



**ASSOCIATION OF  
COMPOST  
PRODUCERS**  
"We Build Healthy Soil"



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November 16, 2020

Mr. Greg Harris, Branch Chief  
Greenhouse Gas and Toxics Emissions Inventory Branch  
Air Quality Planning and Science Division  
California Air Resources Board  
1001 I Street  
Sacramento, CA 95814  
Transmitted via email to: <https://www.arb.ca.gov/lispub/comm/bclist.php>

**RE : Association of Compost Producers Comments on the Informal Review  
Draft of the Air Toxics "Hot Spots" Program Emission Inventory Criteria and  
Guidelines**

Dear Mr. Harris:

The Association of Compost Producers (ACP) appreciates this opportunity to provide comments on the proposed amendments to the AB 2588 Air Toxics "Hot Spots" Emission Inventory Criteria and Guidelines Regulation (EICG) as presented during the April 30th webinar hosted by the California Air Resources Board (CARB).

ACP, [HealthySoil.org](http://HealthySoil.org) is a non-profit trade association founded in 1995, and now has over 100 public agency and private company compost producer members in California. The ACP members, who manufacture and sell compost throughout California, explicitly state in our mission that we are "dedicated to increasing the quality, value and amount of compost being produced and used in California."

Our Association, as the leading voice of the California compost industry is working closely with CalRecycle, Local Air Districts, and the California Dept. of Food and Agriculture, to build a local compost industry throughout our local communities within our local political jurisdictions. Our work and products are designed to protect the environment while enhancing the sustainability of our food systems and provide quality green jobs. Some of our notable past and current projects include:

- Caltrans compost use expansion in all 12 Districts using "Certified – Seal of Testing Assurance (STA) Compost" that is locally produced.
- South Coast AQMD – Collaborative development of Compost Rule 1133

- San Joaquin Valley Air District – Technology Advancement Program funded project “*Greenwaste Compost Site Emissions Reductions from Solar-powered Aeration and Biofilter Layer*”<sup>1</sup>, that validated that this proper use of this technology lowers VOC emissions from compost facilities by 98%.
- CalRecycle – Collaborative development of SB 1383 – Short Lived Climate Pollutant Reduction regulations and collaborative implementation of the implementation of the regulations with our local jurisdiction partners.
- CalRecycle – Collaboration on the publishing of a new guidance document for enhancing environmental justice (EJ) in cooperation with DAC communities in local jurisdictions.

All this is to say, that the compost industry is a partner with both State and Regional Environmental Protection Agencies, Water Boards and Air Districts as well as with our local county and city jurisdictions within the communities where we live, work and invest in building our local green businesses and municipal enterprises. We work together to build local, sustainable resilient economies that support genuine wealth creation, while not only protecting human health and the environment, but also enhancing both.

We understand that this regulation language and process “will be adopted at the Nov 19 Board Meeting.” However, we need to ask ourselves why and how compost producers are being included in this

### **History of EICG Updates, and Effects on Compost Producers with this “Update”**

As per slide 5 of the “EICG-workshop-slides” dated April 30, 2020, the “Key elements” of the California Air Toxics Program, we took this opportunity to review outlined elements:

- Toxic Air Contaminant Identification and Control Program (AB 1807)
- Air Toxics “Hot Spots” Information and Assessment Act (AB 2588)
- Children’s Environmental Health Protection Act (SB 25)
- Community Air Protection Program (AB 617)

This was immensely helpful so that we could review this history ourselves, as well as bring up our new generation of compost producers into the historical and new “Air Toxics” Emissions Inventory Criteria and Guidelines process. Until now, the compost industry has never had to participate in this process.

The importance of amending the EICG was also outlined in this presentation (slide 9) as:

- Improving air toxics emissions estimates in support of public health
- Enhancing public right-to-know
- Streamlining with other reporting programs

However, the inclusion of “compost” was not mentioned until slide 35, under the heading of “Proposing fugitive emissions measurement from “open” types of sources”.

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<sup>1</sup> [http://www.valleyair.org/Grant\\_Programs/TAP/documents/C-15636-ACP/C-15636\\_ACP\\_FinalReport.pdf](http://www.valleyair.org/Grant_Programs/TAP/documents/C-15636-ACP/C-15636_ACP_FinalReport.pdf)

- Wastewater treatment plants, landfills, composting and recycling, scrap metal recycling/recovery, metal shredding, etc.
- Using emission isolation flux chambers

As outlined above, ACP leadership and members have experience with monitoring and capturing certain fugitive air pollution emissions under the existing regulations of volatile organic compounds (VOCs). Even our experience with "using emission isolation flux chambers." This was our work cited above with South Coast AQMD and San Joaquin APCD.<sup>1</sup> However, we have no experience speciating these VOCs at the facility level. ***This will be a step change for the California compost industry!***

### Questions for CARB

- Is CARB going to be updating the "EICG Report" in this round of updates? If so, what will be included for California compost producers? Currently it appears that the EICG Report 2007 is included by reference as Appendix B. Is that correct?
- How can ACP help CARB in effectively outlining and including a staged process for including California Compost Producers in the EICG updating process as it applies to composters in their respective communities?

### Steps for Composters with CARB

This letter to CARB is focused on outlining how ACP members can collaborate with CARB to enhance the air quality in the communities in which our facilities are operating. Therefore, we trust that these ACP comments, questions and recommendations will be seriously and urgently considered by the CARB staff and Board of Directors *and engaging with ACP principals, prior to adoption.*

The following are ACP's comments and questions with our specific recommendations for each issue that we find will greatly affect our industry by these "Proposed Amendments to the AB 2588 Emission Inventory Criteria and Guidelines Regulation"

### Comments, Questions, and Recommendations:

1. **Toxicity is undefined for compostable materials, composting process and compost products air emissions.** The mere presence of any constituent on any list does NOT mean that it is "toxic." **This is true no matter what is already stated in statute.** The mere existence of an "Air Toxics List" do NOT mean that the material is toxic where it is generated. *"Toxicity is the degree to which a chemical substance or a particular mixture of substances can damage an organism."*<sup>2</sup> The question becomes, in what concentration and exposure rate are these listed chemicals in Appendix A-1 actually carcinogenic and or detrimental to any measure of human health and the environment? For example, the human body produces carcinogenic compounds daily.<sup>3</sup> This is also true for plants as they breakdown, e.g. on the forest floor or a compost pile. They will likely produce many of these listed chemicals as intermediate breakdown products. So, while they are on this list, and they may be in the compost pile or

<sup>2</sup> [en.wikipedia.org/wiki/Toxicity](http://en.wikipedia.org/wiki/Toxicity), and [merriam-webster.com/dictionary/toxicity](http://merriam-webster.com/dictionary/toxicity)

<sup>3</sup> [www.cancer.org/cancer/cancer-causes/general-info/determining-if-something-is-a-carcinogen.html](http://www.cancer.org/cancer/cancer-causes/general-info/determining-if-something-is-a-carcinogen.html)

even finished products, they have not been proven “toxic” in the doses or exposure rates that will cause a problem to humans, greater than half century old modern compost industry. This needs to be researched and validated prior to “adopting” these “Proposed Amendments.” Without this level of exposure data and empirical knowledge within compostable materials, compost production industry, and their impact on the local community, *a list of chemicals is not only technically meaningless, it can do harm.* For example, it could make the general public afraid to use any of the natural products that the compost industry has been producing for decades. In fact, it would be irresponsible environmental protection management to do so.<sup>4</sup>

Recommendations:

- Do not issue this list for composters until CARB is > 80% certain of what concentration and exposure rates are actually “toxic” to compost workers, much less the general public in the local community, i.e. both compost production worker exposure, neighbor exposure, and compost user exposures.
- Substances must satisfy the Health and Safety Code listing criteria: As per “Business and industry stakeholder comments on draft updates to the Air Toxics Hot Spots Emission Inventory Criteria and Guidelines Regulation, Sept. 16, 2020” we concur, and recommend:
  - Substances that do not satisfy the listing criteria at Health and Safety Code section 44321(f) should not be included in Appendix A. Candidate substances should be subject to a more rigorous screening and prioritization process to determine if they occur in ambient air or present significant health risks before they are listed.
  - CARB has indicated that it is developing a “non-regulatory technical supplement” which will include the technical justification for adding substances to Appendix A. Given the above noted statutory criteria, this analysis should be part of the rulemaking record. At a minimum, CARB should release this document as soon as possible to allow for stakeholder review and comment and possible changes to Appendix A before the first phase of implementation.
- Appendix B Proposed Update: Include provisions regarding Limit of Detection (LOD) *and* Level of Exposure (LOE) into regulation text.” While LOD is an important toxicology concept and measure, what we should be more interested in is the LOE to compost workers, local community and compost users. Again, “Toxicity is the degree to which a chemical substance or a particular mixture of substances can damage an organism.” Therefore, we recommend that CARB staff:

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<sup>4</sup> Please see “*ACP Environmental Justice Toolkit-Draft 3.3.20*” for ACP’s evolving understanding of the potential impacts of compost manufacturing facilities on, and benefits to, surrounding neighborhoods. This also contains our ongoing guidance on how to implement community protection protocols. An update of this “Toolkit” is being co-published this year with CalRecycle.

- Include a metric for LOE, with CARB funding the study to determine the LOE for each chemical that *significantly impacts* human health and the environment
  - Since OHEHA cancer potency factors are not well understood, and since cancer is not the sole outcomes of various LOE for many toxic compounds, it will be incumbent on CARB to base their "Proposed Update" on an empirically based understanding of how these chemicals behave in compost operations prior to regulating these operations.
  - CARB should NOT leave this up to individual districts, but make the decision statewide based on empirical exposure data (LOE).<sup>5</sup>
2. **Validate Measurement systems:** Since compost facilities have never been subject to AB 2855 regulations until this proposed update, CARB needs to work with compost producers to start going down the list, starting with the best available data that already exists from existing research for the national compost industry. In addition, compost has never been subject to Material Safety Data Sheets (MSDS), so that data does not currently exist for or within our industry on a regular basis to date. Our industry's focus has been on balancing environmental protection with environmental benefits.

Recommendation:

- Only compounds that can be quantified and be shown through double blind tests to be toxic to organisms close to human surrogates be included in Appendix A-I. Compounds that cannot be quantified should instead be listed in Appendix A-II (Substances for Which Production, Use, or Other Presence Must be Reported).
- More data is needed for both LOD and LOE specific to compost production operations and facilities prior to prioritization of listed chemicals. This data should be based on various of:
  - Organic residual feedstocks (secondary bioresources)
  - Method of compost technology:
    - Turned windrow
    - Aerated Static Piles
    - Aerated containerized compost systems, with separate biofilters
  - Determine what, when, and how the compost sector reports Appendix A-1 Compounds prior to implementing this new regulation on the compost industry in California.
  - Estimate prioritization scores and health risks before final toxicity data is published. In this way, the industry can work with its local stakeholders to ease into regulations without incurring lawsuits that

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<sup>5</sup> Note: According to the c, page 41: "(5) District Determination Regarding Exemption." The district may make toxicity determines as to whether to both grant exemptions or reinstate permits (page 38). CARB should collect this data for the entire State, and then provide it to local Air Districts for their use.

could easily shut down operations from not collaborating with the local Environmental Justice stakeholders.

- 3. Who pays?** – The compost industry is traditionally a low profit margin business. Our industry provides as much of a public service, turning “waste organics” into a value-added product that provides a long list of environmental, economic, and social, and human health benefits. All government agencies from OSHA, DTSC, CARB, Air Districts, County Health Offices, all have a stake in the health of the compost industry, as well as all of us citizens.

Recommendation:

- Toxicity and the LOD and LOE needs to be determined for the compost production operations, paid by CARB and the other stakeholder agencies, working with our industry. CARB cannot expect composters to pay for this research expedition. However, ACP is willing to work with CARB staff and the investors of this regulatory regime to implement them in an empirical, phased, tiered process as recommended.
- 4. Impact on the development of facilities:** In order for California to reach its 75% recycling goal in this decade, much less by 2025, we will need to develop, build, commission, and market compost products produced by the equivalent of 100 new compost facilities throughout the State (100 facilities x 100K tons/year produced = ~10,000,000 tons/year total new production). If these regulations are implemented now, it will have the effect of greatly slowing down the progress of the industry, thereby effectively blocking the implementation of SB 1383. Instead of lowering GHG gases (from rotting food scraps in landfills), that will continue, as well as stalling the many other compost benefits to the water and solids (bioresources) media. The current track of 2025 will only be sufficient if the above recommendations are acted upon, and usable results are the outcome.<sup>6</sup>

Recommendation:

- Put compost producers on a separate track for regulatory implementation that is both phased, funded and empirically based, using the above Recommendations.
- 5. Phased or Tiered Implementation:** Phasing the implementation of these new research and reporting recommendations could allow the regulatory implementation to be based on the tiers of toxicity of the chemical list that is based on the LOD (level of detection) + LOE (level of exposure) system dynamic model. This could put this regulatory recommendation on a defensible path that is directly relevant to, and based on, existing California compost production operations.

Recommendation:

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<sup>6</sup> See “Table E-1: Phase-in schedule for reporting by District Group and Sector Phase” in “eicgappe”. Note that compost in is Sector No. 49, Sector Phase 3, “eicgappe”, page E[17.]

- To determine a list of compounds actually emitted from the compost production sector, we request a delay in reporting emissions for Appendix A-I compounds until our members are able to complete the following steps, supported by public funding from CARB, OEHHA, CalRecycle, or other appropriate government capital:
  1. Perform the qualitative screening step (i.e., identify detectable compounds at appropriate LOD)
  2. Obtain certified sampling and laboratory methods needed to quantify actual emissions
  3. Complete a sector-wide pooled emissions study that determines LOE.

Thank you again for the opportunity to comment and provide concrete recommendations on these "Proposed Amendments to the AB 2588 Emission Inventory Criteria and Guidelines Regulation." We request and expect serious consideration and further dialogue on our Recommendations.

Sincerely,



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cc: Mary Nichols, Chair  
Richard Corey, Executive Officer, CARB  
David Edwards, CARB

Attachments:

1. C-15636\_ACP\_FinalReport
2. ACP Environmental Justice Toolkit-Draft 3.3.20