Subject: Comments: 617 implementation and emissions inventory

Dear CARB staff,

I appreciate the opportunity to submit a few comments, unofficially, for your consideration in regards to the implementation of AB617, specifically related to the topic of emissions inventory. Please advise if you would like me to submit any of them officially and if so, to which departments since I know AB617 is a multi-department effort.

1. When designing the new database for new reporting platform, please take into the consideration EPA EIS database requirements.

2. Please consider allowing or requiring emissions reporting from non-permitted sources in addition to permitted sources.

3. Please consider adding an option that would allow multiple throughputs for "episodic" emissions for the same Process to allow more seamless reporting for the episodic events such as Upsets. Of course, only one "annual" throughput per Process should be allowed.

4. Please consider the EPA E-enterprise Combined Air Emissions Reporting (CAER) project (also incorporating common elements for Form R) in defining the new reporting system requirements. (Toxics Release Inventory, Greenhouse Gas Reporting Program, and Compliance and Emissions Data Reporting) (Insert from their web site: *The team has identified six enabling activities toward the desired future state, each of which also will yield benefits in its own right when completed. These include developing a detailed implementation plan and prototype, improving availability of industry stack test data, forming a data dictionary and harmonizing data codes, developing a web-based service for emissions process codes, working to eliminate EPA adjustments to state-submitted emissions data, and using the Facility Registry Service to collect facility attributes needed for Residual Risk and Technology Review analyses.*)
https://www.epa.gov/e-enterprise/e-enterprise-combined-air-emissions-reporting-caer

5. Note on Toxic families for the therms I have used in subsequent comments:

   a. "toxic family members": toxics with a unique CAS#s under single toxic name, such as for "Chlorinated dioxins and dibenzofuran" or "Polynuclear aromatic hydrocarbons (PAHs)."

   b. "pre-toxics": chemicals that have a unique CAS# and contain toxic metals, such as Strontium Chromate CAS# 7789-06-2 that contains 39.7% of Hexavalent chromium CAS# 18540-29-9 (Hexavalent chromium has to be reported).

6. As you know, when we are talking about "toxic families," there is no all-inclusive list on the state or federal level (or, at least, I have been unable to find it). This fact makes it difficult for the reporting community to identify all toxics that have to be reported using electronic means, even

if they have a list of all ingredients for all of their materials. My recommendations for ways in which CARB could assist with ameliorating these types reporting issues:

a. As a 1st level of assistance: CARB could maintain a publicly available list, for example in Excel, of "toxic families members" and "pre-toxics" with the associated toxic Weight Fraction (in example above 0.397).

b. As a 2nd level of assistance: CARB could create an AER SDS data repository, as described below.

c. As a 3rd level of assistance: If CARB creates an AER SDS data repository, and you are able to make participation in the AER SDS data repository obligatory, data in the future reporting system related to VOC and/or TAC emission factors (EFs) could be automatically extracted from the AER SDS data repository by selection of the material ID.

6. More information on creating an AER SDS data repository:

a. Material characteristics, such as density (or specific gravity), VOC of material, VOC of coating, and ingredients (by CAS#), are necessary in addition to knowledge of processes where materials are used for emissions estimate.

   i. This information is typically found in Safety Data Sheet (SDS). SDSs are still not perfectly standardized and sometimes is a challenge to find the information necessary, in particular, when there are proprietary ingredients. In the case of proprietary ingredients, each user must contact the supplier individually and attempt to allay the suppliers' business fears about releasing product formulas to gain access to critical reporting information, such as: (a) whether proprietary ingredients contain any toxics specified for reporting or screening during the application process. (b) if there are toxics: the toxic content, (c) if there are no toxics: confirmation that there are no toxics. The user must also contact the suppliers when other required information, like VOC content, is not listed or clear.

b. All parties would win, which would promote better reporting, if CARB would design a simple database where suppliers could list the basic data needed for emissions estimates (for reporting/permitting/compliance). There is a good chance suppliers would be motivated to participate since they would gain efficiency in process by only dealing with one entity rather than fielding hundreds or thousands of individual inquires. Reporting facilities and regulatory agencies would have centralized source of data. CARB would receive quality data from the onset and be able to reduce time needed for data processing.

     c.   An additional advantage of creating an AER SDS data repository is that it would provide a source of information for new chemicals that would be added to the new "toxic families members" and "pre-toxics" list.

     d.   If supplier participation in an AER SDS data repository is required, rather than voluntary, information could then be capitalized on by automatically extracting it to the new tool. This would also allow for automatic updates of reformulated materials where the Product Code does not change, that is often missed by user in my experience.

     e.   For a very few high risk toxics, such as hex chrome: Suppliers could be also required to report sales data, such as quantities and specific consumers of their products containing these toxics. This approach would treat high risk toxics in a similar way to other federally controlled substances, such as codeine or pseudoephedrine where consumers must provide ID to purchase in any amount. This would allow CARB to identify small sources (sources with low criteria emissions) that may have high toxic risk and are probably not aware of.

7. A development of an SCC crosswalk matrix that would "translate" SCC to corresponding International/European codes that describe process and industry. This would allow for better information sharing and exchange and the utilization of international research/testing results.

8. A development of Stationary sources approved source test plans and reports database (Source Test db): would CARB consider either linking to equivalent EPA's db or creating its own statewide Stationary sources approved source test plans and reports database that could be used for the development of new local defaults and/or be a source of information for similar source specific emission factors?

     a.   If Source Test db is developed, it would be great to add corresponding SCC to each source tested process.

     b.   If Source Test db is developed, including corresponding SCC for each source tested process, it would be great to also add corresponding International/European codes that describe process and industry.

9. When standardized emissions calculation methodologies are defined at the local level, please consider adding SCCs and corresponding International/European codes that describe process and industry.

10. Would CARB consider developing a publicly available application for estimating evaporative losses from storage Tanks – equivalent to the EPA TANKS program? EPA does not support EPA TANKS any more, and the final version of the program does have at least one problem (bug) that I am aware of. When there is a partial speciation of tank contents, in report, program will assign the CAS# from the last speciated chemical to the non-speciated portion. If the last specified ingredient is toxic, this could greatly overestimate toxic emissions if user is not aware of the

problem and does not specifically exclude emissions resulting from incorrectly assigned CAS#. There are equivalent applications available for purchase, but EPA TANKS is the only free application, which is likely used by the majority of users. If this is developed, it could also be incorporated in the new reporting system.

These are high level suggestions. I have many more ideas of user friendly features when you are ready to dive into the details.

Please do not hesitate to reach out to discuss any of the listed propositions in further detail.

Best Regards,

Natasha Meskal
Ecotek