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January 19, 2017

Grant Cope, Deputy Secretary  
California Environmental Protection Agency  
1001 I Street, Sacramento, CA 95814

Jenny Lester Moffitt, Deputy Secretary  
California Department of Food and Agriculture  
1220 N Street, Sacramento, California, U.S.A. 95814

Scott Smithline, Director  
CalRecycle  
1001 I Street, Sacramento, CA 95814

#### Re: Implementation of AB 1045 (Irwin) - Composting and Organic Management

Dear Mr. Cope, Ms. Moffitt, and Mr. Smithline

The California Compost Coalition (CCC) is a statewide organization representing operators of permitted facilities involved in the processing and composting of green and food materials throughout California. On behalf of these companies, we respectfully submit the following comments on the implementation of AB 1045 (Irwin, 2015). CCC attended the December 22, 2016 Public Meeting on Composting and Organic Management, and have followed up to obtain copies of the presentations, to no avail at this point, and have scoured the Cal-EPA's website looking for recommendations for promoting organic waste processing infrastructure statewide.

CCC and all parties recognize the huge lift required to implement AB 1826 – mandatory commercial organic collection, and now SB 1383 – the short-live climate pollutant strategy. We have been anticipating these policies for years, being deeply engaged in the AB 32 Scoping Plan, its Updates, and the implementation of SB 605 charting the course for the short-live climate pollutant strategy. We have all rallied for cap-and-trade revenues and other incentives to energize compost and anaerobic digestion facility development. Even with those incentives, facility development is stalling out due to regulatory fatigue and the crashing of the urban wood waste market. Having been a huge supporter of AB 1045, we were hoping that after one year of dialogue, there would be more deliverables to discuss. AB 1045 was multi-pronged, requiring the assessment of the State's progress, promotion of compost use, and ensuring proper coordination of agency regulations and goals in their implementation. CCC has specific comments for each topic area and recommendations on **promoting compost use, assessing progress, and coordinating regulations.**

## **AB 1045 and Promoting Compost Use:**

PRC 42649.87.

(a) The California Environmental Protection Agency, in coordination with the department, the State Water Resources Control Board, the State Air Resources Board, and the Department of Food and Agriculture, shall develop and implement policies to aid in diverting organic waste from landfills by promoting the use of agricultural, forestry, and urban organic waste as a feedstock for compost and by promoting the appropriate use of that compost throughout the state.

b) In developing policies pursuant to subdivision (a), the California Environmental Protection Agency shall promote a goal of reducing at least five million metric tons of greenhouse gas emissions per year through the development and application of compost on working lands, which include, but are not limited to, agricultural land, land used for forestry, and rangeland. The California Environmental Protection Agency shall work with the Department of Food and Agriculture to achieve this goal.

We appreciate the efforts of the Governor promoting The Healthy Soils Initiative over the last few years and the recent funding of \$7.5 million. The HSI is laced with compost concepts, but without adequate metrics to assess the progress that could be made to divert the organic wastes resulting from both AB 1826 and SB 1383 towards compost use. CCC has estimated (see additional comments below) where irrigated cropland could use approximately 7 million tons of compost by 2030 to aid in diverting organic waste from landfills with a demand pull for compost products.

We have concerns that the AB 1045 process does not engage a broad enough group of stakeholders, (specifically, air districts, local governments, and other state agencies, who will be required to achieve the already-monumental infrastructure development effort needed, now that the landfill diversion of organics has more imminent target dates and much higher capacity needs, following the passage of SB 1383.

There ought to be a law to require compost use...and there are four laws on the books some since 1991 promoting compost use. Current law, as noted in **PRC 42240**, **PRC 42241**, **PRC 42241.5**, and **PRC 42243** requires state agencies to use compost, with CalTrans starting as far back as 1991, and Forestry, Parks and Recreation, and General Services since 1993. For over 20 years the compost industry has attempted to implement these current laws and has proposed legislation, SB 1345, (Chesbro, 2006), that failed, to add metrics. We sponsored legislation, AB 921 (Allen, 2011), to study incentives for water efficiency and greenhouse gas reductions. We have also recommended funding for compost use on these state lands using cap-and-trade revenue and an increased landfill tip fee. Compost use on state lands is not being tracked or reported, and is not being used in significantly quantifies. Compost use on state grass lands at just 10,000 acres per year is a starting point, as mentioned in the Public Workshop on Carbon Sequestration Modeling Methods and Initial Results for the Natural & Working Lands Sector for the 2030 Target Scoping Plan.

**PRC 42240** requires that the Department of General Services and the board, in consultation with other affected state agencies, shall maintain specifications for the purchase of compost by the State of California. The specifications shall designate the state minimum operating standards and product quality standards. The specifications shall be designed to maximize the use of compost without jeopardizing the safety and health of the citizens of the state or the environment.

**PRC 42241** requires that on or after January 1, 1991, the Department of Transportation shall use compost in place of, or to supplement, petroleum-based commercial fertilizers in the state’s highway landscape maintenance program.

**PRC 42241.5** is where CalRecycle may develop a program to increase the use of compost products in agricultural applications. The program may include, but shall not be limited to, the following:

- (a) Identification of federal, state, and local financial assistance.
- (b) Cooperative efforts with appropriate federal and state agencies.

**PRC 42243** requires that on or after January 1, 1993, the Department of Forestry and Fire Protection, the Department of Parks and Recreation, and the Department of General Services shall initiate programs to restore public lands that use compost, co-compost, rice straw, and chemically fixed sewage sludge and shall use those products or materials wherever possible.

CCC would like to clarify the intent of the Scoping Plan language is that compost use should not be just for grasslands, but also for irrigated croplands, as we pointed out during the Public Workshop on Carbon Sequestration Modeling Methods and Initial Results for the Natural & Working Lands Sector. Copied below is an excerpt from the Table in the working lands presentation by Alan V. Di Vittorio of Lawrence Berkeley National Laboratory on the CALAND model, where the modeling inputs low and high management scenarios for an incremental 10,000 acres each year, both for croplands (no till/cover crop) grasslands, would be adopting sustainable agriculture practices, adding a total of 260,000 acres by 2030. However, compost use on irrigated cropland was not specifically mentioned and needs to be identified. We support the use of metrics and goals setting to get to 2030, and specifically identifying compost use on irrigated cropland can accommodate a new 7 million tons in California. CCC added in the line items below the Table where 40,000 acres per year to 80,000 acres per years should be identified as low and high management scenarios.

According to CDFA, there are roughly 9 million acres of irrigated farmland, so if just 10,000 acres per year are targeted, only 130,000 acres of compost use on working lands would occur, representing only a 1.5% increase. According to UC Rangelands at UC Davis, there are 62.9 million acres of rangeland; pushing for another 130,000 acres would mean only a 0.2% increase. Neither could be classified as aggressive targets and barely qualify as a ‘low management scenario’, where agriculture could use all of the compost derived from organics recycling mandated by SB 1383 to mitigate methane, given more robust market development targets.

The following is recommended with supportive information to increase compost use:

- Include Irrigated Cropland (compost use) in the model with a low and high management scenario of 40,000 acres per year and 80,000 acres per year
- Grasslands – compost amendment (state/private) — Require CalTrans and Department of General Services and other state agencies to use compost following current state law and increase by over 10,000 acres per year

Compost use on irrigated croplands is the largest current market, estimated at over 1,000,000 acres per year, and yet is not included the CALANDS model despite its huge potential growth.

- Low Management

- Assumed - 1,000,000 acres baseline in 2017
- 500,000 acres by 2030 to get 50% of new compost produced –
- Add 40,000 acres each year
- Possible 1.5 million acres using compost – 17% of all irrigated cropland
- High Management
  - Assumed - 1,000,000 acres baseline in 2017
  - 1,000,000 acres by 2030 to get 100% of new compost produced –
  - Add 80,000 acres each year
  - Possible 2.0 million acres using compost – 22% of all irrigated cropland

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## Management scenarios

• **These scenarios are applied to the baseline, from 2017-2030**

Activity	Low management	High management
<b>Forests - fuel reduction, restoration (state/private)</b>	60,000 ac/yr through 2030	175,000 ac/yr through 2030
Forests – reforestation is implicit in the model	Increase rate 15% above BAU by 2030 (assume 15% above BAU rate in each year to 2030)	Increase rate 30% above BAU by 2030 (assume 15% above BAU rate in each year to 2030)
<b>Croplands – conserve soil C (no-till/cover crop)</b>	10,000 ac/yr through 2030	10,000 ac/yr through 2030
<b>Meadow restoration - rangeland (state/private)</b>	10,000 acres by 2030	30,000 acres by 2030
<b>Grasslands – compost amendment (state/private)</b>	10,000 ac/yr through 2030	10,000 ac/yr through 2030
<b>Delta Fresh Wetlands Restoration (state/private)</b>	15,000 acres by 2030	30,000 acres by 2030
<b>Coastal/Tidal wetlands restoration (state/private)</b>	30,000 acres by 2030	60,000 acres by 2030
<b>Urban – Increase urban tree canopy fraction</b>	20% above current by 2030 (same as baseline)	40% above current by 2030
<b>Ocean – restore eelgrass beds</b>	5% above current levels by 2030	10% above current levels by 2030
<b>Croplands (irrigated) compost amendment (CCC comments)</b>	<b>40,000 ac/yr through 2030 3.5 million tons per year by 2030.</b>	<b>80,000 ac/yr through 2030 7 million tons per year by 2030</b>

**AB 1045 and 5 million tons of Greenhouse Gas Reductions through compost use:**

PRC 42649.87.b states that California Environmental Protection Agency shall promote a goal of reducing at least five million metric tons of greenhouse gas emissions per year through the development and application of compost. Using the adopted emission factors, it would take 9.8 million tons of compost use to reach this requirement, diverting almost 17 million tons of organics from landfills. Calculations are provided on the next page. Cal-EPA should provide the metrics and needed programs to achieve this requirement. Applying compost on irrigated croplands could use 7 million tons of compost by 2030, and Caltrans and the other state agencies should be able to use the rest.

<b>PRC 42649.87.b</b>	5,000,000	MTCO <sub>2</sub> e	from compost use.
Decreased Soil Erosion	0.25	MTCO <sub>2</sub> e/per ton compost	
Decreased Fertilizer Use	0.26	MTCO <sub>2</sub> e/per ton compost	
Decreased Herbicide Use	0	MTCO <sub>2</sub> e/per ton compost	
	0.51	MTCO <sub>2</sub> e/per ton compost	
<b>9,803,922 tons of compost to reach this goal</b>			
	0.58	conversion from feedstock to compost	
	16,903,313	tons of compost feedstock	
Source: <a href="https://www.arb.ca.gov/cc/waste/cerffinal.pdf">https://www.arb.ca.gov/cc/waste/cerffinal.pdf</a> pg 19			

**AB 1045 and SB 1383 – Methane Mitigation – diversion of organics waste from landfill to compost use**

By 2025, over 13.2 million tons of organics need to be diverted from landfills, representing over 5.7 million tons of GHG reductions, and by 2030, over 13.9 million tons of organics need to be diverted from landfills, representing over 6.0 million tons of GHG reductions.

**AB 1045 and Assessing Progress:**

PRC 42649.87 (a)

(1) Assess the state’s progress towards developing the organic waste processing and recycling infrastructure necessary to meet the state goals specified in Assembly Bill 341 (Chapter 476 of the Statutes of 2011), Assembly Bill 1826 (Chapter 727 of the Statutes of 2014), the State Air Resources Board’s May 2015 Short-Lived Climate Pollutant Reduction Strategy concept paper, and the Department of Food and Agriculture’s Healthy Soils Initiative.

There has not been a full assessment of the compost industry and compost use since 2010 when CalRecycle published the *Third Assessment of California Compost and Mulch-Producing Infrastructure*, using 2008 data. Now is the time to have CalRecycle prepared the *Fourth Assessment of California Compost and Mulch-Producing Infrastructure* for 2017 in order to measure the current status.

- According to the CalRecycle Third Assessment Report:
  - 5.76 million tons of compost produced in 2008
  - 56% agricultural sales
  - 3.2 million tons applied to agricultural
- Using 7 tons per acres average use – 460,000 acres using compost in 2008
- Croplands – irrigated – compost amendment use – not listed in AB 32 Working Lands CALAND model
- 9 million acres of irrigated farmland in use

- 460,000 acres using compost as a 2008 baseline – use as baseline for AB 32 Scoping Plan (2008)
- Assume 1,000,000 million acres using compost as a 2017 baseline for now based on 9 years of growth since 2008, and anecdotal market surveys since then
- Adjust baseline to 2017 with new CalRecycle Fourth Assessment study and CDFA organic input registry information

To further the efforts of the state to determine the progress in achieving the goals of AB 1045, we recommend, starting in 2018, to have compost use (bulk and organic) be reported to CDFA, included in the County Crop Reports, while recognizing the upcoming AB 901 regulations.

- Starting 2018, have compost use (bulk and organic) be included in the County Crop Report and have CDFA and CalRecycle report compost use
- Need CDFA to determine the amount of ‘organic input material’ category – compost – for both bagged and bulk compost in tons, since it has been a registration program only reported in dollars – to determine mill tax
- Since compost is an agricultural commodity, have the County Crop Report, report compost use in acreage each year starting in 2016
- CalRecycle will be implementing the AB 901 regulations in 2018 which can assist in reporting compost use to gauge the development of the market to 2020, 2025 and 2030.

**AB 1045 and Coordinating Regulations:**

PRC 43032.

(a) The department, in coordination with the State Air Resources Board and the State Water Resources Control Board, shall develop a policy that promotes the development of coordinated permitting and regulation of composting facilities while protecting the environment.

The AB 1045 process would be most beneficial if it were to help develop a policy between CARB and the local air districts to recognize baseline conditions for organic waste management practices such as landfilling when adopting their local regulations and issuing permits. Some local air districts are treating new covered aerated static pile (CASP) compost facilities using the best available control technologies as a new source where the permitting and cost of off-sets would stop the development of the facility. When applying for air permits, baseline conditions need to be recognized where the net benefit of both greenhouse gas reductions and criteria pollutants can be demonstrated when diverting food waste from landfills to composting and/or anaerobic digestion facilities.

Cal-EPA should prepare a Program EIR for covered aerated static pile composting facilities similar to what CalRecycle prepared for anaerobic digestion. This Program EIR would be used to develop policies and recommendations to coordinate permitting by local air districts, where baseline conditions need to be recognized and that CASP facilities should not need to be treated under new source review.

**AB 1045 and the Public Process**

PRC 42649.87(c)

(2) Meet at least quarterly and consult with interested stakeholders, including, but not limited to, the compost industry, local governments, and environmental organizations, to encourage the continued viability of the state's organic waste processing and recycling infrastructure.

(3) Hold at least one public workshop annually to inform the public of actions taken to implement this section and to receive public comment

We look forward to being invited to the next quarterly meeting to share this letter. We would also ask that the quarterly meeting include representatives of CalTrans and General Services to inquire about their historical compost use and plans to utilize more compost in the future.

The annual public workshop was held during Christmas week, under short notice, and still attracted over 50 participants who are hungry to participate and provide information in the AB 1045 process. The information presented has not been made available to date and offered few new recommendations. We suggest that the next quarterly meeting be noticed to the public where the dialogue can continue.

PRC 42649.87(c)

(4) Develop recommendations for promoting organic waste processing and recycling infrastructure statewide, which shall be posted on the California Environmental Protection Agency's Internet Web site no later than January 1, 2017, and updated annually thereafter.

We have not located this information on the internet Web site to date.

We appreciate the opportunity to comment on the AB 1045 process and look forward to continuing as an active stakeholder.

Should you have any questions, please contact me at (916) 739-1200.

Sincerely,



Evan W.R. Edgar

Regulatory Affairs Engineer