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February 28, 2015

Jeanine Townsend, Clerk to the Board
State Water Resources Control Board
1001 I Street, 24th Floor
Sacramento, CA 65814

RE: Comment Letter - General Order for Composting Operations

Ms. Townsend,

Thank you for the opportunity to comment on the Draft Order No. WQ 2-15-XXXX-DWQ:
General Waste Discharge Requirements for Composting Operations.

California Polytechnic State University, San Luis Obispo (Cal Poly), is a comprehensive, polytechnic, undergraduate teaching institution, whose mission is to discover, integrate, articulate and apply knowledge. Cal Poly is located on the central coast of California midway between Los Angeles and San Francisco. The campus is composed of a Main Campus and six ranches, which total approximately 6,000 acres. The campus is composed of various habitats, which include urban, agriculture, range, riparian, wetland, and aquatic. These habitats contribute to the wide variety of activities and uses associated with Cal Poly's undergraduate and graduate teaching programs and the "Learn-by-Doing" teaching philosophy.

The University, in carrying out and administering its educational functions, has the ability to sustainably manage water quality associated with agricultural impacts. The University has maintained an existing WDR for agricultural activities for over 20 years which includes point source pollution activities (sprayfields), non-point pollution activities (grazing, irrigation, compost, etc.), and stormwater related activities (construction). Under the new requirement, the University's composting operations would be considered a small scale (<5000 cy/annually) operation utilizing a combination of allowable Tier I and Tier II feedstock (agricultural materials, green materials, and manure). It is our understanding that based on the above, Cal Poly would be considered exempt from this General Order.

In order to understand the proposed order for composting operations and how these requirements would impact Cal Poly's educational mission, we respectfully request that you

provide comment on and/or clarify the following items: 1) coordination with CalRecycle, 2) leachate to groundwater, 3) exempt facilities and 4) the unfunded mandate.

Coordination with CalRecycle

As discussed in Finding 11, CalRecycle regulations address composting operations including facility siting, design standards, operating standards, environmental health standards, sampling, reporting, etc. (Title 14 and Title 27). The proposed draft order does not appear to be consistent with Title 14 or Title 27 with regards to compost materials handling operations and facilities' regulatory requirements. For instance, Item 30 e/f of the draft order regulates the size of composting facilities, which is inconsistent with Title 14, Chapter 3.1, Section 17855 (4) *"Handling of green material, feedstock, additives, amendments, compost, or chipped and ground materials is an excluded activity if 500 cy or less is on-site at any one time, the compostable materials are generated on-site and if no more than 1,000 cy of materials are sold or given away annually..."*

Please provide clarification regarding the communication and cooperation SWRCB has had with CalRecycle with regards to these requirements. We would like to submit our recommendation that SWRCB consider drafting language that is consistent with CalRecycle regulations.

Compost Leachate to Groundwater

Finding 6 states *"The compostable materials may contain nutrients, metals, salts, pathogens and oxygen-reducing compounds that can degrade water quality if allowed to migrate into groundwater or surface water. The process of composting can allow contaminants to migrate with leachate or stormwater that contacts these materials."*

While we agree that compost operations may impact surface waters (which can be effectively mitigated), we disagree that science supports the impact of leachate on *site-specific* groundwater resources. For instance, a study of compostable manure found that concentrations of NO₃-N are a fraction of total N that contributes to groundwater contamination. Results showed that 68 percent of the precipitation eventually became runoff. A significant delay between the precipitation event and eventual runoff was observed. (Martins, O and Dewes, T).

In another study of yardwaste, the study indicated composting of high nutrient feedstocks on coarse-textured soils (sands, loamy sands, sandy loams, etc., where there are no barriers to soil water movement) can create elevated nitrates in shallow groundwater. (Gaskin, J., Governo, J., Faucette, B., and Borden, D.). These studies demonstrate that leachate impacts to groundwater resources are greatly varied depending upon the soil type and the depth to groundwater. Based on the above, we submit that the draft order should regulate compost operations and the potential impact to groundwater (soil type and depth to groundwater). For example, if a facility has clay soils with a depth to groundwater of >20 feet, the facility should not be regulated for leachate.

Exempt Facilities - Completely Cover

We again find inconsistencies between Title 14 and the proposed order. For instance, Item 30 f (1) of the draft order requires exempt composting facilities *completely cover all materials during rain events to prevent the generation of contaminated non-process wastewater and leachate.* Title 14, Chapter 3.1, Articles 6.1 and 6.2, Sections 17406.1 (Siting and Design), 17406.2 (General Design

Requirements) and 17407.3 (Drainage Control) covers these requirements. Please describe the process by which you will coordinate with CalRecycle and provide comment as to why SWRCB has proposed this draft order prior to the finalization of CalRecycle's review of the solid waste activities and revisions of solid waste regulations.

Unfunded Mandate

Finally, we would like for you to comment on the financial burden of this unfunded mandate upon the University and the regulated community. Currently, Cal Poly has nine rows of compost averaging approximately 200' in length. To cover the windrows we would use a product called ComposTex which would cost approximately \$14,000 (product alone). This figure does not include the labor for installation, the anchoring design or the maintenance that will be required before and after storm and wind events to ensure quality and function of the covers. The use of other products may be considered, but utilizing plastic on our often-windy campus would only increase the trash that the State is in the process of regulating and reducing. We would like you to review the draft order with the Commission on State Mandates with regards to State institutions such as Cal Poly. As a state facility, Cal Poly does not have the ability to gain reimbursement for this regulated activity.

As you are aware, currently an estimated 35 million tons of waste are disposed of in California's landfills annually, of which 32 percent is compostable organic material, 29 percent is construction and demolition debris, and 17 percent is paper. Cal Poly is a vital resource to help lead California to meet its 75 percent reduction target by 2050 by providing education to future industry leaders in the area of resource management. Our facility provides a unique opportunity to demonstrate effective and sustainable water quality measures when it comes to all agricultural activities the University provides, including compost operations.

Thank you again for the opportunity to provide comment. We look forward to your response.

Sincerely,



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cc: Chris Adair, Regional Water Quality Control Board - R3

Citations

Gaskin, J., Governo, J., Faucette, B., and Borden, D. 2003. The Compost White Paper - Large Scale Composting in Georgia. Environmental Sciences, Engineering Outreach Service University of Georgia, College of Agriculture & Environmental Sciences. October, 2003

Martins, O (Reprint) and Dewes, T. 1992 Loss of Nitrogenous Compounds During Composting of Animal Wastes. Bioresource Technology, 42 (2). 1992