CTR Emissions Reporting Guidance: 2022+ Emissions Data

1 Introduction

Owners or operators of a permitted stationary source of emissions in California may be subject to the *Regulation for the Reporting of Criteria Air Pollutants and Toxic Air Contaminants* (CTR) and its emissions reporting requirements. Beginning in 2022, a multiple year phase-in process will substantially expand the emissions reporting requirements of CTR to apply to nearly all California stationary emission sources permitted by air districts. This guidance document focuses on the first year of this expansion and assists with identifying when a facility may be subject to emissions reporting under CTR and what is required to be reported.¹

The CTR does not exempt facilities from local air district rules or regulations, or National Emissions Inventory (NEI) reporting requirements.

2 CTR Overview

CTR establishes an emissions reporting program for permitted facilities across California. The permitted facilities are phased-in over a seven-year period, beginning with the 2022 data year through the 2028 data year², until all applicable facilities are reporting the data required by CTR on an annual basis. Due to this phase-in process, a facility may not be required to report emissions data or other data elements under CTR immediately. Table 1 provides brief descriptions of the phase-in schedule.

As the CTR phase-in proceeds, CARB staff, in close coordination with local air districts, will provide additional guidance, outreach, and training. Periodically refer to our program website for additional information and sign up for our email list to receive notification of any upcoming activities. For more information and assistance with the requirements of CTR, contact ctr-report@arb.ca.gov.

- CTR program website
- Subscribe to the CTR email list
- Guidance for the 2020 and 2021 data years
- Unofficial CTR regulation text
- CTR Fact Sheet

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¹ Unlike the official published regulation, this guidance does not have the force of law, does not establish, or modify requirements, and in no way supplants, replaces, or amends any of the legal requirements of the CTR. Conversely, an omission or truncation of regulatory requirements in this guidance does not relieve operators of their legal obligation to fully comply with all requirements of CTR.

² The data year is the year in which emissions occur.

Table 1. Brief CTR Phase-In Summary

Data Year	General Description
2022 through 2025	Phase-in: Facility-specific annual report required for "phase-in year," based on district/facility type; for other phase-in years report according to existing NEI protocols
2026 through 2027	Most applicable facilities reporting annually; some still phasing-in
2028+	All applicable facilities reporting annually

3 Who Reports?

This section identifies the facilities that are subject to emissions reporting under CTR. However, the facility may not be required to report emissions data or other data elements under CTR immediately, due to the phase-in schedule.

This guidance document groups the four applicability criteria of CTR (93401(a)(1) through 93401(a)(4)) into two broad classes of applicability:

- 1. GHG, Criteria, and Elevated Toxics Facilities, and
- 2. General Applicability (the "Additional Applicability Facilities" criterion of 93401(a)(4)).

Facilities that meet the GHG, Criteria, and Elevated Toxics applicability criteria have been subject to current CTR reporting requirements, which began with 2019 emissions reported in 2020, and are discussed further, below. The majority of facilities will be applicable to CTR reporting under General Applicability criteria, which are a part of the CTR amendments that will go into effect January 1, 2022 and which are discussed first.

3.1 General Applicability

Permitted facilities with actual emissions (or authorized potential to emit), or activity levels exceeding any of the following thresholds are subject to reporting under CTR:

- 4 tpy of any criteria pollutant (excluding carbon monoxide) in a Group A District
- 10 tpy of any criteria pollutant (excluding carbon monoxide) in a Group B District (Group B requirements are phased in beginning with 2024 emissions reported in 2025)
- 100 tpy of carbon monoxide
- Exceeds the activity level threshold for a specific permitted process (described in detail under the data year for What is Reported?)

A facility's district group is based on the air district that has jurisdiction over the facility. Table 2 shows the district groups. District Group A includes the Bay Area AQMD, Imperial County APCD, Sacramento Metropolitan AQMD, San Diego County APCD, San Joaquin Valley APCD, and South Coast AQMD. All other California air districts are in District Group B.

Depending on the district group and sector, the CTR requirements for facilities are phased-in over multiple years, as shown in Table 3. Data year 2022 is the earliest that some facilities in District Group A would be required to begin reporting according to CTR's requirements. For District Group B, data year 2024 is the earliest. During the initial phase-in period (from the 2022 to 2025 data years for District Group A and the 2024 to 2027 data years for District Group B), applicable facilities are required to report a facility-specific, annual update for the data year as indicated by the regulation's phase-in schedule. For the other phase-in years, facilities and districts should report according to existing local air district rules or policies and standard NEI reporting practices. However, once facility-specific emissions are reported for a facility, the emissions for that facility should continue to be reported as facility-specific, and not included as part of an industry-wide reporting category. Following the phase-in period for each district group, facilities applicable to CTR are required to report updated, facility-specific emissions on an annual basis, beginning with data year 2026 for District Group A and data year 2028 for District Group B.

Table 2. District Grouping

District Group A	District Group B
Bay Area AQMD, Imperial County APCD, Sacramento Metropolitan AQMD, San Diego County APCD, San Joaquin Valley APCD, South Coast AQMD	All other districts

Table 3. Phase-In Summary

District Facility		Data Year						
Group	Category	2022	2023	2024	2025	2026	2027	2028+
А	>4 tpy	Х	NNR	NNR	NNR	Х	Х	Х
	Phase 1	х	NNR	NNR	NNR	х	х	Х
	Phase 2			х	NNR	х	х	Х
	Phase 3				х	х	х	Х
	>10 tpy			Х	NNR	NNR	NNR	Х
В	Phase 1			Х	NNR	NNR	NNR	Х
	Phase 2					х	NNR	Х
	Phase 3						Х	Х

NNR = No new CTR reporting requirements; follow existing reporting requirements (e.g., district, NEI).

3.1.1 Abbreviated Reporting

Many smaller facilities qualify for abbreviated reporting, which allows for the reporting of a reduced data set to satisfy the requirements of CTR. Abbreviated reporting allows reporting of only general facility information (such as facility ID and location) and the activity level of the permitted process(es) at the facility. See the specific data year under *What is Reported?* for more information regarding abbreviated reporting.

3.2 GHG, Criteria, and Elevated Toxics Facilities

If the facility is considered a "GHG Facility", "Criteria Facility", and/or an "Elevated Toxics Facility" (see Table 4), these facilities have already been phased-in to CTR and have been required to report annually since the 2019 data year. As shown in Table 5, these facilities continue to be subject to the reporting requirements of CTR, and must continue to report annually.

However, beginning with the 2022 data year, there are additional data fields and substances that are phased-in over time. See the section *What is Reported?* for changes in emissions reporting for these facilities – while some data reporting requirements no longer apply, there are additional data reporting requirements for these facilities. Facility applicability is determined at the start of each data year. For example, if a facility meets any applicability criteria on January 1, 2022, then the facility is subject to reporting under CTR, and emissions that occurred during the 2022 data year (i.e., January 1, 2022 through December 31, 2022), are reportable in 2023.

Important Note: GHG, Criteria, and Elevated Toxics Facilities are not eligible for abbreviated reporting.

Table 4. GHG, Criteria, and Elevated Toxics Facility Applicability

Facility Type	Description
GHG Facilities	Permitted facilities that are required to report greenhouse gas (GHG) emissions to the CARB Mandatory Reporting Program for Greenhouse Gases (MRR) for the relevant data year (some exclusions apply for facilities that do not emit criteria air pollutants or toxic air contaminants in California).
Criteria Facilities	Permitted facilities that are authorized by district permit to emit over 250 tons per year (tpy) of a criteria pollutant in a nonattainment area at the beginning of the data year, regardless of actual emissions.
Elevated Toxics Facilities	Permitted facilities identified by their local air district as "high priority" as of January 1 of the data year, based on the district's implementation of the AB 2588 "Hot Spots" requirements.

Table 5. GHG, Criteria, and Elevated Toxics Facility Reporting

Facility Type	Data Year						
	2022	2023	2024	2025	2026	2027	2028+
GHG	x	x	x	x	x	x	х
Criteria	×	x	×	x	x	x	х
Elevated Toxics	х	х	х	х	х	х	х

GHG Facilities

CTR reporting is required regardless of Cap-and-Trade status. Electric power entities (EPEs) are not direct sources of emissions in California and are not subject to reporting under CTR (electricity generating facilities are not considered EPEs). Facilities that only report sulfur hexafluoride (SF₆) emissions associated with their electricity transmission equipment are not subject to any of the applicability criteria listed in the CARB MRR. Under the MRR reporting program, some entities may be combined for reporting GHGs rather than reported as discrete facilities. However, for CTR emissions reporting, the combined entity must be disaggregated and emissions should be attributed to the permitted facility, as determined by the local air district. If there are questions regarding the applicability of a "GHG Facility", contact CARB staff at *ctr-report@arb.ca.gov*.

Criteria Facilities

Applicability provisions for "Criteria Facilities" are based on (1) permitted emission levels, and (2) the attainment status for the pollutant(s) in the area for which the facility is located. It may not be readily apparent if a facility meets the applicability criteria – if there are questions regarding the applicability of a "Criteria Facility", contact CARB staff at *ctr-report@arb.ca.gov*. The applicability for "Criteria Facilities" is based on the facility-wide permitted emission levels of an individual "criteria air pollutant" as defined in CTR, and not the sum of the pollutants. Air district permitting staff should be contacted for questions relating to calculations used to determine potential to emit emission levels.

Elevated Toxics Facilities

Under CTR, the term "elevated" is synonymous with "high priority." Air districts determine whether a facility is classified as high priority under the Air Toxics "Hot Spots" Act and therefore determine its status as an "Elevated Toxics Facility." Air district staff responsible for Air Toxics "Hot Spots" implementation should be contacted regarding facility scores and classifications. The "high priority" designation applies to current designations only, and not historical designations. The facility must be classified as high priority at the beginning of the year to be considered an "Elevated Toxics Facility."

3.3 Frequently Asked Questions: Applicability

Question: My facility does not have any permits issued by an air district. Does that mean the facility is not subject to the CTR requirements?

Answer: That's correct. If the facility has not been issued any permits to operate by an air district, the facility is not subject to the CTR reporting requirements. Please refer to the regulation for definition of a permit.

Question: How does my facility cease being subject to CTR reporting requirements?

Answer: To cease reporting, a facility must not be subject to any of the applicability criteria for CTR. If none of the applicability criteria are met, then the facility operator may provide a written notification of cessation of reporting to CARB and the local air district. The notification must clearly indicate that none of the applicability criteria apply. Notifications may be provided either by letter or email and must be submitted by the designated representative for the facility. CARB notifications must be submitted to either the mailing address or email account (ctr-report@arb.ca.gov) specified in section 93403(f). Notifications are due by the May 1 reporting deadline, when a report would be due, or by an air district deadline if it is earlier than May 1.

4 What is Reported?

4.1 Data Year 2022

<u>Due to District: May 1, 2023 (or by the local air district's data reporting deadline, if earlier)</u>

The 2022 data year is the initial year of phase-in for District Group A (other than GHG, Criteria, and Elevated Toxics Facilities). The groups phasing-in this data year are: (1) facilities in District Group A with actual emissions of greater than 4 tpy of any criteria pollutant (100 tpy for carbon monoxide), and (2) District Group A, Phase 1. Table 6 shows a summary of the reporters for data year 2022; however, refer to Table A-3 of the CTR regulation for the full criteria, including SIC and NAICS codes limitations. Figure 1 summarizes the applicability and reporting requirements in a flowchart.

Table 6. Data Year 2022 Reporters

Data Year 2022 Reporters

District Group A

Any permitted facility emitting **greater than 4 tpy of any criteria pollutant** (the threshold for carbon monoxide is 100 tpy).

District Group A/Sector Phase 1

Any of the following permitted activities, per-device (from Table A-3 of the regulation):

- Diesel combustion (not including agricultural operations or medical-related)
 - o Greater than 5 hours per year of non-emergency operation in any diesel engine; or
 - o Greater than 30 gallons of diesel combusted per year in a Tier 3 or lower diesel engine; or
 - o Greater than 100 gallons of diesel combusted per year in a Tier 4 or higher diesel engine (or any other combustion device);
- Any metal plating, anodizing, or grinding using cadmium or chromium;
- Plating, polishing, coating, engraving, and allied services, including thermal spraying, using chromium, cadmium, or nickel;
- Dry cleaning facilities (besides water or carbon dioxide based systems);
- Industrial machinery manufacturing (SIC codes 353x, 356x; NAICS codes 333xxx);
- Petroleum refining and related industries;
- Rubber and miscellaneous plastics products manufacturing;
- Release of fumigant or fumigation of crops for market;
- Solvent use:
 - o 1,4-dioxane use emitting greater than 10 pounds per year
 - o Methylene chloride use for paint or coating removal, printing or print shop cleaning, or aircraft maintenance or repair greater than 1 gallon per year
 - o Processes emitting greater than 1 pound of styrene per year
 - o Paint stripping and varnish stripping in reupholstery and furniture repair
 - o N-methyl pyrrolidone use greater than 1 gallon per year
 - o Tert-butyl acetate use greater than 20 pounds per year
 - Parachlorobenzotrifluoride (PCBTF) in cleaning or degreasing solvents, adhesives, printing inks, or coating operations (excluding auto body repair and coating operations) greater than 0.5 gallons or 5 pounds per year
 - o Solvent cleaning and degreasing (if any substances used are a human carcinogen or potential human carcinogen, or if annual average exceeds 55 gallons per month)

Facilities that meet any of the applicability criteria must report emissions data from all air district-permitted equipment (and any unpermitted emissions that the air district has requires to be reported according to the districts' rules and regulations). If eligible, abbreviated reporters only need to report Facility Data and activity level data, as specified in Section 4.1.1. For all applicable facilities, the use of best available data and methods is required. For all applicable facilities, the substance list in Table B-2 must be considered (in addition to the existing substances listed in Appendix A-I of the 2007 EICG regulation). Table 7 shows brief descriptions of the data to report.

Figure 1. Data Year 2022

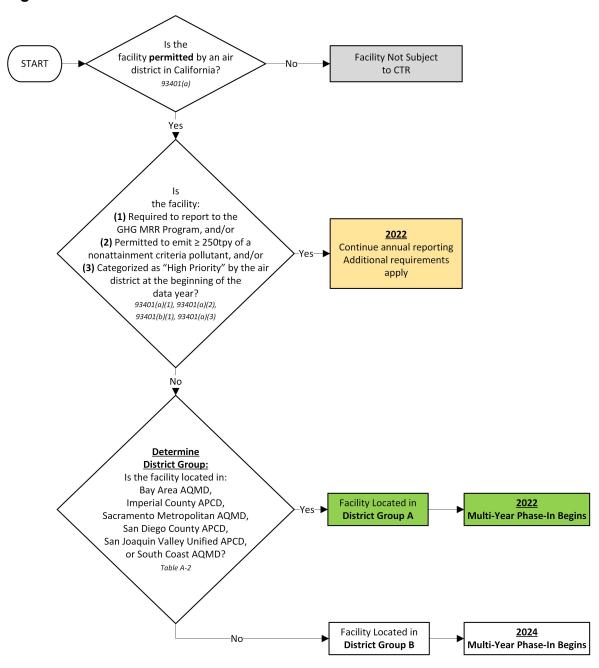


Table 7. Data to Report

Data Type	Description
Sources	All permitted equipment Any unpermitted emissions that the air district requires
Methods	Best available data and methods
Substances	Table B-2, and existing substances listed in Appendix A-I of the 2007 EICG regulation

4.1.1 Abbreviated Reporting

Certain facilities are eligible for abbreviated reporting. Abbreviated reporting allows for reporting only general facility information (such as facility ID and location) and the activity level of the permitted process(es) at the facility. For abbreviated reporting facilities that report this information, emissions estimates will be calculated on their behalf by the air district or CARB. Abbreviated reporting requirements under CTR do not exempt facilities from local air district rules or regulations, or National Emissions Inventory (NEI) reporting requirements.

Owners or operators of facilities self-identify as abbreviated reporters. To qualify for abbreviated reporting, the facility:

- 1. **Must only have one or more** of the facility types or permitted processes indicated in Table 8. If the facility has permitted equipment outside of the list in Table 8, the facility is not eligible for abbreviated reporting.
- 2. **Must not meet** the applicability requirements to be considered a GHG, Criteria, or Elevated Toxics Facility.

Table 8. Abbreviated Reporting

Facility Type/Permitted Process	Activity Level
Agricultural operations	Quantity of head of cattle
Combustion of natural gas or propane in boilers or heaters	Total annual fuel usage, in million scf or MMbtu
Construction aggregate processing, where no asphalt products are used or produced	Total annual mass of dried material produced, in tons
Cremation of humans or animals	Total annual mass cremated by type of remains, in pounds
Diesel-powered emergency standby generators and direct-drive emergency standby fire suppression pump engines and direct-drive emergency standby fire water pump engines	Total annual hours of operation
Retail sale of gasoline	Total annual gasoline dispensed, in gallons

The local air district or CARB will use existing permit data for these facility types and the activity level provided to compute the emissions for the facility. Air districts may request that CARB consider additional processes or activities to be identified and included as abbreviated sources under the CTR.

4.1.2 GHG, Criteria, and Elevated Toxics Facilities

"GHG Facilities", "Criteria Facilities", and "Elevated Toxics Facilities" must continue reporting; however, there are new requirements for these facilities, including release location data reporting, and portable diesel engine reporting (at "GHG Facilities" and "Criteria Facilities").

Permit or Rule Emissions Limit Reporting Removed

Reporting the "Permit or rule emissions limit(s) for industrial sources" is no longer required.

Release Location Data Reporting

The release location data elements listed under 93404(b)(1)(D), also known as stack parameter data, are required to be reported for the 2022 data year for all emission processes. The release location data for some fugitive emissions (such as from individual equipment components like flanges and valves) may be combined in a manner consistent with existing air district reporting.

Portable Diesel Engine Reporting at GHG and Criteria Facilities

"GHG Facilities" and "Criteria Facilities" (not "Elevated Toxics Facilities") must begin reporting emissions data for portable diesel engines. Reporting is required for all diesel-powered engines and devices rated at 50 brake horsepower or above – regardless of equipment ownership – including contracted equipment, equipment registered under the Portable Equipment Registration Program [PERP], and emissions from unpermitted equipment. There are no prescribed methods to calculate these emissions estimates, and these emissions may be aggregated as one or more sources for a facility-wide total, if approved by the local air district. If local air district rules or policies require reporting of emissions from additional portable diesel-fueled engines and devices, the district may require reporting for such sources.

4.2 Data Year 2023

<u>Due to District: May 1, 2024 (or by the local air district's data reporting deadline, if earlier)</u>

For the 2023 data year, requirements remain the same for "GHG Facilities", "Criteria Facilities", and "Elevated Toxics Facilities". These facilities must continue emissions reporting. Refer to data year 2022 for information regarding reporting of release location data and portable diesel engines and devices.

For all other facilities, there are no new CTR reporting requirements for the 2023 data year; however, facility emissions data should be reported by facilities and districts according to existing local air district rules or policies and NEI reporting protocols. For any facility for which facility-specific emissions were reported for 2022 emissions data, emissions for those facilities should continue to be reported as facility-specific, and not included in an industry-wide reporting category. For the 2023 data year, best available data and methods may be used to report emissions from such facilities.

4.3 Future Data Years

This guidance will be revised with reporting guidance for the 2024 data year and beyond.

4.4 Frequently Asked Questions: Reporting

Question: Who do I report to: CARB or the local air district?

Answer: Submit your emissions report to the local air district by May 1st of the year following the data year, or by the local air district's data reporting deadline if earlier. Report data as requested by the local air district.

Question: Under CTR, I have no reporting requirements in certain data years. Does that mean I don't have to report emissions according to the rules and policies of air districts, or guidance for the National Emissions Inventory (NEI)?

Answer: CTR does not alter other emissions reporting requirements.

Question: Are unpermitted emissions subject to reporting, and if so, what unpermitted emissions need to be reported?

Answer: The local air district determines what unpermitted emissions need to be reported. If you have historically reported unpermitted emissions from your facility, you will report those emissions under CTR.

Question: If a quantification method for a substance emitted at a facility does not exist, then that substance does not need to be reported. Does CARB maintain a list of substances that do not have quantification methods?

Answer: CARB does not maintain a list of substances that do not have quantification methods. If a substance is present at a facility and can potentially be emitted to the air, but there are no methods to provide a reasonable estimate of emissions, then the amount of the substance used or produced at the facility during the data year must be reported, pursuant to CTR requirements.

Question: Is there guidance on methods for determining, quantifying, and reporting use, production, or presence of a substance?

Answer: CARB does not currently provide guidance on reporting the use, production, or presence of a substance.

Question: Agricultural operations in California have historically had higher thresholds and different permit requirements than other facilities, and may take longer to comply with the emissions reporting requirements of CTR. Do agricultural operations have a deferred reporting option?

Answer: Facilities that meet the "agricultural operation" definition in CTR (and not a GHG, Criteria, or Elevated Toxics Facility) may postpone reporting until the 2026 data year for Group A Districts, and the 2028 data for Group B Districts.

Question: Waste sector facilities are unique in that they can emit almost any substance because they accept and process waste. In addition, waste sector facilities have a set list of substances to report (Table B-4 in the regulation). Do waste sector facilities need to report now, or can they wait until 2028, to give time for this sector to perform testing?

Answer: If the facility is a part of the waste sector, the facility may defer reporting until the 2028 data year. However, if the facility is a "GHG Facility", "Criteria Facility", or "Elevated Toxics Facility", the facility must report (using best available data and methods) and does not need to consider the Table B-4 toxics list until the 2028 data year).

Question: The facility recently changed ownership. How should I report the facility's emissions?

Answer: Emissions data must always be reported for the entire data year. The prior owner and current owner share responsibility in reporting emissions for the entire data year. Each party is responsible for data collection and reporting for the period during which they had operational control of the facility. Emissions reports can be submitted as a single consolidated report, or as individual reports for the period during which they held ownership of the facility.

Question: How should substances that are present, used, or produced be reported?

Answer: For substances that are reported as the amount "present, used, or produced" on site during the data year, best available data may be used to estimate the amount used or produced during the data year. CARB is in the process of confirming the data field(s) in the CEIDARS 2.5 reporting format that should be used for reporting this information. As soon as this confirmation is made, CARB will provide the information on our website. If there is not an appropriate field in the CARB database format to report this information at the reporting deadline, reporting of the information may be postponed until additional information is provided indicating the manner in which this data should be reported to CARB.