



Californians Against Waste

Conserving Resources. Preventing Pollution. Protecting the Environment.

August 24, 2009

Mark De Bie
California Integrated Waste Management Board
1001 I St.
Sacramento, CA 95814

RE: White Papers and Guidance on ADC, Food Waste Composting, and Anaerobic Digestion

Mr. De Bie,

Thank you for the opportunity to comment on the ADC and Composting white papers, and the Draft Guidance for Anaerobic Digestion. While the AD Guidance is new, the CIWMB has been dealing with ADC and composting for many years. We have actively worked with the CIWMB to promote more aggressive organics diversion, and we hope that the CIWMB will take this opportunity to advance Strategic Directive 6.1 and 8.3.

Alternative Daily Cover Draft White Paper:

California is the only state that counts material applied as Alternative Daily Cover as recycling. Counting ADC as diversion undermines the legitimacy of California's role as a leader in resource conservation, and is a primary regional barrier to diverting organics from the landfill. Landfill cover is recycling in name only, and counting it as such is environmentally regressive. We have urged the CIWMB, to no avail, to reconsider how it regulates ADC within its statutory constraints. We will repeat those recommendations below.

Last year, the ADC Policy Working Group resulted in a series of policy options for the CIWMB to consider. While the policy group did not come to consensus on many issues, some progress was made. It is worth noting that while the group did not reach consensus on whether diversion should be phased out for ADC:

“There was consensus among group members that a transitional period of seven years would provide sufficient incentive for local government action, and at the same time, provide an adequate period for implementation.”

The CIWMB has taken no follow up action based on this significant progress regarding the phaseout of diversion credit.

In addition, as staff has recognized, the CIWMB has the responsibility under PRC Section 41781.3 to ensure that the board's ADC regulations “provide for the continued economic development, economic viability, and employment opportunities provided by the composting industry in the state”. We have identified cases (Orange County, for instance) where the low or non-existent landfill tip fees for greenwaste have dominated the greenwaste market and made it impossible for the composting industry to compete. The composting industry has also provided the board with testimony and evidence establishing that, in certain regions of the state, ADC use has impaired the economic viability of greenwaste composting. Thus, in the absence of evidence to the contrary, we urge the board to immediately limit the use of ADC in impacted regions.

We have also reviewed the issues raised in the ADC white paper and have the following recommendations:

1. Issue: “Optimum amount, depth, and quality of ADC have not been adequately researched”
Preferred Option: “Option 3: CIWMB conducts research on the optimum amount, depth, and quality of ADC materials”
It is apparent to us that there has been significant abuse of greenwaste ADC around the state, with yard trimmings accounting for over a quarter of the material that is placed in some landfills. At the very least, the CIWMB should investigate this issue (option3), and investigate landfills that appear to have disproportionately high ADC use (option 1, below).
2. Issue: “Evaluating ADC compliance is difficult; ADC misuse can go undetected”
Preferred Option: “Option 1: Establish refuse to ADC ratio at landfills. Investigate high refuse to ADC ratios or require operators to record working face size/ADC use to enable LEAs to determine overuse or underuse.”
3. Issue: “ADC often contains materials not allowed in regulation”
Preferred Option: “Option 3. CIWMB sponsors a study of additional ADC material types” and “Option 6. CIWMB Researches hydrogen sulfide generation in landfills that receive C&D materials”
There is a clear need for more research in the area of allowable ADC material types. CIWMB should also evaluate the environmental merits and demerits of various cover types, including a comparison of proposed new ADC materials to tarps.
4. Issue: “Site demonstration projects for new ADC materials lack guidance which makes it difficult to test new ADC types, such as MRF & C&D fines”
Preferred Option: “Option 3: Revise regulations to specify requirements on how to conduct ADC demo projects”
A clarification of regulations would add uniformity to ADC demonstration projects, allowing new materials to be tested while being protective of the environment.
5. Issue: “Definition of Green Material is different than Processed Green Material”
Preferred Option: *Unprocessed green material should not be allowed to be used as ADC.*
6. Issue: “Green waste ADC is considered diversion and not disposal, which is a disincentive to keep green material out of the waste stream and conflicts with SD 6.1”
Preferred Option: *None of the options offered here are sufficient for addressing this significant barrier to diverting yard trimming from landfills. The ADC Policy Working Group ended several months ago, and the organics lifecycle has been in released as a final draft. Similarly, evidence of the economic impact of ADC on the compost industry has been clearly presented to the Board by composters, local governments, and environmental advocates. This issue has been “monitored” and “researched” for many years and it is time for the Board to take action by immediately limiting the use of greenwaste as ADC pursuant to 41781.3 and sponsoring legislation to phase out diversion credit for greenwaste ADC within 7 years.*

Food Waste Compost Draft White Paper:

Composting has been the cornerstone of California’s organics diversion program, and the industry continues to develop and mature every year. We need to ensure that the composting regulations reflect our current knowledge and experience, and do not unnecessarily hinder

organics diversion in the process of protecting the environment and public health. Every time a food waste collection program is implemented, we divert more organics from the landfill. This diversion provides a multitude environmental benefits including making our state's agricultural system more sustainable and reducing greenhouse gas emissions. We believe it is critical to ensure a reasonable path is available for composters to begin to accept food scraps.

We have reviewed the white paper and have indicated which options we believe make the most sense at this time:

1. Issue: "Requiring a full permit may be too stringent"
Preferred Option: "Option 5: Allow food waste to be composted at GMCOs (EA Notification) & require specific handling procedures & BMPs to reduce odors, etc."
We believe that a well-managed food composting would not pose any additional problems compared to greenwaste composting, and there should be parity between the permitting requirements for these materials. Both greenwaste and food waste need to be managed properly, and the state's efforts should be focused on the elements in option 5, along with special training for composters.
2. Issue: "Food material definition is vague"
Preferred Option: *None of these options are particularly appropriate for addressing this issue. Instead of focusing on delineating pre-consumer food from post-consumer food, all food should be treated similarly to green materials.*
3. Issue: "Food material contaminants may impact facility operations and product quality"
Preferred Option: *No opinion on this. While contamination is clearly an issue of concern, none of these options seem to offer a good solution.*
4. Issue: "Potential negative environmental impacts have not been fully researched"
Preferred Option: "Option 3: CIWMB partners (e.g. with U.S. Composting Council) to develop & implement a Compost Operator Certification Training Program to educate operators on reducing negative environmental impacts"
5. Issue: "Current regulations may not comprehensively address compost safety issues"
Preferred Option: "Option 5: CIWMB partners (e.g. with U.S. Composting Council) to develop & implement a Compost Operator Certification Training Program to educate operators on compost safety issues."
Metal concentrations are handled by federal regulations, and STA doesn't test for metals, so Options 1 and 2 do not seem appropriate. Options 3 and 4 might have some beneficial impact, but we believe that partnering with a third party organization to provide training would be the most effective of the options offered. This training might be done in conjunction with option 4.

Anaerobic Digestion Guidance Document:

Anaerobic Digestion of MSW and source separated organics will provide California with an additional tool to divert organic material from landfill disposal. AD technologies span a broad spectrum of operational conditions and feedstock specifications, and vary in terms of process efficiency and quality and quantity of end-products. These differences are in part the strength of these technologies, allowing them to be placed into the appropriate infrastructure. These differences will also present an initial challenge in terms of determining the appropriate level of regulatory oversight for any given facility.

The Draft Guidance On How Anaerobic Digestion Fits Current Board Regulatory Structure takes the first step towards developing a regulatory regime for AD facilities by using the existing composting regulations as a basis for regulation and identifying the type of permit that will be required. We agree with this approach, and believe that it offers the clearest path to permitting AD facilities given the lack of available operational data.

The challenge with this approach is that, at its core, anaerobic digestion is operationally very different from aerobic composting. This is particularly true for the part of the AD process that occurs in-vessel. As noted below, the Guidance document makes certain distinctions that are not relevant from an environmental or public health perspective, and we look forward to discussing these with the CIWMB as the process moves forward.

Also, it is still unclear how many of the operational requirements of a Compostable Material Handling permit would transfer to an AD facility. A new section of the Guidance document that identifies which operational requirements of the composting regulations will be applied to real-world AD facilities would greatly improve the utility of this Guidance, and we urge you to consider developing such a section as soon as possible.

Specific Comments:

1. Compostable v. Non Compostable Material:

Once organic material is placed in a vessel, impacts to the public health, safety and the environment are not materially changed by a difference in temperature within the vessel. The guidance document, however, distinguishes between facilities that handle compostable materials and those that do not by using a temperature threshold of 50 degrees Celsius. While this may be a meaningful distinction at an aerobic composting facility, it is not significant with respect to material inside an anaerobic digestion vessel. At an AD facility, any environmental and public health impacts will occur from feedstock transportation and preparation before it is placed in the vessel (the front end), and from digestate handling and processing after the feedstock leaves the vessel (the back end). These impacts will not vary meaningfully, if at all, due to temperature differentials within the vessel itself. We urge you to amend the Guidance Document to create a consistent permitting path for AD facilities, whether they be Thermophilic or Mesophilic in nature.

2. POTWs:

The Guidance states that if compostable materials are added to biosolids undergoing anaerobic digestion, the activity will be permitted under the Notification tier. However, anaerobic digestion of compostable materials “completely separate” from the biosolids treatment “may” require a Compostable Materials Handling Permit.

It is not clear what “completely separate means” under these circumstances. For example, are feedstocks that use the same front and back end treatment equipment, but are digested in an isolated (no biosolids) tank considered separate? Or, if the acetogenic phases for biosolids and food waste occur in separate vessels, but the organic acids from both tanks are fed into a single methanogenic reactor, is that “completely separate”? Again, since the impacts from AD will largely occur on the front end and the back end, it is unclear how the act of mixing of other organics with biosolids would change the potential impacts and thus merit different treatment under this guidance.

We appreciate the Board's efforts to encourage organics diversion and we look forward to having a detailed discussion about the issues that we have raised in this letter.

Sincerely,

Scott Smithline

Director of Legal and Regulatory Affairs