber, for example, does not produce substantial methane in landfills and therefore does not pose the same short-lived climate pollutant risk as putrescible organic matter in landfills. Woody biomass may need to be treated separately from putrescible waste under the 90% diversion goal given the overarching goal of methane and black carbon emission reductions.

Compost, Mulch and Digestate Markets

While demand for compost and soil amendments produced through organics processing certainly exists, the demand remains variable according to seasonal and regional needs, as well as feedstock. Mulch demand, for example, drops dramatically during the winter months. In order to process and move the material through the system – an essential component of efficient organics processing – mulch material is sometimes sent to biomass facilities where it is used to produce renewable energy. Compost overs, the woody fraction screened out during processing, is also traditionally sent to biomass facilities. However, with the recent and continued closure of several biomass facilities as more power-purchase agreements come to an end, this market throughput is rapidly becoming less viable.

Regional challenges also exist and adequate markets must be developed throughout California, not just within agricultural regions where demand for compost and soil amendments is established. Transporting material long distances is economically and environmentally prohibitive, thereby necessitating local facilities and local demand for organics processing outputs to meet our diversion goals. The Proposed Strategy should address regional capacity to absorb additional throughput volumes, both in terms of processing and market outputs.

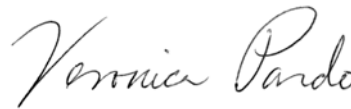
Finally, the Proposed Strategy should tackle the barriers of renewable energy production from organics. Besides costs and permitting, barriers to pipeline injection are becoming increasingly relevant for infrastructure development and expansion. Forging the infrastructure necessary to handle California's organic waste will require the support of nearly every agency, including the CPUC and CEC.

Ultimately, organics management in California has a long road ahead with many barriers and unknowns. With new technologies, fluctuating markets and drivers, aligning economic incentives with state objectives, permit capacity, and public involvement, this process will require consistent monitoring and evaluation. The CRRC recommends and looks forward to an annual evaluation of the organics recycling infrastructure in California and a public conversation on how to meet our crucial goal.

Sincerely,



Kathryn Lynch
Regulatory Affairs



Veronica Pardo
Regulatory Affairs

cc: Scott Smithline
CRRC State Executive Committee Members