SACRAMENTO METROPOLITAN
AIR QUALITY
MANAGEMENT DISTRICT

Alberto Ayala, Ph.D., M.S.E.
EXECUTIVE DIRECTOR/AIR POLLUTION CONTROL OFFICER

June 7, 2019

Dr. David Edwards, Branch Chief
Air Quality Planning and Science Division
California Air Resources Board

RE: Proposed Regulation for the Reporting of Criteria Air Pollutants and Toxic Air Contaminants (Board Item CTR2018)

Dear Dr. Edwards:

The Sacramento Metropolitan Air Quality Management District is providing comments regarding the *Proposed Regulation for the Reporting of Criteria Air Pollutants and Toxic Air Contaminants*. We are submitting a number of general and language-specific comments on the draft regulation and cost analysis for your consideration prior to final adoption. Please see the following attachments:

- Attachment A – General and Specific Comments on the *Proposed Regulation for the Reporting of Criteria Air Pollutants and Toxic Air Contaminants*
- Attachment B – General and Specific Comments on *Attachment D: Preliminary Revised Economic Impacts Summary*
- Attachment C – Comments and Recommendations for AB 2588 and AB 617 Programs

We appreciate the opportunity to provide input in this process. If you would like any clarification about our comments, please contact me directly at (916) 874-6354 or aroberts@airquality.org.

Sincerely,

Amy L. Roberts

Amy Roberts
Division Manager
Stationary Source Division

Dr. David Edwards
June 7, 2019

ATTACHMENT A

General and Specific Comments on the *Proposed Regulation for the Reporting of Criteria Air Pollutants and Toxic Air Contaminants*

GENERAL COMMENTS

Duplication of Effort: Districts already have well-established inventory programs for criteria and toxics emissions. The Air Toxics "Hot Spots" Information and Assessment Act of 1987 (AB-2588, Connelly,1987) has been in place for more than 30 years. It requires facilities to submit detailed inventories of toxic emissions, and for districts to analyze the emissions and notify the public when exposed to levels that can cause elevated health risks. The program was amended in 1989 (AB-3205, Greene and Torres, 1989) to require facilities causing a high health risk to the public to conduct an emissions reduction audit and reduce public exposure to an acceptable level.

The CTR regulation gives no consideration to the program described above. Instead, it proposes a duplicative program that results in additional work and cost to facilities and air districts.

As shown in Attachment B, the Air Toxics "Hot Spots" program was established for the very same reason CARB is now proposing the amendments to the CTR regulation. Deficiencies in the Air Toxics "Hot Spots" program should be addressed by correcting the program, or by making one reporting program that will provide a streamlined and consistent program for the public, regulated sources and the air districts to understand.

Economic Impacts: While CARB has taken steps to alleviate some of the reporting burden on sources and local air districts, there will still be significant costs associated with complying and implementing this regulation. The District requests that CARB take these concerns into further consideration when going forward with the final regulation.

SPECIFIC COMMENTS

Page A-3 (§ 93400): *"…permitted facilities to report to the state board (or in many cases, the local air district) annual emissions of criteria air pollutants and toxic air contaminants…"*

Comment: This language implies that the facilities will need to report emissions, not fuel usage or other surrogate.

Recommendation: Should be changed to allow the reporting of surrogates such as fuel consumed, hours operated, etc. Change to "annual emissions or activity level".

Page A-3 (§ 93400): *"using the uniform statewide system of annual reporting."*

Comment: This system does not currently exist. Is the intent to someday make it mandatory to use CARB's reporting system? If so, we don't believe the cost analysis takes into consideration the additional cost for districts that already have their own reporting system and will now need to duplicate the reporting into CARB's system.

Recommendation: CARB's long-term plan should be clearly outlined and consistent with the cost analysis performed.

Page A-4 (§ 93401): *"…must include the data year emissions from all permitted processes at the facility…"*

Comment: This language is confusing. The districts typically permit devices not processes. For example, a district may have a permit for a gas station (the device) and not permits for the processes (breathing losses, vehicle fueling, spillage, etc.)

Recommendation: Change it to "all permitted devices".

Page A-5 (§ 93401): *"(3) Elevated Prioritization Toxics Applicability (Elevated Toxics Facility). A facility that is categorized by the air district as high priority for toxic air contaminant emissions"*

Comment: The prioritization score is the first step in the Air Toxics "Hot Spots" screening process. So what happens if the prioritization score is high but subsequently they do an HRA that demonstrates a very low health risk? The proposed approach does not capture the true intent, which is to require high-risk facilities to report.

Recommendation: Elevated Toxics Facilities should be those that pose a significant risk (i.e. facilities that are subject to public notification as per §44362(b)) and should be the ones to report, not those that receive an initial elevated prioritization score.

Page A-5 (§ 93401(a)(4)):

(A) 4 or more tpy of any criteria air pollutant (except for carbon monoxide).

(B) 100 or more tpy of carbon monoxide.

Comment: Facilities will have to prepare an annual inventory to show they are not subject to an annual inventory.

Recommendation: Increase the threshold to 10 tpy (keep 100 tpy for CO) and change it from actual emissions to permitted emissions (PTE). This will make it a lot easier for the facilities and the Districts to know who needs to report.

Page A-8 (§ 93401(c)(2)): *"The notification must be submitted no later than May 1, or by the local air district's data reporting deadline if it is earlier than May 1, of the year in which the emissions data report was due"*

Comment: It is not clear if this is a one-time notification or an annual notification. For example, a facility that was formerly reporting because NOx emissions were greater than 4 tpy, during this reporting year, NOx emissions have dropped to 3.5 tpy, so they prepare an inventory to show they are exempt from reporting for the data year. What happens next year? Do they need to submit a new inventory to show they are exempt from reporting? Do they need to do this annually? If so, then what's the point of the exemption if you have to annually submit an inventory to show you are not subject to an inventory?

A deadline of May 1 will not allow districts to use other methods of data collection such as an annual inspection. Recommend CARB build in flexibility and allow data submitted through Dec 31.

Page A-12 (§ 93402(a)): *"Device" means a piece of equipment that has a process associated with it (e.g., internal combustion engine, boiler, tank, spray paint booth, etc.).*

Comment: For clarification purposes, the definition of device should specify that it applies only to permitted equipment. It should also give guidance on how to handle air pollution control devices. For example, a solvent tank vented to a carbon filter. The tank has a permit and it's a device. The carbon filter has its own permit. Is the carbon filter a device also? Should the emissions be attributed to the tank or the carbon filter?

Page A-17 (§ 93402(a)): *"Pollutant code" means the numeric codes associated with the criteria air pollutant names as specified in the table below …"*

Comment: PM is not on the list. However, as per Table A-4 (page 51) engines are required to report PM emission.

Recommendation: Include a numeric code for PM or give guidance on how to report PM emissions from engines.

Page A-24 (§ 93403(b)(1)(A)2): "Data reports must be submitted beginning no later than the 2023 data year reported in 2024 and for all subsequent years, for sources subject to 93401(a)(4)(A) or (B), or both, in District Group B, and sources subject to 93401(a)(4)(C) in District Group A and Sector Phase 2, and in District Group B and Sector Phase 1. "

Comment: Table A-1 of the regulation has 2022 as the data year. This section and Table A-1 should match.

Recommendation: Correct these dates as per Table A-1.

Page A-26 (§ 93403(c)(4)): *"Methods for Abbreviated Reporting. Methods of calculating emissions from facilities that qualify for abbreviated reporting must be approved by the CARB Executive Officer…"*

Comment: It would be much more efficient if CARB proposes acceptable methods for typical equipment subject to abbreviated reporting and allows for case-by-case approval of other methods.

Page A-26 (§ 93403(c)(5)): *"…The petition must be received by CARB and approved by the date upon which the emissions data for the processes must be reported, pursuant to this article."*

Comment: This requirement is very open-ended and does not require CARB to act on the requests by a given deadline. Districts need to be able to conduct their work and cannot be waiting indefinitely for CARB to approve these requests. It should specify a deadline for districts

to submit a request and a deadline for CARB to comment/take action on the request. If no action is taken by CARB by the specified deadline, the request should be deemed acceptable.

Page A-26 (§ 93403(d)(2)): *"Annual emissions reports must be submitted to the local air district…"*

Comment: This is not a requirement of the bill and inconsistent with §93400 (page A-3), which states "…This article also requires owners or operators of specified permitted facilities to report to the state board…"

Page A-29 (§ 93403(g)(1)): "The owner or operator at the time of a reporting deadline is responsible for submitting the emissions data report covering the complete calendar year data.

Comment: The reports are not due until May of the year following the reporting year. This section implies that for changes of ownership that occur during the first 4 months of the year, the new owner is responsible for reporting the old owners emissions? This is not a workable requirement.

How is the new owner going to be notified of his responsibility to obtain all the necessary data from the previous owner prior to closure of escrow? The change of ownership application does not get submitted to the district until the change of ownership is finalized.

Page A-29 (§ 93403(g)(3)): *"Previous owners or operators are required to provide data and records to new owners or operators that are necessary and required for preparing annual emissions data reports required by this article."*

Comment: How is this going to be enforced? What happens if the previous owner fails to give the new owner the necessary data, is the new owner responsible as per § 93403(g)(1) or the prior owner as per § 93403(g)(3) ? Are air districts expected to "track down" the prior owner and try to get data that may or may not exist? Is the time to do this accounted for in the cost analysis?

Page A-29 (§ 93404(a)(2)(B)): *"Owner or Operator"*

Comment: It is not clear if this is the current owner or operator or the owner or operator during the data year.

Page A-31 (§ 93404(a)(2)(C)): Primary and Secondary NAICS codes

Comment: More guidance is needed. For example, what would be the primary and secondary NAICS code for a multi-purpose building with a backup generator and a fire pump? Is it the NAICS of the operator (building management company) or the largest "facility" within the building? Does the owner or operator need to report the NAICS codes for all businesses in the building as secondary NAICS codes?

Page A-31 (§ 93404(a)(2)(D)): Primary and Secondary SIC codes

Comment: More guidance is needed. For example, what would be the primary and secondary SIC code for a multi-purpose building with a backup generator and a fire pump? Is it the SIC of the operator (building management company) or the largest "facility" within the building? Does the owner or operator need to report the SIC codes for all businesses in the building as secondary SIC codes?

Page A-33 (§ 93404(a)(5)(C) and (D)): Emittent ID and Actual Emissions

Comments: The CTR needs to specify the applicable degree of accuracy for reporting actual emissions. Emittent IDs are based on Appendix A-1 of the AB 2588 Air Toxics "Hot Spots" Emission Inventory Criteria and Guidelines Regulation (Guidelines), which also contains requirements for Applicable Degree of Accuracy for reporting. Should actual emissions be reported using the applicable degree of accuracy specified in Appendix A-1 of the Guidelines?

Page A-34 (§ 93404(b)(1)(A)): "*Criteria air pollutants and total organic gases, in units of short tons per year, except for lead (Pb) and ammonia (NH3) which must be reported in units of pounds per year;"*

Comment: Need to specify the degree of accuracy. Is it rounding to an integer (e.g. 3 tpy) or to a certain number of decimal places (3.8 tpy)? Should also specify if emissions should be rounded using conventional rounding, rounding up, rounding down, etc.

Recommendation: Should follow the Applicable Degree of Accuracy specified in Appendix A-1 of the AB 2588 Air Toxics "Hot Spots" Emission Inventory Criteria and Guidelines Regulation.

Page A-34 (§ 93404(b)(1)(B)): "*Toxic air contaminants in units of pounds per year, except for radionuclides which must be reported in units of curies per year."*

Comment: Need to specify the degree of accuracy. Example, should 0.005 lb/year be reported as 0 lb/yr, 0.0 lb/yr, 0.005 lb/yr, or should it be reported at all? Should hexavalent chromium be reported to the same degree of accuracy as trichlorofluoromethane (Freon 11)?

Do crematories need to report radionuclides? Where are crematories and other possible sources of radionuclides going to get emission factors from?

Recommendation: Should follow the Applicable Degree of Accuracy specified in Appendix A-1 of the AB 2588 Air Toxics "Hot Spots" Emission Inventory Criteria and Guidelines Regulation.

CARB needs to give guidance on how to report radionuclides from crematories and other small sources.

Page A-34 (§ 93404(b)(2)(A)): "*Direct and fugitive emissions for permitted processes at the facility."*

Comments: 1) Districts generally permit devices, not processes as defined in this regulation. 2) The regulation requires facilities to report their emissions but it does not give guidance as to how to do it. It just assumes that all facilities have in-house expertise to do this. CARB needs to commit to provide detailed reporting guidance prior to the effective date of the reporting requirements. 3) Special guidance will be needed for certain source categories such as

crematories. For example: How are crematories going to report mercury? Are they going to be required to count/estimate the amalgam content for each body cremated? What are CARB's expectations with regard to mercury emissions reporting from crematories? Do crematories need to report radionuclides? Where are crematories going to get emission factors from?

Page A-34 (§ 93404(b)(2)(C)): *"Emissions from portable engines or devices operated at a facility, regardless of equipment ownership or duration of operation, must also be reported. The emissions report contents of 93404(a)(6) do not need to be reported for permitted portable engines or devices."*

Comment: Reports for portable equipment should include all the elements of 93404(a)(6). It's all relevant and important for analyzing risk. For 93404(a)(6)(B) the operator should report the coordinates of the location that best represents where the equipment operated.

CARB should coordinate with their Portable Equipment Registration Program and look into adding relevant conditions to state registrations.

Page A-37 (§ 93405(a)): ***"…****must retain records and documentation necessary to validate the data in the emissions data report for a period of five years from the date that the emissions report is submitted to CARB..."*

Comment: This is confusing. Aren't facilities submitting the report to their air district? How is the facility going to know when it was submitted to CARB?

Recommendation: Change it to "when it was submitted to the air district or CARB, whichever occurred first."

Page A-37 (§ 93405(c)): ***"…****within 30 days of receipt of such request to the designated representative of the owner or operator of the facility subject to this article, unless a different schedule is agreed to by CARB…"*

Comment: This allows CARB to shorten the 30-day clock at will. I believe the intent is to allow CARB only to extend the 30-day clock.

Recommendation: Change it to "unless agreed by both parties" or "unless a longer schedule is agreed to by CARB".

Page A-38 (§ 93407(a)(2)): ***"****Any report, data, or documentation submittal required by this article that is not submitted, or is submitted late shall be a violation of this article."*

Comment: Submitted to whom? CARB or the district. It is not clear how this section relates to §93403(d)(2)(A) (page A-26) and at what point it becomes a violation.

Page A-44 (Table A-3 – last row): Activity level reporting threshold for engines.

Comment: 1) Most diesel engines do not keep track of fuel combustion so won't be able to use the proposed reporting threshold. As per the ATCM, they are equipped with an hour meter.

2) Having Tier-4 engines report if they operate for more than 5 hours seems overly conservative. After much analysis, the "Hot Spots" program determined that it was not necessary to analyze engines at engine-only facilities that operated a combined total of less than 20 hours/year.

Recommendation: Change the reporting threshold for all diesel engines to be based on hours of operation, not fuel usage. Use the same criteria as the "Hot Spots" program – 20 hr/year per facility. Years tracking these engines has shown that engines operating under 20 hr/yr do not pose a health risk.

Page A-47 (Table A-3 – 6th row): *"…carcinogenic solvents…"*

Comment: This term needs to be defined. Is it substances categorized as carcinogens by OEHHA and published in the *Consolidated Table of OEHHA/ARB Approved Risk Assessment Health Values*? EPA? Other?

Page A-47 (Table A-3 – 8th row): "Over 50 gallons of paint used per year"

Comment: The term "paint" needs to be defined. Should look at the definition of "coatings" from various districts and include a definition in the CTR regulation.

Page A-47 (Table A-3 – 8th row): "…or over 30 gallons of diesel…"

Comment: 1) Most diesel engines do not keep track of fuel combustion so won't be able to use the proposed reporting threshold. As per the ATCM, they are equipped with an hour meter.
2)The reporting criteria for Tier-4 engines in page 47 (medical services) is much different than for Tier-4 engines in page 44 (all other diesel engines).
Recommendation: Change the reporting threshold for all diesel engines to be based on hours of operation, not fuel usage. Use the same criteria as the "Hot Spots" program – 20 hr/year per facility. Years tracking these engines has shown that engines operating under 20 hr/yr do not pose a health risk.

Page A-48 (Table A-3 – 2nd row): "miscellaneous commercial printing"

Comment: This category is already included on page A-46 with a much lower reporting threshold (3 lb/year).

Page A-49 (Table A-3 – 11th row): Activity level reporting threshold for ag engines.

Comment: 1) Most owners/operators of diesel engines do not keep track of fuel combustion so they won't be able to use the proposed reporting threshold. As per the ATCM, they are equipped with an hour meter.

2) Having Tier-4 engines report if they operate for more than 5 hours seems overly conservative, especially for agricultural engines. After much analysis, the "Hot Spots" program determined that it was not necessary to analyze engines at engine-only facilities that operated a combined total of less than 20 hours/year.

Recommendation: Change the reporting threshold for all diesel engines to be based on hours of operation, not fuel usage. Use the same criteria as the "Hot Spots" program – 20 hr/year per facility. Years tracking these engines has shown that engines operating under 20 hr/yr do not pose a health risk, even when operating in urban areas.

Page A-51 (Table A-4 – 2nd row): Data Elements to Report – "…and PM emission rate…"

Comment: Engines are required to report PM emission rate but PM is not one of the pollutants required to be reported. Should it be reported as PM, PM10 or PM2.5?
Typically, the engine certification data only shows the filterable portion of the PM. Is that good enough or should emissions also include the condensable portion of the PM?

Page A-51 (Table A-4 – 3rd row): "Total annual sales of gasoline, in gallons"

Comment: Is gasoline the only fuel that needs to be reported? Diesel, biodiesel, methanol, E85, CNG, etc. are not required to be reported?

ATTACHMENT B

General and Specific Comments on *Attachment D: Preliminary Revised Economic Impacts Summary*

GENERAL COMMENTS

1) The Revised Economic Impacts Summary is too vague to be able to fully analyze it to determine its accuracy. It is missing very basic information such as:
   a. Average estimated time for facilities to conduct each of the various steps required in the CTR regulation.
   b. Average estimated time for districts to educate facility operators about their responsibilities under the CTR regulation.
   c. Average estimated time for districts to assist facility operators fill out forms and find acceptable methods for estimating criteria and toxics emissions for each device and process.
   d. Average estimated time for districts to track submittals and follow-up with facility operators that fail to report in a timely manner.
   e. Average estimated time for districts to review, conduct any necessary follow-up, verify and approve the reports.
   f. Average estimated time for districts to put the information in a format acceptable to CARB and submit to CARB.

2) The economic analysis does not address CARB's costs.
   a. What are the detailed estimated hours for CARB to conduct each of the steps required under the CTR regulation?
   b. What are the fully-loaded hourly rate used for CARB's staff, including supervisory and management positions?
   c. How is CARB going to cover their cost? Is the cost going to be passed on to the facilities?

3) The economic impact summary is only looking at a very small portion of the program and does not reflect the true cost of the program. AB 617 tasked CARB with analyzing the health impact in disadvantaged communities. In order to conduct the analysis, the majority of facilities in the state are being required to annually report their criteria and toxics emissions. The true cost to facilities is not just the annual reporting. CARB needs to identify the different aspects of the program and describe how they are going to be funded. For example:
   a. What is CARB going to do with all this data that's being collected annually and how is it going to be funded?
   b. Will the CTR be expanded later to include more sources?
   c. Will some facilities be required to reduce emissions further?

4) It is impossible to review and provide meaningful comments on the specifics of the document (time or cost to implement) because the document speaks in general terms and does not offer any documentation as to how these values were developed; nor does it specify or reference any resources used to develop the document.

5) The document only discusses the program cost during the phase-in period. It does not discuss the true, ongoing cost of the program (i.e. post year 2025).

SPECIFIC COMMENTS

Page D-1 – Last paragraph: "Approximately 50,000 individual facilities would be affected by the Proposed Modifications to the CTR Regulation"

Comment: This is likely a gross underestimate of the number of facilities that will need to report. In addition, it does not give the number of permitted devices or processes that will need to be reported by these facilities.

It does not account for the fact that most facilities permitted by an air district will need to report every year in order to show their actual emissions are below the reporting thresholds (4 tpy; 100 tpy for CO) and thus not subject to reporting. Some air districts have already indicated they will have to collect data from all their sources because determining which facilities have actual emissions at the threshold levels will be too onerous.

Another sector not being properly accounted for is diesel engines. Most permitted engines will need to report because they are not capable of measuring fuel usage and won't be able to take advantage of the Activity Level Reporting Threshold provided in the CTR regulation.

Page D-1 – Last paragraph: "…Many of those Additional Applicability Facilities (approximately 29,000 – a conservatively low estimate) are expected to submit an abbreviated emissions report..."

Comment: This statement fails to consider that abbreviated reporting is for devices, not facilities. As an example, many facilities with back-up generators also have other permitted devices that will need to be reported and are not included in the abbreviated list. Therefore, abbreviated emissions reporting will have a much smaller impact than expected by CARB.

Page D-2 – 3rd paragraph: *"Costs were estimated based on CARB staff experience with prior reporting programs and evaluation of the expected labor hours required to prepare and report the required data, including an evaluation of the current local air district reporting programs..."*

Comments: The statement is too vague to evaluate. The following information is missing:
1) What are the labor hours used to estimate the cost? We need a breakdown of estimated average hours required to perform each of the tasks for each device and process.
2) How was the evaluation of current local district reporting programs conducted? Was any air district contacted and asked to give CARB an estimate of time or cost of their current reporting programs?

Page D-2 – 3rd paragraph: *"…labor hour estimates were multiplied by an average California loaded wage rate, based on the types of personnel expected to perform the data collection…"*

Comments: The statement is too vague to evaluate. The following information is missing:
1) What are the wages used for the various types of personnel identified
2) What type of personnel were identified for each of the tasks required

3) The wages and personnel types need to be identified for the facilities, the air districts, and CARB.
4) What's included in the "loaded wage" for the facility, air districts, and CARB? To properly perform a cost analysis, the loaded wage should be the fully burdened labor cost, including recruitment, salary, employer-side taxes, benefits, training, space, equipment, etc.

Page D-2 – 3rd paragraph: ***"…****costs will decrease over time as ongoing reporting methods are established, and as the air districts and CARB develop more advanced electronic data reporting systems to streamline the reporting process."*

Comment: How are these more advanced electronic reporting systems going to be developed? Who is going to pay for the development of these systems? If the cost is going to be passed on to the facilities, it should be included in the cost analysis.

Page D-2 – 1st bullet: "On an individual basis, GHG, Criteria, and Elevated Toxics Facilities subject per sections 93401(a)(1), (2), or (3), will have minimal cost impacts to comply with the regulation because the costs will typically be a relatively modest additional workload"

Comment: The workload will not be minimal. Below are some of the reasons:
1) GHG facilities (93401(a)(1)) currently report their GHG emissions directly to CARB using a certified GHG verifier. Under the CTR regulation, these facilities will now need to annually report their criteria and toxics (525 toxic substances) emissions to the air districts and/or CARB.
2) Criteria emission sources (93401(a)(2)) currently report activity levels from their various devices to the district. Under the CTR regulation, these facilities will now have to report emissions (not activity levels) for all criteria pollutants and toxics (525 toxic substances).
3) In most cases, Elevated Toxics Facilities (93401(a)(3)) under the "Hot Spots" program are able to demonstrate a low risk after performing an HRA and are either exempted from the program or placed in a 4-year streamline reporting schedule. Under the CTR regulation, they would have to submit a full report every single year.

Page D-2 – 1st bullet, last paragraph: ***"****For the typical private business subject per sections 93401(a)(1), (2), or (3), average initial year costs are estimated to be approximately $1,140. Average ongoing costs are estimated to be approximately $490."*

Comment: There is no supporting discussion or justification for these costs. The basis for all costs analysis in this document seems to be missing.

Page D-2 – 2nd bullet: ***"****For Additional Applicability Facilities subject per section 93401(a)(4), the regulation contains options to minimize labor and cost for those facilities, while obtaining the necessary data."*

Comment: This statement fails to consider two major issues:
1) The bulk of the devices that can qualify for a reporting exemption are engines. However, since it's very difficult to measure fuel usage from diesel engines and most engines are not equipped to measure fuel usage, most engines will be subject to reporting.
2) Abbreviated reporting is for certain types of devices, not facilities. Many facilities qualifying for abbreviated reporting (e.g. diesel engines) also have other permitted equipment that is subject to full reporting.

Dr. David Edwards
June 7, 2019

Page D-3 – Top paragraph: ***"****For the typical private business subject per section 93401(a)(4), but not qualifying for abbreviated reporting per section 93403(c), average initial year costs are estimated to be approximately $490. Average ongoing costs are estimated to be approximately $250…"*

Comment: There is no supporting discussion or justification for these costs. The basis for all costs analysis in this document seems to be missing.

Page D-3 – End of top paragraph: ***"…****average initial year costs are estimated to be approximately $120. Average ongoing costs are estimated to be approximately $40…"*

Comment: There is no supporting discussion or justification for these costs. The basis for all costs analysis in this document seems to be missing.

Page D-3 – 2nd paragraph: ***"…****at $41.5 million over the eight year full phase-in period, or approximately $5.2 million per year on average…"*

Comments:

1) How were these costs estimated? Is there any supporting documentation?
2) Why eight years? The phase-in period is seven years (Data years 2019 – 2025).
3) This is not the correct approach. CARB also needs to estimate the ongoing cost of the regulation, not just the phase-in period. Effective 2026 **all** facilities meeting the criteria in the CTR regulation will need to report regardless of their phase-in date.

Page D-3 – 2nd paragraph: ***"****The estimated costs for air districts depends on the implementation year, but can range from approximately $350,000 to $6.5 million annually to implement the proposed regulation, or $38.7 million over the eight years…"*

Comments:

1) How was this estimated? Is this based on information obtained from the air districts or just CARB's estimates?
2) As per page D-3 of the document, the $6.5 million per year seems to be based on year 2022. Only a fraction of facilities will be reporting by 2022. The costs should be based on full implementation, which does not occur until 2026.
3) Why eight years? The phase-in period is seven years (Data years 2019 – 2025).

Page D-3 – 2nd paragraph, last sentence: ***"****In total, the combined facility and district implementation costs to comply with the Proposed Modifications to the CTR Regulation are estimated to be approximately $80.2 million over the eight year phase-in period…"*

Comment:

1) How are the districts going to recover their implementation costs? If it's expected that most districts will pass their cost directly to the affected facilities, then shouldn't the cost to the facility be the entire amount (i.e. $80.2 million)?

2) Why eight years? The phase-in period is seven years (Data years 2019 – 2025).

3) What is the total ongoing implementation cost to the facilities (facilities and districts costs) after the phase-in period?

4) What are the phase-in period and ongoing costs for CARB? How is CARB going to cover the cost of implementing the CTR regulation?

Page D-3 – 3rd paragraph: ***"****Due to the phase-in schedule established in the regulation, it is not possible to calculate an accurate estimate of the average annual costs a typical facility may incur to comply with the regulation by using the estimated total cost to all facilities and the estimated total number of facilities affected over the analysis period, as some facilities would not have reporting costs every year of the analysis period…"*

Comment: Why not? There are two parts to the cost analysis (currently only one is being discussed in this document); phase-in costs and ongoing costs. We recommend the following approach:

Phase-in period: For each phase-in year:

a) Estimate the number of facilities, devices and processes affected
b) Estimate the number of affected devices and processes, and the cost for facilities, air districts and CARB (if applicable).
c) Divide the total cost by the number of affected facilities for that specific phase-in period.

After the phase-in period: The annual ongoing cost will be total annual cost of the program after the phase-in period, divided by the total number of facilities in the program.

Page D-4 – 2nd paragraph: *"…CARB estimates that by 2022 approximately 50 additional district staff positions statewide, at a total cost of approximately $6.5 million per year…"*

Comment:

1) Why 2022? Only a fraction of the affected facilities will be reporting by 2022. The cost analysis needs to be based on the full implementation of the regulation, which will not happen until 2026.
2) How was this cost estimated? Is there any supporting documentation?

Page D-4 – 2nd paragraph: *"…These approximate district costs are based on a variety of factors including the number of affected businesses in the region, the types of facilities, the previous air district efforts in collecting criteria and toxics data, and the data management systems in place to process and compile collected data…"*

Comments:

1) Were these approximate district costs based on cost estimates submitted by the districts or estimated by CARB?
2) If it's based on information submitted by districts
   a. Did CARB gather data from all 35 air districts?
   b. Did CARB look at costs and existing resources from small, medium and large districts?
3) If it's based on CARB estimates, why didn't CARB contact the districts (maybe through CAPCOA) and obtain more accurate cost estimates?

Page D-4 – 3rd paragraph: "Based on our analysis, we anticipate that 17,200 small businesses will be subject to the requirements of the regulation"

Comment: There is no data or justification supporting this number. More information is needed in order to evaluate this statement.

Page D-4 – last paragraph: "The preliminary estimated total cost to all small businesses to comply with the reporting requirements would be approximately $1.6 million per year on average…"

Comments:

1) How was the "per year on average" calculated? Is it based on 8 years (should be 7) or on full implementation?
2) The document needs to discuss the cost to small businesses during the phase-in period **and** during ongoing annual reporting.
3) How was the $1.6 million per year estimated? There is no supporting discussion or justification for this cost. The basis for all costs analyses in this document seem to be missing.

Page D-5 – 1st paragraph: *"…The cost of this regulation is expected to have a minor financial impact on individual small businesses to collect and report the required data…"*

Comment: The basis for this statement is neither justified in this document nor supported by the CTR regulation itself. Some of the items that don't seem to have been considered include:

a. The reporting requirements for small businesses are the same as for large businesses. The only difference may be the number of devices and processes they need to report.
b. Small businesses do not have the expertise or resources to fill out all the necessary data/forms, collect the necessary information, determine appropriate emission factors to use, determine which of the 500+ substances they need to report (especially when there are no *de minimis* reporting levels), or calculate emissions of each of these substances for each process associated with each device at the facility.
c. Abbreviated reporting is only allowed for 5 specific processes. Even if a facility qualifies for abbreviated reporting, they still need to do a full report for any other processes or devices not qualifying for abbreviated reporting. Also, for their first reporting period, they need to do a full report for all processes and devices.
d. Since small facilities don't have the resources or expertise to effectively comply with the emissions reporting requirements of the CTR regulation, it is expected that the majority of the implementation costs for air districts will be associated with small facilities. The cost to districts will be passed on to the affected facilities, including small businesses.
e. It is not clear in this document what the implementation costs will be for CARB or how those costs will be recovered. If the CARB costs are to be recovered, either directly or indirectly, those costs will be partially passed on to small businesses.

Dr. David Edwards
June 7, 2019

ATTACHMENT C

Comments and Recommendations for AB 2588 and AB 617 Programs

Air Toxics "Hot Spots" Information and Assessment, CH&SC, §44301.

The Legislature finds and declares all of the following:
(a) In the wake of recent publicity surrounding planned and unplanned releases of toxic chemicals into the atmosphere, the public has become increasingly concerned about toxics in the air.
(b) The Congressional Research Service of the Library of Congress has concluded that 75 percent of the United States population lives in proximity to at least one facility that manufactures chemicals. An incomplete 1985 survey of large chemical companies conducted by the Congressional Research Service documented that nearly every chemical plant studied routinely releases into the surrounding air significant levels of substances proven to be or potentially hazardous to public health.
(c) Generalized emissions inventories compiled by air pollution control districts and air quality management districts in California confirm the findings of the Congressional Research Service survey as well as reveal that many other facilities and businesses which do not actually manufacture chemicals do use hazardous substances in sufficient quantities to expose, or in a manner that exposes, surrounding populations to toxic air releases.
(d) These releases may create localized concentrations or air toxics "hot spots" where emissions from specific sources may expose individuals and population groups to elevated risks of adverse health effects, including, but not limited to, cancer and contribute to the cumulative health risks of emissions from other sources in the area. In some cases where large populations may not be significantly affected by adverse health risks, individuals may be exposed to significant risks.
(e) Little data is currently available to accurately assess the amounts, types, and health impacts of routine toxic chemical releases into the air. As a result, there exists significant uncertainty about the amounts of potentially hazardous air pollutants which are released, the location of those releases, and the concentrations to which the public is exposed.
(f) The State of California has begun to implement a long-term program to identify, assess, and control ambient levels of hazardous air pollutants, but additional legislation is needed to provide for the collection and evaluation of information concerning the amounts, exposures, and short- and long-term health effects of hazardous substances regularly released to the surrounding atmosphere from specific sources of hazardous releases.
(g) In order to more effectively implement control strategies for those materials posing an unacceptable risk to the public health, additional information on the sources of potentially hazardous air pollutants is necessary.
(h) It is in the public interest to ascertain and measure the amounts and types of hazardous releases and potentially hazardous releases from specific sources that may be exposing people to those releases, and to assess the health risks to those who are exposed.

Recommendation for AB 2588 Toxics "Hot Spots" Program

The highlighted sections of state law for the "Hot Spots" program align very closely with the intent of AB 617. Legislative discussions on AB 2588 specified similar concerns in 1987 as what were brought forward during passage of AB 617 and AB 197. If AB 2588 did not accomplish the intended goals, we recommend ARB either:

1) modify the “Hot Spots” program to meet the current need, or
2) eliminate the “Hot Spots” program and focus on a new and improved uniform reporting system under AB 617 and AB 197.

Both programs are intended to collect toxics data from facilities of interest and to analyze localized concentrations or air toxics “hot spots”. So if the current program (Air toxics “Hot Spots”) is not working as intended, the state should amend it or eliminate it and focus on an all-encompassing reporting program. Adding a new program without first understanding fully the initial goals and shortfalls of AB 2588 may only lead to similar issues arising in efforts under AB 617.

Thresholds

There does not seem to be any risk-based logic behind the proposed thresholds. The first step in developing thresholds should be to establish a de minimis risk value and then establish reporting/exemption thresholds for the various categories (based on usage, hours, etc) that equate to the established de minimis risk value. One thing learned from the “Hot Spots” program is that for small facilities, their health risk contribution is very localized, so it is very unlikely that we would have more than 5 small facilities contributing to a localized impact in any significant way; this becomes much more apparent if you consider the contribution from mobile sources.