

July 6, 2009

Ken Decio
California Integrated Waste Management Board
1001 I Street
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Subject: Direct Application of Coffee Grounds to Farms: For 7/28/09 “stakeholder input” opportunity

Mr. Decio:

Thank you for directing me to the website for upcoming regulatory input opportunities, at <http://www.ciwmb.ca.gov/Organics/EventsInfo/ADCFoodWaste/FoodWaste.pdf>.

As noted on page 12 of the Food Waste Composting Regulations Draft White Paper, June 29 draft document, “Many stakeholders indicate that the current definition of food material... does not clearly differentiate between pre-consumer, post-consumer material, and agricultural material,” but other stakeholders maintain “there should not be a distinction between pre-consumer and post consumer food materials because both (can be) putrescible, odorous, and attract vectors.”

In response to this issue, thank you for including on page 13 input received from Ventura County (and others, presumably), noting additional stakeholders who “indicate... current definitions of food material and agricultural material are problematic because... coffee grounds at a coffee shop are considered a food material under current regulations but grape pomace at a winery is considered an agricultural material.”

This summary of the issue may be helpful in framing the discussion for the webinar, but it does not go far enough in making another important distinction for decision-makers who may revise regulations. As documented by scientific testing conducted by Fruit Growers Laboratory, the results of which were forwarded to CIWMB staff by the Ventura County RMDZ two years ago, pre-consumer coffee grounds from a factory have the potential to be used safely in direct application to farms. As documented by additional information provided by the Ventura County RMDZ to CIWMB staff (including a letter from the University of California Cooperative Extension, Farm Advisor), such direct application of coffee grounds to farms has been an accepted agricultural practice and has safely provided direct agronomic benefit in the past.

Coffee grounds from coffee shops, as the issue is currently framed, may not have the same potential, due to smaller amounts generated. Additionally, coffee grounds from coffee shops may not be handled in the same source-separated manner as coffee grounds from factories.

A factory located in the unincorporated portion of Ventura County produces approximately 3,000 tons of clean, source separated, coffee grounds per year. Prior to enforcement of current regulations, these coffee grounds were directly applied to farms. Attached are copies of material previously submitted to CIWMB staff documenting the safety, desirability, marketability to farmers, and historical precedent for direct application of this material to farms. The five options listed on page 13 of the Draft White Paper do not include direct application to farm land, but this option should be considered for clean, source separated coffee grounds from factories producing coffee products.

In considering this issue, one issue that may be considered is the potential acidity of coffee grounds. On page 33, Attachment 9 of the White Paper lists potential physical and chemical requirements for finished compost. One of those requirements is a pH level between 6.0 and 8.0. Data provided by the analytical chemists at Fruit Growers Laboratory indicates coffee grounds from the coffee beverage manufacturing factory in Ventura County are slightly more acidic than this standard, having a 5.8 pH. Commenting on this pH level, and other loads which tested with a pH as low as 5.46, Soil Scientist Chad Lessard writes, in the enclosed letter, "The pH of 5.46 in this amendment may reduce the pH of a soil over a long period of time and therefore should not be used in extreme excess where a pH of 6 and above is desired."

Please note that a pH of 6 and above is not always desirable in Ventura County, so this standard should not be applied statewide as a limitation. An October 9, 2007 letter from University of California Farm Advisor Ben Faber (enclosed) describes the valuable role coffee grounds played in a local farming operation and notes "We were hoping that the mulch (directly applied coffee grounds) would have a significant effect on the soil's acidity over time, since blueberries require a soil pH of about 4. To date, there has been only a minor drop in pH" and "...we still need to acidify the water to keep the plants productive at this point." In fact, a farmer deprived of coffee grounds indicated he now uses sulfuric acid to lower soil pH levels. To the extent coffee grounds can lower soil pH, they may be a safer alternative than chemical methods otherwise used.

If, on the other hand, the CIWMB determines the pH levels of coffee grounds make the material unacceptable for direct application to farms, another option could facilitate recycling and agricultural reutilization of this material. Tests conducted by Fruit Growers Laboratory for Peach Hill Soils (results also enclosed), show coffee grounds evenly blended with compost had a pH level of 6.7. If direct application is not permitted, coffee grounds blended with compost could be allowed for direct application to farms.

Sincerely,

David Goldstein, Coordinator
Ventura County Recycling Market Development Zone