

COUNTY SANITATION DISTRICTS OF LOS ANGELES COUNTY

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STEPHEN R, MAGUIN
Chief Engineer and General Manager

February 9, 2009

Mr. Clark Williams, Supervisor Statewide Technical and Analytical Resources Division California Integrated Waste Management Board 1001 I Street P.O. Box 4025 Sacramento, CA 95812

Dear Mr. Williams:

Comments on Technical Approach for the Life Cycle Assessment and Economic Analysis of Organic Waste Management and Greenhouse Gas Reduction Options

Thank you for holding the stakeholder meeting on February 2, 2009, on the subject project. The Sanitation Districts of Los Angeles County is supportive of the project and would like to be involved throughout the process, as we believe science should be the basis for policy decisions. At the stakeholder meeting, the contractor provided an overview of the technical approach for the project. We would like to indicate our concerns with this approach:

INCOMPLETE DATA

In order to draw meaningful conclusions there needs to be complete and meaningful data. As indicated by the contractor at the stakeholder meeting, the data received from most public agencies that participated in the survey is incomplete due to the short deadline given and non-existent for private operators due to confidentiality concerns. This leaves hardly any meaningful data from which to draw conclusions. The contractor is apparently proceeding forward with these major information gaps, which will call into question any conclusions or findings. Filling the information gaps with general information not pertaining to the specific site may not be useful or may misrepresent that site.

NEED FOR TECHNICAL ADVISORY GROUP

Stakeholder input should be early and throughout the process, not towards the end when it will be too late to make any corrections or adjustments. A technical advisory group would provide an opportunity for stakeholders with expertise in landfill operations and energy recovery, composting processes, conversion technologies, local government perspective, and knowledge of regional solid waste management infrastructure to review technical information and have input into the project deliverables. As you are aware, we have requested that a technical advisory working group be formed for this project.



UNBIASED AND TRANSPARENT ANALYSIS

The goal of the project should be to conduct an unbiased, robust, and scientifically sound life cycle assessment of organics diversion options. This can only be achieved by making all assumptions, models, and calculations transparent and accessible for peer review. The process should also be deliberate and properly vetted, not rushed with artificially short deadlines.

The study should also recognize the investments made in landfill gas-to-energy facilities and their significant greenhouse gas (GHG) reduction benefits as a result of less fossil fuel being burned to produce the same power and the effective management (destruction) of methane.

It is also important to acknowledge that composting is very difficult to site and permit, thereby resulting in facilities being located far away from metropolitan areas. Transportation to these facilities needs to be included as an emissions source. If a new collection infrastructure is needed for organics, then emissions from these collection vehicles must be accounted for in the analysis. Additionally, any proposed composting facility within the South Coast Air Quality Management District would likely require full enclosure with air ventilated to an odor control system in order to meet stringent air quality requirements. The significant capital required to fully enclose such a facility also needs to be included in the study.

ACCURACY OF BASE CASE LANDFILL

Since no two landfills are the same, there needs to be an accommodation or input field for collection efficiency, methane destruction (flaring), and energy recovery (which has GHG reduction benefits). The basic assumptions indicated by the contractor for landfills are erroneous, particularly for those landfills located within the South Coast Air Quality Management District (SCAQMD). The contractor intends to use a default landfill gas collection efficiency of 75%. The landfills operated by the Sanitation Districts of Los Angeles County have much higher collection efficiencies (90+%) and technical papers have been published substantiating this. Additionally, a low collection efficiency of 75% would likely be insufficient to meet the stringent SCAQMD landfill surface emissions monitoring requirements or the impending statewide version of this requirement being adopted by the California Air Resources Board.

The contractor also indicated that the base case assumes no landfill gas collection for the initial three years of operation. This is contrary to actual practice in Southern California. For landfills within the SCAQMD jurisdiction, gas collection systems are installed from the beginning of the operation and throughout landfill's development. SCAQMD inspectors and the local enforcement agency visit the landfills regularly to ensure that adequate landfill gas systems are in place to control surface emissions.

GREENWASTE AS ALTERNATIVE DAILY COVER IS DIVERSION

Greenwaste used as alternative daily cover (ADC) is diversion according to state law. Consequently, the CIWMB study should portray it as such and classify it as a diversion alternative. The technical approach erroneously includes greenwaste as ADC in the landfill base case, which could artificially skew the results and GHG benefits towards composting.

FUGITIVE GHG EMISSIONS FROM COMPOSTING

There is an increasing awareness in the scientific community of fugitive GHG emissions from composting operations. In fact, scientific studies (e.g., Czepiel, et al, 1996; Schenk, et al, 1997; Stredwick, 2001, and Amlinger, et al, 2008) have shown that methane and nitrous oxide are generated from composting and these fugitive GHG emissions are comparable to surface GHG emissions of a well-controlled landfill. The LCA should include these fugitive methane and nitrous oxide emissions as part of composting.

CONSIDERATION OF MARKET OR PRODUCT DEMAND

It is important to sustain the existing markets for alternative organics management, such as composting, and not negatively impact them. Flooding the marketplace with a new, unplanned supply of finished products could negatively impact pricing and the financial viability of these operations. A careful evaluation and strategic management of potential markets also needs to be considered in this study, so that supply does not exceed demand and cause an accumulation of product such as the existing situation in the recyclable commodities market.

Thank you for your consideration of our concerns. Should you have any questions, please contact me at (562) 908-4288, extension 2723, or Mr. Dung Kong at extension 2475.

Very truly yours,

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cc: Brenda Smyth, CIWMB Howard Levenson, CIWMB