

Regulation for Criteria Air Pollutant and Toxic Air Contaminant Emissions Reporting

Proposed Amendments

Public Workshops
February 6 – 20, 2020

Workshop Slides – <https://ww2.arb.ca.gov/our-work/programs/criteria-and-toxics-reporting>



Presentation Outline

- ✓ Introduction and Current CTR Status
- Proposed Amendments: Key Elements
- Next Steps and Feedback/Questions



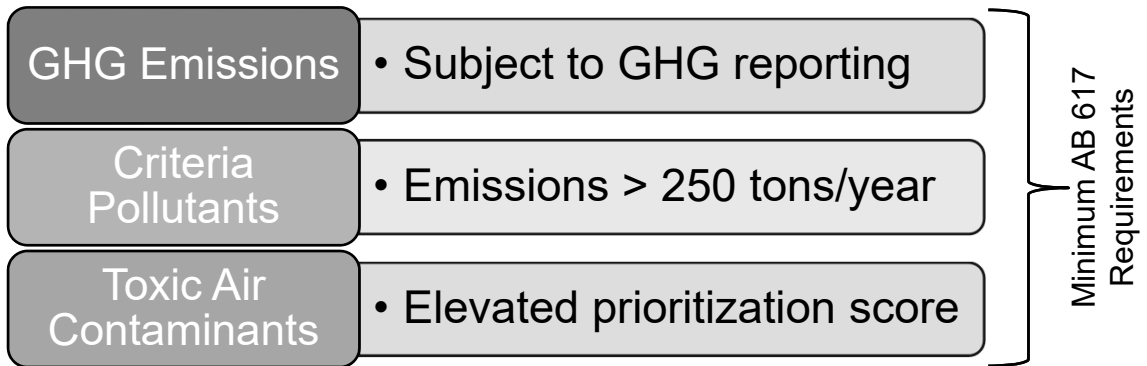
Introduction

- Regulation for the Reporting of Criteria Air Pollutants and Toxic Air Contaminants (CTR) became effective on January 1, 2020
 - Requires annual emissions data reporting from specified facilities
- First year of implementation is “business as usual” reporting
 - For 2019 data submitted in 2020, approximately 1,500 facilities subject to CTR must report data as specified by their local air district’s existing emissions reporting program.

Purpose of CTR

- CTR reporting will harmonize emissions reporting requirements and support several mandatory state and federal programs
 - AB 197
 - AB 617
 - National Emissions Inventory (NEI) requirements
 - And support: Air Toxic Control Measures, SIPs, CalEnviroscreen inputs

CTR Applicability



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Importance of Emission Inventories

- ❑ Increased focus on mobile, stationary, and area-wide emissions inventory improvements
 - AB 197 and other programs require better data and access
 - Mapping tool integrates/displays GHG, criteria pollutant, and toxics emissions from stationary source facilities
 - Transparency, public right-to-know
- ❑ Current criteria and toxics emissions reporting meets the needs of historical programmatic goals

Primary Principles for CTR Amendments

- ❑ Collect emissions data from sources statewide
 - Increase data consistency, improve transparency
 - Allow evaluation of cumulative health risk and changes in emissions over time
- ❑ Minimize resource impacts
- ❑ Provide applicability thresholds that are easy-to-understand by industry and the public
- ❑ Use scientifically defensible methodologies

Primary Regulation Elements

Applicability

- Who is subject to reporting?

Reporting Requirements

- Consistent reporting deadlines
- Uniform data report contents

Implementation

- CARB and Air District collaboration

Proposed expansion

Adding Abbreviated Reporting

Expanding CTR Applicability

GHG Emissions

- Subject to GHG reporting

Criteria Pollutants

- Emissions > 250 tons/year

Toxic Air Contaminants

- Elevated prioritization score

Additional Applicability

- Statewide facility criteria and toxics reporting thresholds

Minimum AB 617 Requirements

NEW

Additional Applicability – Overview

- Proposed applicability based on:
 - Criteria pollutant threshold [93401(a)(4)(A)-(B)]
 - Must report annually if individual permitted actual criteria pollutants > 4 tons per year (100 tpy for CO)
 - Toxic air contaminant thresholds [93401(a)(4)(C)]
 - *Certain* permitted industry sectors required to report *regardless of emissions*, such as metal plating and hazardous waste facilities
 - *Other* permitted industry sectors must report if a sector throughput or use threshold is *exceeded*, such as hours of operation or gallons of fuel consumed for a diesel fired engine

Additional Applicability – Toxic Air Contaminants

- Toxics applicability thresholds reflect: [Table A-3]
 - 2015 OEHHA risk guidelines and childhood risk science
 - Emerging chemicals and persistent or bioaccumulative chemicals
 - Near-source, neighborhood-scale impacts and facility “clustering” effects (cumulative effects from multiple facilities)
- Sector-based toxics thresholds
 - Activity level thresholds based on Appendix E of Emissions Inventory Criteria and Guidelines (AB 2588 “Hot Spots” program)
 - Phasing based on greatest impact to community health and need for method development in some cases
 - “Abbreviated reporting” for 40+ percent of affected facilities

Additional Applicability – Example Sectors

Example: “Phase 1” Sectors for Inclusion, Based on Toxics Emissions

- Metal plating, anodizing or grinding using cadmium or chromium*
- Plating, polishing, coating, engraving, and allied services, including thermal spraying, using chromium, cadmium, or nickel*
- Petroleum refining and industries related to petroleum refining*
- Polybrominated biphenyl compounds (PBBs), and any brominated diphenyl ethers, manufacture or use*
- Rubber and miscellaneous plastic products manufacturing if styrene, butadiene, phthalates, carcinogenic solvents, or isocyanates are used*
- Industrial machinery manufacturing*
- Paint stripping and varnish stripping*
- Processes emitting 1,4-dioxane (multiple sectors)
- Isocyanate compound use (multiple sectors)
- Methylene chloride use for paint or coating removal, printing or print shop cleaning, or aircraft maintenance and repair
- Combustion of crude, residual, distillate, or diesel oil (multiple sectors)
- Tert-butyl acetate use (multiple sectors)
- Processes emitting styrene (multiple sectors)
- Use of parachlorobenzotrifluoride (PCBTF) in cleaning or degreasing solvents, adhesives, printing inks, or coating operations (multiple sectors)
- Printing and publishing including print shops and miscellaneous commercial printing



*Sector with no minimum threshold

Additional Applicability – Phase-In Schedule

□ Reporting for “toxics” industry sectors phased

- Toxics sectors added each year, to help balance workload
- Additional phase-in of non-emissions data (e.g., release location)
- District Classification A = Districts with Year 1 Selected Communities

Proposed Schedule by District Classifications and Sector Phase

District Classification	Sector Phase 1 & 4 tpy Sources	Sector Phase 2	Sector Phase 3
A	2021 data, reported in 2022	2023 data, reported in 2024	2024 data, reported in 2025
B	2022 data, reported in 2023	2024 data, reported in 2025	2025 data, reported in 2026

Two years provided between Sector Phases to provide additional implementation time



Additional Applicability – Abbreviated Reporting

- ❑ Sources that qualify for abbreviated reporting will have reduced reporting requirements
- ❑ Abbreviated emissions estimates quantified by district or CARB staff based on facility- or agency-supplied activity data
- ❑ Proposed sources with the option for Abbreviated Reporting include:

Agricultural operations

Combustion of natural gas or propane in boilers or heaters

Emergency standby generators and direct-drive emergency standby fire pump engines

Retail sale of gasoline

Cremation of humans and animals

Construction aggregate processing, where no asphalt products are used or produced

Others?



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A Few Statistics and Examples

- ❑ Facilities with permits to operate
 - Total = About 68,000 unique permitted facilities
 - About 34,000 facilities currently in CEIDARS database
- ❑ CARB is leveraging statewide information
 - Gas station data
 - Specialty coating survey
- ❑ Natural gas or diesel combustion only (~15% of facilities): report fuel consumption only, other data upon request



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Examples

Example:

A hotel with only a permitted diesel-powered emergency backup generator in Placer County, 30 hours of operation

- Group B, Phase 1: report hours of operation beginning with 2022 data reported in 2023; no stack data required unless requested (abbreviated reporting); alternate schedules and activity data may be proposed by district



Examples

Example

An auto-body paint shop in Fresno, greater than 50 gallons of coatings used during the year

- Group A, Phase 2: report activity data pursuant to district requirements beginning with 2023 data reported in 2024; stack information may be deferred until 2026 (or longer upon CARB approval of a request).

VOC Usage							1/6/2020	
Item Code	Item Description	UOM	Quantity	VOC lbs	Gallage Total	VOC % per Total lbs	Cust	
Customer Location: 24 - 24 - MARTIN AUTO COLOR, INC.								
Customer: MASTERCRAFT - PPG - 6475 Phone: (805)962-3318								
Ship To: MASTERCRAFT - PPG - 6475 Phone: (805)962-3318								
VOC Class: Unspecified								
Manufacturer: PPG INDUSTRIES, INC.								
Line: ENVIROBASE								
EC530 01	Env-V Performance Clear	GALLON	3.00	0.38	3.00	1.14	9.8%	
ECH9075 04	Standard Hardener	QUART	4.00	0.30	1.00	1.20	10.3%	
ECR15 01	Gray A Chromatic Surfacer	GALLON	1.00	1.36	1.00	1.36	11.7%	
ECR73 01	Medium Temp Reducer	GALLON	1.00	3.91	1.00	3.91	33.5%	
EN531 04	ECS Hardener	QUART	2.00	0.28	0.50	0.56	4.8%	
T407 2L	Jet Black	2L	1.00	0.35	0.50	0.35	3.0%	
T409 2L	Deep Black	2L	1.00	0.25	0.50	0.25	2.2%	
T423 HE	Trace Yellow Oxide	HE	1.00	0.12	0.13	0.12	1.0%	
T444 1L	Bordeaux	LITER	1.00	0.23	0.25	0.23	2.0%	
T445 1L	Transparent Magenta	LITER	1.00	0.59	0.25	0.59	5.1%	
T448 2L	Plated	2L	1.00	0.62	0.50	0.62	5.3%	
T474 1L	Fine Met	LITER	1.00	0.23	0.25	0.23	2.0%	
T475 1L	Aluminum	LITER	1.00	0.22	0.25	0.22	1.9%	
T490 2L	Tinted Clear Additive	2L	1.00	0.55	0.50	0.55	4.7%	
T595 01	MUST Be Above 110 Degree	GALLON	1.00	0.17	1.00	0.17	1.5%	
Total for Line: ENVIROBASE					10.63	11.50		
Line: SPECIALTY								
SWA350 01	H2O-So-Clean 0 21 Precleaner	GALLON	1.00	0.16	1.00	0.16	1.4%	
Total for Line: SPECIALTY					1.00	0.16		
Total for Manu: PPG INDUSTRIES, INC.					11.63	11.66		
Total for VOC Class: Unspecified					11.63	11.66	100.0%	
Total for Ship To: MASTERCRAFT - PPG - 6475					11.63	11.66	100.0%	
Total for Cust: MASTERCRAFT - PPG - 6475					11.63	11.66	100.0%	
Total for Location: 24 - 24 - MARTIN AUTO COLOR, INC.					11.63	11.66		
Grand VOC Total:					11.63	11.66		



Examples

- **Examples**
 - A high school with a permitted natural gas boiler and no other permitted devices burns 60 million standard cubic feet of natural gas
 - Not subject to CTR, below the 4 ton and natural gas combustion thresholds
 - A dry cleaning facility in San Diego
 - Group A, Phase 2: report activity data pursuant to district requirements (likely the contents of, or reference to, the specific cleaning solvents used, amounts purchased, waste solvent removed, etc.), beginning with 2023 data reported in 2024

Other Amendments to CTR

- **Definitions**
 - Definitions for new terms, including facility types have been added
- **Reporting of emissions from on-site use of diesel-powered portable engines or devices**
 - Regardless of ownership or permit status
 - If used on site at any time during three different months of year
 - Best available data and methods
- **Petition process for districts to request additional abbreviated reporting categories and alternative activity data parameters or data collection schedules**

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Next Steps – Regulatory Process

- ❑ Continue working with stakeholders to refine amendments
- ❑ Prepare staff report with rationale, costs, etc.
 - Final staff documents and final proposed regulation text tentatively available in late Spring (45-day comment period)
- ❑ Tentative Board Date: Mid-to-late 2020
- ❑ Please submit comments by March 6th to:
 - ctr-report@arb.ca.gov



Feedback and Questions

Feedback and Questions on Additional Applicability?

- ❑ *Applicability Scope & Sectors Included*
- ❑ *Phase-In Schedule*
- ❑ *Abbreviated Reporting*
- ❑ *Next Steps*

Contact Us – Reporting Regulation

Criteria Pollutant and Air Toxics Reporting



- Website:
 - <https://ww2.arb.ca.gov/our-work/programs/criteria-and-toxics-reporting>
- Email
 - ctr-report@arb.ca.gov
- Click “Subscribe” for Criteria & Toxics Reporting Regulation listserve registration

Contact Us – Reporting: Key Staff

Criteria Pollutant and Air Toxics Reporting



- Dave Edwards, Assistant Division Chief
david.edwards@arb.ca.gov
916.323.4887
- John Swanson, Section Manager
john.swanson@arb.ca.gov
916.323.3076
- Daniel Sloat, Lead Staff
daniel.sloat@arb.ca.gov
916.445.6059



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