



Date: October 6, 2009

To: California Integrated Waste Management Board, LCA Organics GHG Options Tool Team

From: Association of Compost Producers

RE: Comments on the “Life Cycle Assessment of Organics Diversion Alternatives and Economic Analysis of Greenhouse Gas Reduction Options

We are very appreciative of all the work that went into creating and testing this LCA Organics Diversion GHG Reduction Options tool. We are also generally amazed by the comprehensive nature of this tool. However, owing to its robustness and complexity, we have more questions than recommendations at this point in its development and use.

Our questions and comments exist on at least four levels:

- Purpose and Use
- Clarification of Sections
- Clarification of Elements
- Tutorial and Training

Purpose and Use

- Is this tool designed for all recycling, or only organics? (That’s not clear in the introduction, and how and why the two general solid waste stream components, inorganic and organic solids, can and will work together in this tool to fulfill its function, is not immediately obvious)
- How is this tool going to be used by CalEPA? Is this just for Waste Board interactions, or will it be used as part of calculating protocols for GHG cap and trade credits? And/or will it be used for regulatory purposes? Its function both at the local level (for market development and technology development) as well as the State level (for policy, program and regulatory purposes) needs further clarity.
- It seems relatively easy to use but it will require a lot of detailed information and training for it to be functional at the local level (see Tutorial and Training).
- What will be the updating schedule of this tool? Will it be evergreen, i.e. continually updated as data and corrections are found and made? Annual cycle? 5 year cycle? How does this relate to its intended management, investment and regulatory uses? We would recommend that, if possible, it is “evergreen” for the data.
- How will it be distributed... as a spread sheet (current version) or can it be further developed as a SaaS (Software as a Service,

<http://en.wikipedia.org/wiki/SaaS>) tool, management by the Waste Board, or other agency?

Clarification of Sections

- Why is Paper, Glass, Metal, Plastic and C&D included? This addresses the issue of this only going to be an organics tool, or if it's going to be a total recycling, inorganics *and* organics tool. This needs to be made more clear.
- It mentions in the introduction that the basis of the information is using data from 2006 and the 2004 waste characterization study, but will the new calculations from 2016 affect the use of this tool?
- In the case of one Southern California county (San Bernardino), since they have several areas over a larger area, will they need to input for each of their areas? For example, the East Desert and the High Desert both use different disposal facilities and in some cases different haulers.
- It would be convenient for the user to be able to select what s/he wants to pursue – for example Compost and AD – and then have only the inputs relevant to that or those selections become available for use/modification. We cannot imagine that the freight to Asia for recycling plastic should be a value that would be used in Compost or AD – or am we off base? This might be equated to a situation where there were a spreadsheet on Transportation/Travel. If you selected “Auto”, then only the values related to “Auto” would be shown, not those for boat, airplane, bus, train, etc. Again, may be easier with a SaaS application (see above).

Clarification of Elements

- When it asks you to pick a region (e.g. one of us picked GLA because San Bernardino County is included in that region), when we input our jurisdiction's data, are the tool numbers only reflecting what we put in and for our area or does it combine with others in our region?
- For the unit emissions section, we did not notice changes when we input our numbers. Is it supposed to change?
- When we went to the FAQ's section, there are several additional FAQ tabs that one of us was not able to open. That may have been on their end but if we need special access to get to them, that may hinder some who try to use the tool.

Tutorial & Training

- It would be best if a Glossary was added, for those who are new, as well as the emerging experts who need to be confident that clear communication is occurring (i.e. not making assumptions). We eventually found most of the shorthand descriptions in the document, but it will take a little time for the first time user who is new to this tool to figure it out, e.g. that “AD” is anaerobic digestion. If there was one, we missed it.
- The online tutorial was very helpful and should be maintained as part of the tool. However, the sound on the online tutorial has enough interference at times that it is very distracting and interrupted the learning process. The different individuals

seem to be using different microphones and are different distances from them so that also leads to distraction. This will need to be remedied.

- The moderators are apparently the authors or co-authors of the areas they are describing and are so familiar with the subject matter that they lose sight of the fact that they should be teaching from the perspective that their audience is not as near as familiar with their work as they are. This will need to be remedied as the tool is brought to wider markets.
- There is no explanation that we found on how to use the tool when your interest is in a single facet – like theirs was in landfills and others might be in Compost, AD, etc. That is, how to deal with the information/values in the worksheet cells that do not apply to that area of your interest – do you just convert the extraneous cell values to zero or what?
- Although we consider ourselves quite analytical in how we plan and evaluate results - and many of us have enjoyed physics and math as well as having strong business and accounting backgrounds – many of us were easily frustrated in our attempts to learn and use the GHG Tool. We would be interested in knowing if any of the others feel the same or is it just that many of use who reviewed the tool are simply recent entries into this industry that we feel confused both the industry knowledge assumed, as well as the complexities of LCA?
- Part of the training should include the basics of LCA. The larger paper had much of this information, but even that paper and report was very challenging for the first time initiate not only to organics management, but also to life cycle assessments.

Again, we appreciate the opportunity to comment on this tool. To summarize the gist of our comments and questions:

- It appears robust and comprehensive, and therefore usable.
- The purpose and function, in the larger market, investment and regulatory context needs to be clarified by *both* the Waste Board *and* CalEPA.
- Training for all levels of users will be required for it to be used.
- Constant updates, as new data and usability are established, will be necessary.
- Staying close to the organics industry in its use and ongoing management, updates and training, will be essential to the successful utilization of this tool.



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