CORC
California Organic Recycling Council — A Technical Council of the California Resource Recovery Association

March 8, 2013

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

Re: Allocation of Cap and Trade Proceeds for the Diversion of Organic Waste to Bioenergy and Composting to support Sustainable Agriculture

Dear Chairman Nichols:

The California Organics Recycling Council (CORC) is a technical council for the California Resource Recovery Association (CRRA), representing a coalition of organics recyclers, including collectors, processors, end users, and local governments. As a key voice for organics recyclers in the state, the CORC board is committed to supporting the highest and best use of organic materials, which occurs outside of the landfill system where the materials can be processed to provide benefits to soil, water and crop production.

CORC submits these comments on the Draft Concept Paper for the Cap-and-Trade Auction Proceeds Investment Plan. We are grateful for the Administration's leadership on climate change issues and look forward to working together to help achieve the goals of AB 32. We urge the Air Resources Board to invest cap and trade proceeds in the diversion of organic waste to bioenergy and composting to support sustainable agriculture, which is critical to provide many of the greenhouse gas reductions called for in the AB 32 Scoping Plan and to alleviate environmental justice impacts.

The CORC membership been instrumental in our state's efforts to attain the recycling mandate of 50% waste diversion from landfills, required by the California Integrated Waste Management Act of 1989 (AB 939), and will remain critical to the attainment of future sustainable goals of 75% recycling and zero waste, and the implementation of AB 32. CORC fully supports the AB 939 statutory hierarchy of reducing, recycling, and composting. CORC has been supportive and engaged throughout the AB 32 Scoping Plan development and implementation process. Anaerobic digestion and composting are at the nexus of the AB 32 Scoping Plan adopted

measures where organic wastes are diverted from landfilling to generate renewable energy and carbon negative fuel, and where quality organic compost is produced and returned to sustainable agriculture.

Biomethane from anaerobic digesters provides renewable electricity, carbon negative fuels, combined heat and power, and renewable natural gas. It significantly reduces methane emissions from landfills and converts those emissions into clean energy and carbon negative fuels. Biomethane development is important to reduce environmental justice impacts by replacing diesel and other fossil fuels with significantly cleaner, lower carbon fuels. Given the many benefits of biomethane, we urge the Air Board to invest cap and trade proceeds in anaerobic digestion and compost facility development. Specifically, we recommend investments in the following:

- **Sustainable Agriculture Investment: Organic Compost Use Fund -** Farmers that use compost registered for organic use by CDFA would qualify for the "Organic Compost Use Fund"to be administered by CDFA, where the farmer would be reimbursed $10/ton.
- ***Compost Investment: Emission Reduction Credit Reimbursement (ERC) Fund*** where the compost facility operator gets funded directly for the ERC payments in a one-time reimbursement, which could cost between $1 million to $2 million per compost facility.
- ***Compost Investment: BACT Compost Technology Incentive Payment*** where the compost facility operator would receive a per ton incentive payment for handling of food waste and green waste at the existing and new compost facilities that develop covered compost systems to accept organic waste to meet best available control technology (BACT) requirements.
- ***Biomethane Investment: Food Waste to Anaerobic Digestion Technology Incentive Payment*** where the facility operator would receive a per ton incentive payment to operate an anaerobic digestion facility to accept food waste and green waste that can produce a carbon negative fuel to be used in the heavy-duty fleet that collects the organic waste.
- ***Reauthorization of AB 118*** to fund the California Energy Commission grant process to encourage the production and use of carbon negative fuels from organic waste, and the funding of heavy-duty fleet transition from diesel to CNG.

At the nexus of AB 32: Anaerobic digestion and composting are at the nexus of the AB 32 Scoping Plan adopted measures where commercial organic wastes are diverted from landfilling to generate renewable energy and negative carbon fuel, resulting in quality compost that is returned to sustainable agriculture.

- Renewable Energy: The increased use of renewable energy, from 20% in 2010 to 33% by 2020, is mandated to achieve 21.3 million metric tons of CO_2 equivalent reductions by 2020. Anaerobic digestion (AD) facilities create biomethane where typically one-third of the biomethane is converted to renewable energy to power the AD facility, with the remainder of biomethane converted to a carbon negative compressed natural gas (CNG) fuel.

- Low Carbon Fuel Standard: The Low Carbon Fuel Standard calls for a 10% reduction of the fuel intensity by 2020, where renewable CNG from an anaerobic digestion facility (using dry fermentation of food waste with green waste) has been determined by the California Air Resources Board to be minus 15 g CO2e/MJ, or carbon negative, as shown in the figure below. CalRecycle, in the recently adopted Program EIR for AD facilities, has projected the need to develop 70 AD facilities processing 50,000 tons per year, or 210 AD facilities of 20,000 tons per year to meet the AB 32 Scoping Plan requirements.

- Mandated Commercial Recycling: Five million metric tons of CO_2 equivalent reductions are required by 2020, resulting from diverting about 1.5 million tons of waste from landfilling. Commercial food waste diversion will be phased in with the development of both food and green waste composting and AD facilities, to assist jurisdictions in complying with the mandated commercial recycling regulations which became effective on July 1, 2012. CalRecycle has adopted Strategic Directive No. 6 which targets 50% of the food waste to be diverted by 2020.

- Anaerobic Digestion (AD): AD projects are expected to provide two million metric tons of CO_2 equivalent reductions by 2020; where up to 210 AD Facilities at 20,000 tons per year will be needed by 2020. Anaerobic digestion represents the a triple bottom line strategy for the AB 32 Scoping Plan adopted measures where commercial organic wastes are diverted from landfilling to generate renewable energy and carbon negative fuel, and quality organic compost is returned to sustainable agriculture.

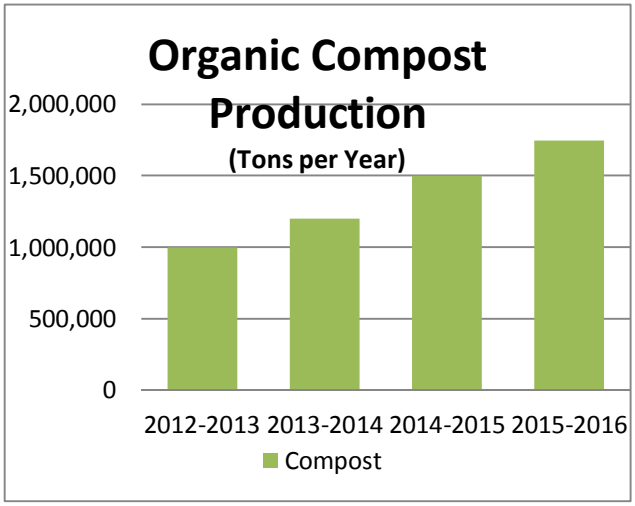
- Compost Use: The use of compost is expected to reduce 2 million metric tons of CO_2 equivalent emissions by 2020. With air and water regulations pushing compost in-vessel, state-of-the-art food waste compost facilities are employing a covered aerated static pile (CASP) system– which is considered best available control technology (BACT) by air districts – where compost is covered and air is forced through the cover for aeration, cleansing the emissions with a biofilter prior to being released, significantly reducing volatile organic compounds (VOC) emissions (by over 80%), and minimizing odors. AD facilities produce a solid digestate after biomethane is recovered, which is typically 70% of the incoming food waste and green waste; where this digestate is a feedstock that is processed into quality compost for use in sustainable agriculture. Case studies have shown that compost use by farmers can reduce water use by up to 30% and significantly reduce the use of fertilizer. The decreased pumping of water and reduced fertilizer usage (minimizing nitrogen releases to both air and water) are key practices for farmers to reduce greenhouse gases and promote sustainable agriculture. The use of certified organic compost reduces the use of pesticides and petroleum-based fertilizers and decreases the impacts on disadvantage communities.

Organic Compost Use to Support Sustainable Agriculture:

Organic compost use has been a long-term strategy of the compost industry. California Department of Food and Agriculture (CDFA) has

been working to determine how compost is to be handled under new regulations developed under AB 856, which was passed in 2009 to tighten the regulation of organic fertilizers, following fraudulent activities by some liquid organic fertilizer producers. Beginning in January 2011, composters selling to Farm Use, which includes conventional agriculture, golf courses, and professional landscaping, were required to license their facilities and undergo annual inspections by CDFA. By January 2012, all products sold to organic farms required registration and review by CDFA to assure they meet state and federal organic standards. During 2012, all composters have been required to report tonnages quarterly for all materials – both in Farm and Non-Farm use – and pay $0.0015 per dollar of sales in tax. It has been estimated that one million tons of the current compost market will be registered organic input material during 2012-2103, and that organic compost supply could grow by at least 20% per year.

Case studies have shown that compost use by farmers can reduce water use by up to 30% and significantly reduce the use of fertilizer. The decreased pumping of water and reduced fertilizer usage (minimizing nitrogen releases to both air and water) are key features for farmers to reduce greenhouse gases and promote sustainable agriculture. Plus, the carbon is sequestered in the soil. The use of registered organic compost reduces the use of pesticides and petroleum-based fertilizers and decreases the impacts to disadvantaged communities.



Under this proposal, farmers that use compost registered for organic use by CDFA would qualify for the "Organic Compost Use Fund"to be administered by CDFA, where the farmer would be reimbursed $10/ton. The Administration seeks feedback on programs for potential investment where the ***Sustainable Agriculture Investment: Organic Compost Use Fund*** of a $10/ton rebate would be paid to the farmers that use the organic compost to promote sustainable agriculture would require a budget amount of $12 million to $17.5 million over the next 3 years as shown in the table below.

Sustainable Agriculture Investment: Organic Compost Use Fund

Sustainable Agriculture Investment: Organic Compost Use Fund		
Budget Year	**Organic Compost Use**	**CDFA Budget**
FY 2013-2014	1,200,000 tons	$12.0 million
FY 2014-2015	1,500,000 tons	$15.0 million
FY 2015-2016	1,750,000 tons	$17.5 million

Given the many benefits of biomethane and compost, we urge the Air Board to invest cap and trade proceeds in anaerobic digestion and compost facility development. Specifically, CRRA has recommended investments in the following:

- ***Sustainable Agriculture Investment: Organic Compost Use Fund***
- ***Compost Investment: Emission Reduction Credit Reimbursement (ERC) Fund***
- ***Compost Investment: BACT Compost Technology Incentive Payment***
- ***Biomethane Investment: Food Waste to Anaerobic Digestion Technology Incentive Payment***
- ***Reauthorization of AB 118***

Michele Young,
City of San Jose
CORC Board President

cc: Cliff Rechtschaffen, Senior Advisor to Governor Brown
Ana Matosantos, Director, Department of Finance
Matt Rodriquez, Secretary, California Environmental Protection Agency
Karen Ross, Secretary, Department Food and Agriculture