

Breathe California
Californians Against Waste
Center for Energy Efficiency and Renewable Technologies
Coalition for Clean Air
GAIA
Natural Resources Defense Council
Sierra Club California

July 12, 2013

Director Caroll Mortensen
CalRecycle
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Re: Comments on Waste Management Sector Plan – AB 32 Scoping Plan Update

Director Mortensen:

The undersigned organizations would like to commend CalRecycle and the California Air Resources Board for taking a comprehensive approach to analyzing the waste management sector. Nonetheless, there are several improvements that will allow the department to capitalize on the tremendous greenhouse gas reduction potential of waste reduction, recycling, and composting.

Key areas for improvement:

- The plan should prioritize the development of regulations to phase out the disposal of organic waste.
- Supporting incineration will increase greenhouse gas emissions, and the plan should not provide any incentives for disposal (at either waste-to-energy facilities or landfills).
- Landfills are a major source of methane emissions and should be targeted for additional regulation.
- Recycled content manufacturing and increased processing of recyclables in-state offer an incredible opportunity for economic and environmental benefits, and strategies to increase them warrant additional development.

Organics

The plan correctly identifies the importance of reducing the disposal of organic wastes, and accurately underscores the importance of tackling this portion of the waste stream for reducing greenhouse gas emissions. While there are many important actions identified in this section, CalRecycle and ARB should prioritize the development of regulations to phase out the disposal of some forms of organic waste.

The lowest hanging fruit for greenhouse gas reductions from this sector is phasing out the disposal of commercially-generated organics and residential yard trimmings that are already being collected separately but are being landfilled under the guise of being Alternative Daily Cover.

The anaerobic decomposition of organic wastes in landfills generates methane, much of which can not be captured by landfill gas systems and is released into the atmosphere. Cutting the disposal of this material in half would cut greenhouse gases by over 4 million tons of CO₂ equivalents each year, but the climate impact would be even greater because methane delivers its entire climate forcing impact in only 12 years.

Organic waste is the most prevalent item in the waste stream, with staggering amounts of readily compostable materials being disposed of every year. As you indicated in your draft report on AB 341 implementation, “the 75% goal cannot be reached unless a significant amount of organics now being landfilled is instead used in new composting/AD facilities.” Another recent analysis by the Department indicated that this policy will create 14,000 new jobs by 2020.

Given the inherent phase-in that would be necessary to eliminate the disposal of commercial organics and residential yard trimmings, CalRecycle and ARB need to prioritize the imminent adoption of these regulations in order to achieve the 2020 goals of AB 32 and AB 341. The draft plan suggests that these policies might be implemented if other policies do not result in an increase of organics diversion, but there is nothing to indicate that the policies and economic drivers that have led to the landfilling of this material are going to change. In fact, the state has been following a wait-and-see approach since the passage of Strategic Directive 6.1 and it is time to take stronger action.

Moreover, these exact policies have been successfully implemented across the United States. Nearly half the states have completely prohibited the landfilling of yard trimmings and several have recently implemented commercial organics disposal limits. Even within California, these policies have been implemented in several cities and counties. It is incumbent upon the state to follow their example because the greenhouse gas and waste reduction opportunities of this sector are too significant to pass up.

Waste-to-Energy

The “MSW Thermal Technologies” technical paper shows a misguided focus on encouraging the development of incineration and other waste-to-energy technologies that should instead be directed to supporting alternatives to disposal. Although the technical paper consistently acknowledges that “the economics of MSW Thermal plants can affect the viability of other waste options, such as recycling, composting, and anaerobic digestion,” the recommendations in the paper are all focused on making disposal through thermal technologies cheaper, easier, and less protective of the public.

This is largely underpinned by the concept that an increase in the cost of incineration will lead to a significant amount of material being sent to landfills, which are presumed to have greater emissions. It is unclear whether a given landfill or incinerator has greater emissions, and the composition of the waste and the pollution controls at a specific facility would have a significant impact on which form of disposal releases more greenhouse gases.

More importantly, the analysis assumes that incineration and landfilling are the only end-of-life management option for California’s waste stream. In fact, disposal competes directly with recycling and composting—technologies that are being promoted in the rest of this plan. An increase in the cost of incineration would actually support the financial viability of expanding recycling and composting, and the greenhouse gas benefits of diverting material from incineration to recycling do not appear to have been considered. CalRecycle has repeatedly characterized the disposed waste stream and found that more than two-thirds of the material we throw away is readily recyclable or compostable. Focusing the state’s efforts on supporting recycling and composting will reduce greenhouse gases more effectively, cheaper, and faster than identifying which disposal technology has fewer emissions.

Given the fact that a significant portion of the material sent to transformation facilities counts as diversion under the state’s waste reduction and recycling law, these facilities largely compete with other diversion technologies, not landfills. Under AB 939, local governments are required to divert 50% of the material they generate, and transformation is allowed to count as 10% of this diversion. Since local governments are using these facilities to comply with AB 939, they would likely send their material to the cheapest “diversion facility”, whether that means continuing to send material to transformation or to the next cheapest form of diversion, recycling and composting. This is evidenced by the fact that most of the existing incinerators are more expensive than surrounding landfills and receive waste from jurisdictions that have closer and cheaper landfill alternatives. Furthermore, the inelasticity of incinerator demand caused by diversion credit has also been shown by the fact that the tonnage that went to these facilities only decreased slightly during the economic downturn, compared to the very significant decrease in landfilling.

Similarly, the argument that incinerators need to be exempt from cap-and-trade to ensure a level playing field with their competitors is incorrect because landfills are already subject to direct regulation under an AB 32 Early Action Measure. Even recycling facilities, such as material recovery facilities, are energy-intensive and would be substantially impacted by increases in energy costs that might result from AB 32.

Exempting incinerators from the cap-and-trade program, or providing other incentives (such as renewable energy credit or streamlined permitting) would give these facilities a competitive advantage over recycling and would result in a direct and significant increase in greenhouse gas emissions.

Landfills

Landfills are one of the largest sources of anthropogenic methane, and, while the Early Action Measure was a good first step toward addressing these emissions, it is necessary to develop further regulations to reduce landfill emissions. This is especially important if urgent action isn't taken to reduce the disposal of methanogenic materials.

During the development of the Early Action Measure, ARB staff proposed much stricter standards than were included in the final adopted regulation. Staff originally proposed lower emissions limits and more extensive monitoring requirements, and environmental stakeholders suggested the required use of advanced emissions measurement technologies. At the time, these elements were not included in the regulation, but a commitment was made to evaluate data that would be submitted and update the regulations. Several years of data have now been collected, and it is time to begin the process of developing a "phase two" of the landfill regulation.

This section also discusses increasing the use of landfill gas, but it is imperative to make sure that landfill gas incentives do not impede the diversion of organic materials to composting and digestion facilities. Generating energy through landfill gas is one of the least efficient means of getting energy from this material, and the impacts of fugitive methane emissions outweigh any presumed benefit from fossil energy displacement.

Manufacturing and Recycling Infrastructure

We were pleased to see a focus on California-based re-manufacturing infrastructure and increased processing of recyclables in state. Achieving these goals offers a unique opportunity to simultaneously achieve an environmental and economic benefit, and we encourage the Department to continue to develop a more in-depth analysis of the regulations and legislation necessary to support this effort.

Many of the specific actions identified in the technical paper (direct incentives for increased reuse of recyclables, programmatic EIRs, access to financing, and better emission reduction quantification, among others) have been proven successful in the past and have contributed to the development of a strong recycling economy in CA. Expanding these strategies to other materials will be an important strategy, and we encourage you to proceed with it.

In addition, the Department should identify more specific strategies for particular materials and manufacturing sectors. The strategies that would lead to more recycled cullet being used in glass production might not necessarily be the same strategies that would lead to increased recycled paper production or domestic end markets for plastics that have historically been shipped overseas. A collaborative stakeholder process would help identify the tools successfully used by other sectors that might be applied elsewhere, as well as broad policies that would help expand all recycling infrastructure.

Another area that warrants further development is the use of producer responsibility to target products and materials that are significant sources of greenhouse gas emissions or, by virtue of their design, are not currently being recycled. Extended Producer Responsibility was identified in the original Scoping Plan, but insufficient action has been taken since then. Similarly, this update of the plan mentions it but the lack of

specific actions makes it unclear what, if anything, the state plans to do. CalRecycle and ARB need to be clear in identifying which products that are still largely landfilled have the largest GHG footprint and propose producer responsibility strategies to reduce those impacts. Producers of products that are still disposed at far higher rates than other materials should bear significant responsibility to reduce those GHG impacts.

Other Comments

- The technical papers refer in several places to the need to treat waste as a resource. While this is an important step toward valuing waste as consisting of useful feedstocks, we believe that the concept of “waste as resource” could still be interpreted as defining waste, incorrectly, to be a homogeneous substance. Viewing waste as homogeneous reinforces systems which conceptualize and process mixed municipal solid waste as a single substance. Instead, we should characterize waste as materials, or feedstocks, each with its own ecologically optimal disposal route. By focusing on materials that make up municipal solid waste, rather than treating waste as a single entity, we can better develop public policy that encourages the routing of materials found in the waste stream to their best use.
- We appreciate the use of specific long-term goals for this sector (i.e. net-zero GHG emissions by 2035, 25% below net-zero by 2050) but it is difficult to judge the ambitiousness of these goals without a sense of the existing baseline. An approximation of current “net emissions” for the waste sector would be necessary to evaluate the goals set in this plan.

The “waste sector” impacts the greenhouse gas emissions of most of California’s economy, and the opportunity for greenhouse gas reductions through waste reduction, recycling, and composting are very significant. 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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