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From: OBGreenGold, a zero waste project of the PTA of Ocean Beach Elementary School
Date: Nov. 26, 2014

Re: Formal Comments on CalRecycle's Proposed Regulations Concerning Composting Operations

OBGreenGold is a volunteer group of parents, neighbors and staff at Ocean Beach Elementary School who work together to promote the diversion of resources from the trash can, including cafeteria food left-overs and lunch service materials. Due to its efforts, OBE is one of the 5 pilot zero waste schools of the San Diego Unified School District. We are also growing food in the school garden for use in the cafeteria. OBGreenGold is a project of the OBE PTA.



**Why we do
what we do...**

In 8 1/2 months, we have

- Learned about local resource management
- Removed over 480 ft³ food from the trash can
- Composted ~ 480 ft³ rich organics back to the soil
- removed >1600 gallons milk from our landfill
- reduced OBE's carbon emissions
- made 1000s worms very happy 

Our Vision

California as a national leader in the full development of a comprehensive food waste diversion system, with policies that include best practices and that ensure a fair and efficient permitting process that supports composting at all scales of production. The implementation of this state-wide adoption will stimulate local job creation within the small and medium-size business sectors while providing easy access for all residents to compost facilities.

Mounting Pressures

We remain concerned that the current draft rules as proposed by CalRecycle will not help California adequately respond to the following mounting pressures. California prides itself in being a leader in the environmental and sustainability movement. However, current rules around resource management make it extremely difficult for smaller-level and local efforts to operate. These hinder our ability to rapidly respond to environmental crises, both immediate and down the road.

Southern California Environment and Ecology

Southern California is a unique region with the close proximity of residential areas with agricultural activity. In fact, San Diego County has more small family farms than any other county in the US. San Diego has the greatest number of organic farms in the US, creating a great demand for non-synthetic soil

amendments. These can and should be more efficiently delivered from nearby composting facilities rather than trucked in from out-of-town.

What makes San Diego County truly unique is the fact that 92 percent of the farms are family owned, 77 percent of the farmers live on their land, and the median farm size is five acres. In addition to being home to more small family farms than any other county in the U.S. (6,565 – San Diego County Farm Bureau), San Diego leads the nation in number of organic farms (343 – County of San Diego Department of Agriculture, Weights and Measures), and is second in the country in farms with a woman as principal operator. This community of family farmers, many of whom are currently practicing or beginning to convert to sustainable methods, ranks 12th in the U.S. in agricultural commodity output for counties (compared to more than 3,000 surveyed nationwide), bringing \$5.1 billion of annual value to the regional economy, and greatly contributing to California’s ability to produce approximately 25 percent of the United States’ table food and 12.8 percent of the nation’s total value of agricultural production.

The state needs to support operations at all levels of scale as part of its responsibility to provide assistance and rules to all segments of the population. We applaud the recent Greenhouse Gas Reduction grants issued by CalRecycle but point out that the grantees are all large scale operations. State composting rules must address the following issues **at all scales of composting** in order to achieve maximum effect:

California Legislative Mandates

The California Legislature passed AB 1826 which mandates comprehensive composting of organic waste. Efficient organics recovery will allow local entities to easily reach the required diversion rate from landfill, and long before the 2020 deadline. The Legislature also passed AB 1594 to monitor progress on organics diversion from landfill, underlining the urgency of stalling our environmental degradation.

However, state-wide infrastructure is woefully inadequate and will not have capacity to comply. Current policies unduly favor large operations; yet organics are created across the board from large generators (schools, military, governmental agencies) to small (residences, small restaurants, etc). Rules also incorrectly classify most viable composting facilities as “landfills”, adding a further layer of unnecessary regulation and overhead that effectively reduce composting capacity at the local level.

Present drought

We are in a severe drought with no end in sight. The soil in Southern California requires extensive amendments to assist with water retention; this need has increased dramatically with the long-term drought and the cost of transportation associated with amendment delivery. The typical high winds of Southern Californiaacerbate soil loss through increased erosion of dry land. The county now imports more compost and mulch than it produces, importing a resource easily produced locally.

An efficient and local compost creation infrastructure will provide cheaper alternatives to increase arable soils, water retention for agricultural lands. This reduces both irrigation requirements and costs to the farming and nursery sector. An effective transfer of residential and commercial food waste as compost to agricultural enterprises will be essential to the farming industry here.

Ecological and environmental constraints

The California Legislature has passed regulations around organic waste diversion in response to the climate disruption resulting from human-generated carbon emissions. Organics diversion away from landfills address a number of environmental degradations caused by human activity in addition to reduction of GWGs.

Composting is a key component of traditional agriculture, where extracted nutrients are returned back to the soil after crop production. This is particularly important in Southern California with its low-organic soil profile. Increasing composting of food/green wastes at the **local level** is an essential component of several environmental and public health initiatives happening in our region, including waste reduction, water conservation and soil humidity, soil depletion, erosion, obesity prevention and healthy food as well as reduced air emissions.

In San Diego County, 40% of what we landfill consists of easily compostable materials such as food scraps, yard trimmings, and manures. Supporting local neighborhood composting operations will reduce GHG emissions by a) eliminating transportation miles accrued through a hauler-centralized system, and b) reduction of methane and other GHG emissions at landfills.

Demand for local composting facilities

About 40% of landfill materials in our area are compostable organics. In 2010 we landfilled 1.2 million tons of easily compostable material. Both residents and businesses in the San Diego region have expressed intense interest in access to composting facilities. The Solana Center reports that its composting workshops are in demand, and that lack of sufficient funding limits output rather than lack of demand. Community gardens and schools receive numerous requests to take in food waste (particularly from apartment dwellers) but prohibitive rules prevent offsite inputs. High food waste generators like Soja Juice in San Diego are actively looking for affordable food intake facilities with little luck. The closest commercial facility is 100 miles away and is expensive. The City of San Diego has started a pilot food diversion project in response to the demand, but this remains small scale and heavily dependent on large carriers.

The continuing emphasis on centralized waste management and large haulers is problematic. Sustainability and environmental studies recommend smaller, decentralized systems to manage resources (energy, waste management, agricultural lands, etc). The current waste hauling system trucks enormous amounts of material to a few treatment sites. The Office of the City Auditor in its review of the city's Environmental Services pointed out that this has created excessive wear and tear on the road infrastructure. The system carries an excessive carbon footprint as well. It increases greenhouse gas emissions through increased transportation miles and landfill decomposition of organic materials. Lack of oversight has also led to incomplete recycling efforts on the part of private haulers and increased prices for residents.

Recommendations briefly.

We strongly recommend the following changes and/or additions:

- Increase footprint allowance for small, excluded sites
Specific to SS 17855(4), CalRecycle deletes the 500 sf. restriction for small, excluded activities and incorporates a burden of proof clause applicable to all activity in the State.
- Expand source allowances and inputs at farms and community gardens
CalRecycle revises and clarifies the language so it is transparent that 1) agricultural sites can compost any volume of agricultural material, 2) agricultural sites using compost onsite are

exempt from permit while agricultural sites selling compost would require at least an EA Notification, and 3) agricultural sites may import an accessory volume green, vegetative/ food material feedstock as part of the permit exemption or EA Notification.

- Clarify permitting of in-vessel facilities
Calrecycle clarifies the language that facilities may conduct onsite curing, and/or apply immediate beneficial use of the compost/solid digestate so long as the in-vessel technology meets temperature and residence time requirements, and meets pathogen destruction and metals requirements.
- Provide guidelines for small- to mid-scale operations
CalRecycle or its partners develop a framework for local jurisdictions to institute trainings, licenses, or guidance programs to ensure that small and on-farm operations produce compost in accordance to typical composting BMPs and uphold a standard of care. This could be simple and similar to low-cost food-handlers licensing programs.

CalRecycle has an important responsibility to ensure proper management of composting facilities through education, outreach and enforcement with local authorities. Local rules already cover the majority of potential problems associated with facilities' operations. It is also equally important that enforcement mechanisms in place to reduce unnecessary risks don't impose undue burdens on smaller efforts.

We want to address some of the potential public safety issues raised by CalRecycle staff by directing them to the BioCycle article "*Supportive Rules for Small-Scale Composting*" in its June 2012 issues on pages 21-24. Other states and several cities across the US have implemented responsive regulations that increased properly managed composting. Eleven states have now revised their rules.¹ The risks that were feared have simply not developed and thus states are moving to expand opportunities for urban sites and on-farm composting. We have expanded on the recommendations in the following section, citing best practices and local needs where applicable.

RECOMMENDATIONS AND RATIONALE

1. Increase the footprint allowance for the small, excluded sites

Background:

CalRecycle has appropriately proposed to exclude small scale composting operations, with no restrictions on feedstocks or use of finished compost. This concept of community composting enable us to create closed-loop nutrient cycles locally. Small sites will have the ability to add soil nutrients directly back to their neighborhoods and gardens, demonstrating first-hand the benefits that compost provides.

However, the 500 square foot (sf) footprint is too restrictive and will not adequately serve most neighborhoods, especially densely populated ones. A footprint allowance for small sites in California would not work because CalRecycle's existing and proposed regulations do not contain any intermediary permitting mechanisms for sites the "next size up."

Roughly, a site with small equipment would compost a maximum volume of 35-55 cubic yards, with no accommodation for feedstock processing or working space. Excluded composting sites may or may not have the ability to process 100 cubic yards of material, and that will be determined on a case-by-case basis within our own local zoning and jurisdictional approvals. The State of Ohio instituted performance-based permitting mechanisms that enable and encourage urban and community composting activities at larger scales.

Proposed Solution:

Specific to SS 17855(4), we request that the 500 sf. restriction be deleted and the language be implemented as follows for small, excluded activities:

Composting green material, food material, and vegetative food material is an excluded activity if the total amount of feedstock and compost on-site at any one time does not exceed 100 cubic yards.

Conveniently, SS17867(a) already defines general operating standards that CalRecycle could require excluded sites to comply as a condition of permit exclusion, or some variation. This will give assurance that excluded sites will not be mismanaged or otherwise pose a risk to public health. The State of Massachusetts includes a burden of proof clause in their composting regulations that applies to all activities (see endnote). Incorporating similar language into the proposed regulations would help further ensure that all composting in California is conducted with a certain standard of care while still encouraging composting activity to occur.

2. Expand source allowances at farms

Background:

The proposed regulations do not contain any intermediary permitting mechanisms for composting of vegetative/food material that accounts for the size or relative risk of the activity to the surrounding environment and public health. We have a major opportunity to develop on-farm composting capacity; this would easily amplify organic waste diversion in the region where agricultural enterprises are often located next to residential areas.

Siting new facilities becomes less of an obstacle when we can take advantage of our expansive agricultural infrastructure. As Massachusetts found, since the organics landfill ban was introduced, 70% of their new composting capacity has occurred at farms composting small volumes of food while exempt from the commercial composting facility permits.²

Has CalRecycle researched the amounts farmers would need to produce enough compost to meet their needs?

A typical small farm in San Diego would need to import roughly 50-60% of their feedstocks (between growing seasons). Off-site feedstocks are needed to produce the carbon:nitrogen balance for composting.

Proposed Solution: Implement an intermediary allowance for accessory on-farm composting, especially for those farms intending to use their compost onsite. For example, Massachusetts allows farms to import up to 30 tons per day, or 105 tons per week of approved materials, including food.

¹ *Assessing Organics Processing Capacity In Massachusetts, October 2014, BioCycle*

This appears to be the intent in SS17855 (1), excluded agricultural activities:

SS17855(1) An activity is excluded if it handles agricultural material derived from an agricultural site, and returns a similar amount of the material produced to that same agricultural site, or an agricultural site owned or leased by the owner, parent, or subsidiary of the composting activity. No more than an incidental amount of up to 1,000 cubic yards of compost product may be given away or sold annually.

CalRecycle staff have stated that this section means farms can only compost their own material derived from onsite. However, we interpret it to mean that **farms can compost agricultural material so long as the compost is used on the site where the composting occurred, or compost can be used on the site where the agricultural material was derived.**

Please clarify the meaning. Moving forward, the only material difference between excluded agricultural sites and agricultural site requiring an EA Notification is whether they use their compost onsite or if they sell/give away more than 1000 cubic yards per year.

Proposed Solution:

We've developed alternatives to the language that if implemented, will clarify and expand on-farm composting allowances. Please consider and implement one of the following alternatives:

Alternative A, Offsite feedstock allowance is based on the farm's size and ability to handle the material:

SS17855 Excluded Activities

~~(1) An activity is excluded if it handles agricultural material derived from an agricultural site, and returns a similar amount of the material produced to that same agricultural site, or an agricultural site owned or leased by the owner, parent, or subsidiary of the composting activity.~~
If their feedstock is limited to agricultural material, the agricultural site may handle an unlimited quantity of agricultural material. Up to 25% by volume of feedstock onsite at any one time may consist of green material, food material and vegetative food material derived from offsite. No more than an incidental amount of up to 1,000 cubic yards of compost product may be given away or sold annually.

SS17856. Agricultural Material Composting Operations:

(c) If their feedstock is limited to agricultural material, agricultural material composting operations may handle an unlimited quantity of agricultural material on the site and may sell or give away any or all compost they produce. Up to 25% by volume of feedstock onsite at any one time may consist of green material, food material and vegetative food material derived from offsite. These operations shall be inspected by the EA at least once each calendar year at a time when compostable material on the site is active compost.

Or Alternative B, Offsite feedstock allowances capped at 500 cubic yards:

SS17855 Excluded Activities

~~(1) An activity is excluded if it handles agricultural material derived from an agricultural site, and returns a similar amount of the material produced to that same agricultural site, or an agricultural site owned or leased by the owner, parent, or subsidiary of the composting activity.~~

If their feedstock is limited to agricultural material, the agricultural site may handle an unlimited quantity of agricultural material. Up to 500 cubic yards of green material, food material, and vegetative food material feedstock received from offsite may be onsite at any one time. No more than an incidental amount of up to 1,000 cubic yards of compost product may be given away or sold annually.

SS17856. Agricultural Material Composting Operations:

(c) If their feedstock is limited to agricultural material, agricultural material composting operations may handle an unlimited quantity of agricultural material on the site and may sell or give away any or all compost they produce. Up to 500 cubic yards of green material, food material, and vegetative food material feedstock received from offsite may be onsite at any one time. These operations shall be inspected by the EA at least once each calendar year at a time when compostable material on the site is active compost.

Similar amendments to SS (d) should be implemented for agricultural operations accepting high volumes of green material. Likewise, SS17857.1 and SS 17857.2 should be amended to allow the specified volumes of vegetative/ food material feedstock.

We are confident that CalRecycle already has the safeguards and assurances in place to ensure properly managed agricultural composting. Agricultural operations in the EA Notification tier that sell or give away more than 1000 cubic yards per year of compost are already required to follow pathogen destruction and other standards outlined in SS17868.1, 17868.2, 17868.3 and 17868.3. Agricultural sites should be given a chance. If sites are found underperforming, they will be shut down or required to enroll in a higher permit tier.

If CalRecycle disagrees with our assessment or determines an on-farm allowance different than ours presented, please provide data, calculations, case studies or evidence to support your findings. We welcome any further discussions with CalRecycle to help develop on-farm composting capacity for California.

3. Clarify permitting of in-vessel facilities

Background:

Please clarify requirements for small to medium in-vessel facilities composting or curing the digestate it produces. The language is unclear.

Aerobic in-vessel technologies, along with many anaerobic digestors, typically produce compost, or solid digestate similar to compost, after processing the material at designated temperatures and residence times. Furthermore, solid digestate from aerobic in-vessel digestion is compost by design and typically requires no further processing other than curing.

Proposed Solution:

Please clarify that facilities may conduct onsite curing, and/or apply immediate beneficial use of the compost/solid digestate so long as the in-vessel technology meets temperature and residence time requirements, and meets pathogen destruction and metals requirements. Facilities should follow the sampling protocol and meet the standards outlined in SS17868.1, 17868.2, 17868.3 and 17868.3.

4. Provide guidelines for small- to mid-scale operations

We recognize that composting is a process that requires knowledge, management and care. Composting is also the catalyst to solve so many of our environmental and social problems. We do not want the risk of mismanaged activities to tarnish the reputation of composting or cause nuisance or harm.

In tandem with this rulemaking process or as soon as possible, we request that CalRecycle itself, or its partners, develop a framework for local jurisdictions to institute trainings, licenses, or similar programs to ensure that small and on-farm operations produce compost in accordance to typical composting best performance measures. This could be simple and similar to low-cost food-handlers licensing programs. As one example, composters could register their activity in a database and complete a simple online tutorial. This database could collect information regarding feedstocks (from offsite or onsite), intended use of finished compost, capacity, etc. While this information is available in permit records, it will not be readily available from excluded sites. The database will provide CalRecycle, LEAs and interested persons with valuable information regarding the types and scales of composting activities taking place in California, while giving the public and regulators assurance that even small sites follow a standard of care.

SUCCESSFUL PRACTICES IN OTHER REGIONS

New York City's history with composting demonstrates that sustainable projects are not necessarily defined as capitally intensive, large, centralized facilities. Facilities can be good neighbors in urban areas, as demonstrated in Boston, MA. A recent piece on NPR³ highlighted the City Soil composting project in urban Boston. City Soil has even been helping develop on-farm composting capacity in response to the state's food waste landfill ban. The State of Massachusetts allows farms to accept up to 30 tons per day off approved feedstocks, including food material. Programs have developed in states and cities across the USA due to favorable rules that encourage composting. Examples of such exciting programs are provided in the endnotes.¹ California is known to be a leader in the environmental movement, however, our own rules make it extremely difficult to start such exciting programs of our own.

CONCLUSION

As we move forward to integrate composting into our healthy community and sustainable food systems, we recognize that CalRecycle is an important and vital ally to our movement. We look forward to State-level rules that enable us to work within our local frameworks to create our own unique composting systems. We are very excited to be submitting these comments to you and thank you very much for the effort and dedication you've put into this process. We would be happy to further this discussion with your staff.

Sincerely,

Anne Barron, co-coordinator of OBGreenGold
San Diego community garden composter and member of San Diego 1in10 Coalition

Cc: Senator Joel Anderson
San Diego County Supervisor Diane Jacobs
Mayor Kevin Faulconer

Kevin Smith, City of San Diego Environment Committee Consultant
Janet Whited, SDUSD Recycling Specialist

Programs Developed in Other States and Cities in the USA.

Oregon has enacted performance based rules that favor experienced operators, promote and exempt small facilities and remove limitations on the feedstocks agricultural composters may use. Iowa allows a Permit exemption for up to 2 tons food scraps per week from offsite sources. Rhode Island requires Registration (but not a full permit) for agricultural composters if they accept less than: 10 tons/day presorted produce or vegetable scraps; 1 ton/day presorted kitchen, restaurant, municipal food scraps; ½ ton/day unprocessed meat/ fish waste. Some examples of new, exciting entrepreneurial or on-farm driven compost programs include:

- Detroit Dirt, whose mission is to “To become an engine for the urban farming movement by regenerating waste into the resources that will reshape Detroit. “
- Lower East Side Ecology Center, New York City: This organization operates food waste-into-compost system at Farmers Markets. At its facility in a City park, they process 6-7 tons per week collected from residents at the Markets into compost, which is then sold back to residents at Farmers Markets.
- Compost Cab, Washington, DC: collects residential and commercial food scraps and delivers to urban farms for composting.
- Compostwheels, Atlanta, Georgia: operates a closed loop system for compost pick up. Organic waste is composted within the surrounding neighborhood, helping to achieve their goal of creating a standard of soil used in each community served.
- Farmer D Organics, Atlanta, Georgia: Compost is made from a combination of green waste from the prepared food and produce departments of Whole Foods Markets and byproducts from pine forests, cotton gins, peanuts, chicken litter, granite dust and biodynamic soil preparations. "This is not just any compost! This was the first certified Biodynamic Blend compost on the market, made from 40,000lbs/week of Whole Foods Market green waste, which was previously headed to the landfill!"
- The Compost Crew, Silver Spring, Maryland: collects residential and commercial food scraps and delivers to urban farms for composting.
- Compost Mobile, Miami, Florida- non-profit organization was awarded a microfinance grant to initiate a program that collects residential food scraps from particularly low-income neighborhoods and delivers to urban farms and community gardens for composting.