



WASTE MANAGEMENT / PUBLIC AFFAIRS

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Via Email: kdecio@ciwmb.ca.gov

Subject: WM comments on the materials CIWMB prepared for Strategic Directive 8.3:

Ken:

Please accept the following as Waste Management's (WM) comments on the documents recently prepared for Strategic Directive 8.3.

Anaerobic Digestion (AD)

- This document is a much needed and long-overdue discussion of the current regulatory status of AD as a form of composting under the current regulations.
- WM would support the development of AD-specific permitting regulations provided that the permitting of AD facilities is allowed to continue under current composting regulations until such time as the new AD-specific regulations are in place.
- This document should be revised to make it clear that the regulation of anaerobic digestion as a type of composting process does not necessitate the production of a product call "compost". As a legitimate composting process, anaerobic digestion can produce a variety of potential products ranging from methane to solid fuel -- as well as traditional "compost". PRC section 40116.1 clearly provides that composting is a process and does not require the production of an end product called "compost". Similarly, there may be occasions when the composting solid residuals have no value and may be required to be utilized by a landfill as ADC or even subject to disposal if there is not a viable market for this material. The landfilling of AD residual should not have any affect on the status of an AD facility as a composting facility.

From everyday collection to environmental protection, Think Green® Think Waste Management.

Alternative Daily Cover

- The statement is made throughout the document that somehow use of green waste as ADC negatively impacts the availability of compost/mulch feedstock. This statement is totally unbelievable given the growth of the compost industry in California the past 10 years that has grown largely on the back of the collection infrastructure that has been sustained in large part by the use of green waste as ADC. There is absolutely no credible evidence that this allegation is true. Rather, it is unsubstantiated allegations of those who would like even a better deal that they have received already. The composting infrastructure in California today would not exist were it not for the collection and processing infrastructure that has grown up to support both the use of green waste for ADC and composting.
- Table 4 shows the relative use of ADC vs. disposal in CA today – about 10%. This is not an exceptionally high use of ADC. Green waste only makes up about 63% of total ADC use – and is currently declining due to increased use as compost and mulch. There is no reason to believe that ADC use compromises the compost industry in any way.

Alternative Daily Cover Issues and Options

- Issue 1. Optimum use: WM supports Option 2 – CIWMB partnering with LEA's and operators to research optimum amount, depth and quality of ADC materials.
- Issue 2. ADC specifications:
 - Option 1: WM can support a refuse to ADC ratio with an upper limit on the order of 20% to waste. An intermediate ration of 10-15% could be used as a "red flag" warranting further site-specific evaluation.
 - Option 2: No objection to leaving ADC thickness at current levels and improve monitoring methods.
 - Option 3: No objection on requiring more information on ADC use, provided public notice and discourse on information required to be reported by operators.
- Issue 3. ADC contaminants
 - Option 1: WM willing to consider redefining ADC types to account for material differences.
 - Option 2: WM willing to consider establishing base contamination levels on volume instead of weight.
 - Option 3: WM supports study of added material types, particularly MRF fines.
 - Option 4: No position on allowing C&D ADC to include gypsum wallboard.
 - Option 5: No position on allowing C&D ADC to include gypsum wallboard.
 - Option 6: WM supports further research and discussion on the suitability of gypsum use as ADC.
- Issue 4. Site-demonstration project requirements.

- Option 1: WM supports the development of further guidance as part of a public process.
- Option 2: No objection for the retention of existing demonstration guidelines, at least for time being.
- Option 3: WM recommends guidance, not regulations.
- Option 4: Flexible guidelines on grain size would be best.
- Option 5: Further testing only if there is reason to believe ADC source may be contaminated.
- Issue 5. Green Material Definition.
 - Option 1: Neutral on leaving definitions the same.
 - Option 2: Neutral on definition compatibility between ADC regulations and compostable material handling regulations.
- Issue 6. Organic Waste Disposal Reduction by 50% by 2020.
 - The problem statement is misstated and incorrect. Because use of ADC is considered recycling its use *is* keeping the material out of the “waste stream”. The term waste stream should be changed to “landfill”. Although it is considered recycling, use of ADC still requires management of this material in a landfill. However, SD 6.1 makes reference to keeping materials “out of the waste stream” which is exactly what using these materials as ADC does. The materials are recycled for use as ADC to reduce the use of soil materials taking up airspace in landfills.
 - Option 1: WM supports continued assessment of organics lifecycle impacts.
 - Option 2: WM supports *objective* CIWMB research of the economic impacts of green material ADC on the compost industry.
 - Option 3: WM supports research on the ability of landfill cover materials to control landfill gas emissions. There is considerable work being done on the benefits of various types of cover materials to oxidize methane that may not be captured by landfill gas collections systems. The CIWMB should be familiar with the recent article by Chanton et al., 2009 (attached). Further information gathering will be helpful in defining the positive GHG reduction attributes of various types of alternative landfill cover materials.
- Issue 7: Organic Cover materials to reduce GHG emissions.
 - The CIWMB should actively compile all the available information on the benefits of landfill cover materials to reduce landfill GHG emissions. See Chanton et al. (2009) article cited above (attached).
- Issue 8: ASW as ADC.
 - The statement describing this issue is not correct. The DTSC has the regulatory ability to continue to allow treated ASW to be managed in MSW landfills – even if they make the determination that the treated ASW is hazardous. The DTSC could grant a “special waste” variance under their regulations to allow this to happen. Or they could continue to re-

classify a hazardous waste as a non-hazardous waste due to mitigating characteristics of the treated ASW.

- Option: WM supports the continued monitoring of this DTSC regulatory issue. WM believes that one of the best possible outcomes would be to allow the continued use of treated ASW as ADC under appropriate controls and conditions. We are not aware of any evidence that the current practice of managing treated ASW in this fashion has caused any harm or resulted in any threat to human health or the environment.

Food Waste Composting Regulations

- This issue paper fails to discuss the fact that putrescible food waste was one of the primary reasons that the modern sanitary landfill was created in the first place. Modern Sanitary landfills originated in California as the best way to avoid threat to human health due to the mismanagement of putrescible organic wastes. Problems that previously encountered prior to the advent of the modern sanitary landfill included odors, litter, air quality impacts, water quality deterioration, insects, rodents, safety hazards, and fire hazards – that are largely avoided with modern sanitary landfills.
- Issue 1: Is a full permit for food waste composting too stringent?
 - WM believes that the continued reliance on full solid waste permits for food waste composting is entirely appropriate – at least until there is incontrovertible evidence that food waste composting can be widely conducted without posing a threat to human health or the environment. WM supports the current requirement that food waste composting facilities be required to obtain full permits. Exemptions to this standard should only be allowed under the existing specified situations as described in the white paper.
 - Option 1: Continue to require full permit and allow current exclusions. WM supports per current regulatory framework.
 - Option 2: Green to food material ratios. WM would not support until sufficient information is provided to justify such a ratio. More RD&D work is required.
 - Option 3: Green to food material ratios with increased inspections. WM believes this is better than Option 2, but sufficient information does not yet exist to justify this relaxation of permitting standards.
 - Option 4: Place Green Material Operations that compost food into registration tier. WM opposes this action until there is better information about the safety of food waste composting practices.
 - Option 5: Allow all food waste to be composted at Green Material composting operations under notification tier. WM opposes due to lack of information regarding adequate protection of health and safety of this practice.
 - Option 6: Allow in-vessel food composting in EA notification or Registration Tier. WM would support the placement of fully enclosed in-vessel food composting facilities into the Registration Tier. Provisions

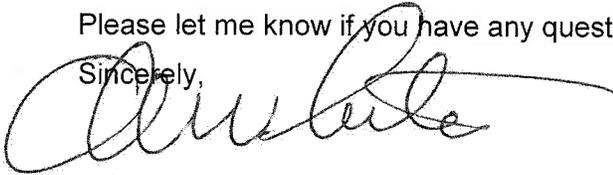
would have to be developed regarding the “charging” of the vessels with the compostable food waste to minimize problems. Further RD&D research is still required at this time.

- Issue 2: Definition of Food Material.
 - Option 1: Allow pre-consumer food waste composting under Notification Tier. WM opposes this approach until more information is available documenting the lack of threat to human health or the environment.
 - Option 2: Allow pre-consumer food waste composting under Notification Tier with minimum standards and handling practices. WM believe this approach is better than Option 1, but would still limit such operation to only RD&D pilot scale operations at this time per the current regulations.
 - Option 3: Distinguish between vegetable and dairy/meat products and allow vegetable only waste to be co-composted under Notification Tier. WM believes this is preferable to Options 1 and 2 above.
 - Option 4: WM that pre-consumer food wastes should continue to be managed as wastes not agricultural materials.
 - Option 5: Retain current definitions. WM believes that this approach has proven to be workable with sufficient flexibility to allow pilot project to proceed to demonstrate new practices that will allow the collection of sufficient data to justify and form the basis for potential future regulatory changes.
- Issue 3: Food Waste Contaminants that impact facility operations and product quality.
 - Option 1: Define Max contamination levels by volume. There is currently no reliable basis to define such maximum contamination levels.
 - Option 2: Define Max contamination levels by volume or weight in final compost product. There is currently no reliable basis to define such maximum contaminant levels.
 - Option 3: Do not define maximum physical contamination levels. WM believes that the CIWMB should continue to support RD&D projects to help identify better metrics to define acceptable contaminant levels in either incoming materials or finished products.
- Issue 4: The Potential Negative environmental impacts of composting food materials have not been fully researched.
 - WM agrees with this discussion.
 - Option 1: CIWMB researches negative impacts. WM support.
 - Option 2: CIWMB provide BMP training. WM believes development of BMPs must be developed first.
 - Option 3: CIWMB partners with US Composting Council to develop Operator Certification Training Program. No position.
- Issue 5: Current regulations may not comprehensively address compost safety issues.

- WM supports this statement particularly as it applies to compost operations with respect to pathogen reduction, inorganic contamination and the control of GHG emissions.
- Option 1: WM supports the development of appropriate compost safety standards.
- Option 2: WM supports the development of appropriate finished compost quality standards.
- Option 3: WM supports the development of appropriate standards.
- Option 4: WM supports enhanced standardized training for compost facility operators.
- Option 5: WM has no position on the development of a Compost Operator Certification program with the US Composting Council.
- Option 6: WM believes the evaluation of enhanced standards for compost quality and operations is warranted.

Please let me know if you have any questions or require further information.

Sincerely,



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