2024 Emission Inventory Reporting Guidelines for Air Districts

Contents

Purpose

This document is intended to provide guidance to Air Districts (districts) for reporting emissions data to the California Air Resources Board (CARB) pursuant to state and federal reporting requirements. This document, however, 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 set forth by California state and federal laws.

What's New in 2024

Follow the links below to easily access this year's new reporting information and requirements.

Submission to 2023 NEI

The 2023 emissions inventory year data will be submitted to the U.S. Environmental Protection Agency (EPA) for their National Emissions Inventory (NEI). Submissions will include point, nonpoint, onroad, nonroad, and fire sources. In addition to the 2023 inventory being used for CARB programing, it will also feed into several federal programs including AirToxScreen and air emissions modeling platforms.

CTR and EICG Requirements

The first phase of reporting began in 2023 for the amended Regulation for the Reporting of Criteria Air Pollutants and Toxic Air Contaminants (CTR) and the AB 2588 Emission Inventory Criteria and Guidelines (EICG). This first phase of the expanded applicability requirements brought additional facilities into the reporting requirements that hadn't been previously. Notable sectors in the first phase of CTR reporting included diesel fuel combustion, which will make most emergency diesel-fueled engines at permitted facilities subject to reporting, and facilities that have permitted solvent use such as degreasing and paint stripping operations. There is a planned gap year for 2023 emissions, with the next phase of reporting to begin with 2024 emissions reported in 2025. This planned gap year will help identify any barriers and lessons learned with the first reporting phase.

Unlike the official published regulations, 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 or EICG. Conversely, an omission or truncation of regulatory requirements in this guidance does not relieve facility operators of their legal obligation to fully comply with all requirements of CTR and EICG.

The full CTR regulation is available here:

https://ww2.arb.ca.gov/sites/default/files/2022-02/Unofficial%20CTR_Jan2022_0.pdf

The EICG and its appendices can be found here:

https://ww2.arb.ca.gov/rulemaking/2020/hotspots2020

For more information on EICG, the 2022 FAQ can be found here:

https://ww2.arb.ca.gov/sites/default/files/2024-01/2022%20AB%202588%20EICG%20FAQ_FINAL_0.pdf

Utility Table Updates

CEIDARS Utility Tables have been updated to comply with U.S. EPA, CTR, and EICG regulations. Please see the *Utility Table Updates* section for updated reporting requirements broken out by transaction file type and *Appendix B* for the updated tables.

HARP Updates

In addition, applicable HARP utility tables have been updated consistent with the updates made in CEIDARS as described in this document. Please check for *updates* in the application manually to ensure updates are implemented.

Master Facility Table

To maintain a record of facilities that are still in operation versus facilities that have closed, CARB has created a master facility table covering the entire state. The table will be updated based on facilities that are reported in the inventory each year. Newly reported facilities will be added to the table and nonreported facilities will be marked as closed. To prevent a recently closed facility from being rolled over into the new reporting year, Districts should provide a list of facilities (using CO, AB, DIS, and FACID identifying factors) and the year in which the facility closed along with their data submittals to CARB. Additionally, districts should ensure that facilities still in operation are rolled over from the previous inventory year. For additional information regarding facility data rollover, please see the *Additional Reporting Threshold Information* section. Additionally, if the FACID for a particular facility has changed, please let us know or provide a crosswalk to your district liaison.

District Submittals

Reporting Timeline

Table 1 lists the most important reporting milestones for the 2023 reporting year. Local air pollution control and air quality management district (district) deadlines are shown in bold. Districts are encouraged to submit before the deadline.

Table 1: 2023 Reporting Year Milestones

Due Date	Task	Responsibility
April 1, 2024	Create 2023 CEIDARS database.	CARB
August 1, 2024	**Submit 2023 point source updates and corrections to CARB.**	**District**
August 1, 2024	**Submit 2023 area source updates (grown and controlled) to CARB.**	**District**
August 1, 2024	**Submit any new District control profiles/rules.**	**District**
October 1, 2024	Complete the update of 2023 CEIDARS for submittals received as of August 1, 2024.	CARB
October 1 – December 3, 2024	**Conduct review and QA for the 2023 inventory.**	**CARB/District**
January - March 2025	Publish the district's point source data on CARB's website.	CARB

Importance of Reporting

State and federal laws require CARB to compile the statewide emission inventory. These mandates include:

- State Health and Safety Code
- California Clean Air Act (CCAA) of 1988
- State Air Toxics "Hot Spots" Information and Assessment Act (AB 2588) of 1987
- Federal Clean Air Act Amendments (CAAA) of 1990
- Federal Air Emissions Reporting Requirements (AERR) Rule of 2008
- Fine Particulate Matter National Ambient Air Quality Standards: State Implementation Plan Requirements of 2016
- California Assembly Bill 197 of 2016
- California Assembly Bill 617 of 2017
- Implementation of the 2015 National Ambient Air Quality Standards for Ozone: State Implementation Plan Requirements of 2018
- Criteria Pollutants and Toxics Emissions Reporting (CTR) of 2021

A more complete description of these mandates is available on the CARB District Resources website, *https://ww3.arb.ca.gov/ei/drei/maintain/legalrequirements.pdf*.

Other Applications of District Submittals

- Developing air quality management plans
- Determining reasonable further progress (RFP)
- Developing potential control measures
- Analyzing new source impacts
- Determining control program effectiveness
- Predicting future air quality through modeling analyses
- Determining compliance of emissions sources
- Supporting environmental justice and neighborhood level assessments
- Performing neighborhood-level health risk assessments
- Populating the Integrated Emission Visualization Tool (IEVT)
- U.S. EPA National Emission Inventory (NEI) submittal as required by the AERR Rule
- U.S. EPA Air Toxics Screening Assessment (AirToxScreen) (formerly known as NATA)
- Online public web tools (for example, Community Emissions Inventory StoryMaps)

Reporting Requirements

CARB is responsible for developing annual statewide emission inventories based in part on data submitted by districts. CARB estimates emissions from mobile and natural (non-anthropogenic) sources and works cooperatively with districts in developing emission estimates for aggregated point sources, area-wide sources, and some off-road mobile sources.

Districts are responsible for reporting emissions from all point sources and those area source categories designated as district categories. A list of area source categories, along with a designation of who is responsible for the data submittal, is available on the web at: *https://ssl.arb.ca.gov/sslapp/emsinv/dist/utltab/eic/eic.php*.

Table 2: Common Pollutants Reported to CEIDARS

Pollutant Code	Pollutant Name	Abbreviated Name
42101	Carbon Monoxide	CO
42603	Oxides of Nitrogen	NOx
42401	Oxides of Sulfur	SOx
11101	Particulate Matter	PM
85101	Particulate Matter 10 Microns or Less	PM10

Pollutant Code	Pollutant Name	Abbreviated Name
88101	Particulate Matter 2.5 Microns or Less	PM2.5
16113	Reactive Organic Gases	ROG
43101	Total Organic Gases	TOG
43104	Volatile Organic Compounds	VOC
7664417	Ammonia (**Toxics** reported in pounds)	NH3
7439921	Lead (**Toxics** reported in pounds)	Pb
42604	Ammonia (**Criteria** reported in tons)	NH3
12128	Lead (**Criteria** reported in tons)	Pb

Point Source Submittal

Required Pollutants

Criteria Pollutants: (reported in tons) CO, NOx, SOx, one form of PM (PM or PM10 or PM2.5), one form of organic gases (TOG or ROG or VOC), lead (Pb; as criteria), and ammonia (NH3; as criteria).

Toxic Pollutants: (reported in lbs): The EICG *Appendix A chemical list* includes a list of toxic substances that must be reported. Appendix A is divided into three sub-appendices: Appendix A-I includes substances for which emissions must be quantified, Appendix A-II includes substances for which production, use or other presence must be reported, and Appendix A-III includes substances which need not be reported unless manufactured by the facility. Appendix A-I includes 1,457 chemicals (including 3 broad functional groups), A-II includes 184, and A-III includes 284. During the 2020 EICG amendment process, 994 chemicals were added to A-I, 13 to A-II, and 162 to A-III (in a few cases, a chemical was moved from A-II to A-I).

Reporting of Appendix A-I substances are to be phased in between data years 2022 through 2028. Substances in Appendix A which are denoted in the "Effective Phase" column as "ChemSet1" or "ExistGrp", have an effective initial emission data quantification year of 2022 shown in Table 3 from EICG Section II.H(2) and for the applicable District Group as shown in the EICG Appendix E, Table E-2.

Substances added to Appendix A, which have no delayed phase-in provisions denoted in the "Effective Phase" column of Appendix A, are denoted as "e" for existing substances which were part of Appendix A prior to the 2020 amendments. See EICG Section II.H, Appendix A as well as Appendix E for more details.

Table 3 EICG Section II.H(2) Effective Initial Emission Data Quantification Year for New Substances

District Group	ExistGrp	ChemSet-1	ChemSet-2
A	2022	2022	2026
B	2024	2024	2028

The first year of enhanced reporting under CTR occurred with 2022 emissions reported in Fall of 2023. This applied to Group A[1] air districts which must report emissions of every toxic substance found in the "Existing Group" list of EICG Appendix A AND every toxic substance in "ChemSet-1" or Table B-2 of the CTR regulation. The substance list in Table B-2 of the CTR regulation is consistent with the Chemset-1 substances listed in the EICG, so that the reporting requirements under CTR and EICG are aligned.

As reflected in Table 3, there is a gap year for 2023 reported emissions in both CTR and EICG.

Group B air districts are required to begin reporting all toxic substances in the "existing group" list of EICG AND every toxic substances in ChemSet-1 for 2024 emissions, reported in 2025.

Pollutant Reporting

Districts can provide all three forms of PM (PM, PM10 and PM2.5) and three forms of organic gases (TOG, ROG, and VOC). If districts do not provide these set of emissions, CARB will estimate them based on your organic gases and PM data.

Please report either all three forms of PM (PM, PM10, and PM2.5) or one of the three. The same applies to the organic gases, please report either all three forms of organic gases

[1] Group A air districts are those containing a designated AB 617 community, namely: Bay Area Air Quality Management District (AQMD), Imperial County Air Pollution Control District (APCD), San Diego County APCD, Sacramento Metropolitan AQMD, San Joaquin Valley APCD, and South Coast AQMD

(TOG, ROG, and VOC) or one of the three. DO NOT report two out of three forms for PM and organic gases.

Particulate Matter (PM)

The federal Fine Particulate Matter National Ambient Air Quality Standards: State Implementation Plan Requirements of 2016 requires states with sources of direct PM2.5 to include emissions data for both filterable PM2.5 and condensable PM2.5 in the base year inventory for the nonattainment area.

Direct PM2.5 emissions include:

- Condensable emissions: Material that is in the vapor phase at stack conditions but condenses or reacts upon cooling and dilution in the ambient air to form a solid or a liquid particle immediately after discharge from the stack.
- Non-condensable (filterable) emissions: Particles that are directly emitted as a solid or liquid at the stack or release point conditions and captured on the filter of a stack test train.

Important Note: Total particulate emissions (pollutant codes 11101, 85101, and/or 88101) should still be reported regardless of whether the non-condensable component is also reported.

Ammonia and Lead

CARB has assigned pollutant codes for ammonia (NH3) and lead (Pb) for the criteria reporting side. The criteria pollutant codes are 42604 for ammonia (NH3) and 12128 for lead (Pb), as reported in tons per year (tpy); and the previously used pollutant codes (7664417 and 7439921) are only valid on the toxic reporting side (and reported in pounds per year)

CEIDARS Emission Inventory Liaisons will assist the districts with this transition to ensure that both ammonia (NH3) and lead (Pb) emissions get processed correctly.

Emission Reporting Units

Emissions of criteria pollutants such as CO, NOx, SOx, PM, and TOG must be reported in tons per year.

Emissions of toxic pollutants listed in Appendix A of the AB2588 Air Toxics “Hot Spots” (EICG) Program (also listed in Appendix B of CTR, including Tables B-2, B-3, and B-4) must be reported in pounds per year. (Radionuclides use units of Curies).

On the criteria reporting side, emissions of ammonia (NH3) and lead (Pb) with 42604 and 12128 pollutant codes should be reported in tons per year. On the toxic reporting side, emissions of ammonia (NH3) and lead (Pb) with 7664417 and 7439921 pollutant codes should be reported in pounds per year. If ammonia (NH3) and/or lead (Pb) are being

reported as criteria, then they should also be reported as toxics with their respective pollutant code and converted to pounds per year; vice versa if reporting as toxics pollutants with conversion to tons per year.

Point Source Information and Facility Risk Data Reminders

- Facility Location
  Districts shall submit valid facility names, addresses, and latitude and longitude in decimal degrees to CARB.

  CARB has compiled geographic coordinates of the existing facilities in CEIDARS by geocoding, and they are used in quality assurance (QA) checks.
  DO NOT report the headquarters location under facility address. The facility's risks are related to its location and surrounding population. Risks may be overestimated if a facility that is located in a sparsely populated area is incorrectly placed in a populated area by the headquarters coordinates.

- Facility ID (FACID)
  If the FACID for a particular facility has changed, please let us know or provide a crosswalk to your district liaison. FACIDs must be unique per county, air basin, and district.

- Stack Information
  If a facility covers a large area, provide all stack coordinates because risks are dependent on the location of the release points. Districts shall provide the stack height, stack diameter, gas temperature, and gas velocity (or gas flow rate). The calculated gas flow rate should be consistent with the submitted gas velocity.

- Device Information
  Please ensure that there are no devices without any process associated with them (widow devices). All widow devices will be deleted in CARB's submittal to U.S. EPA.

- Process Information
  Please ensure that submitted temporal parameters, such as Operating Hours per Day (HPDY), Operating Days per Week (DPWK), Operating Weeks per Year (WPYR), and monthly throughput, are appropriate.

- SIC/SCC Information
  Please provide correct and valid SIC/SCC combinations. Stationary aggregated point sources will be estimated based on the associated point sources using these combinations by reconciliation. Emissions from any invalid SIC/SCC combinations may be incorrectly categorized or reconciled against incorrect source categories. Valid SCC codes can be found here,

https://ofmpub.epa.gov/sccwebservices/sccsearch/. Please ensure that the SCC is under the data category "Point" for point sources. Valid SIC codes can be found here, *https://www.osha.gov/data/sic-search*.

- North American Industry Classification System (NAICS) Information
  NAICS code is found in the facility and process tables. FNAICS (in the facility table) describes the activity of the entire facility, while the process NAICS describes the activity of a specific process. For the 2023 inventory, the 2022 vintage of NAICS is considered valid. Valid NAICS codes can be found here, *https://www.census.gov/naics/?58967?yearbck=2022*.

- Facility Risk Information

Districts shall submit facility risk data (which is required for the Hot Spots Fee Regulation, the EICG Regulation update categories and their differing requirements[2], and the online Facility Search Tool) in the tables of Facility Risk and Facility Transaction Related Fields, as described in
Appendix A: CTR and EICG Priority Reporting Fields.

Reporting Thresholds and Frequency

U.S. EPA

Annually:

- Districts shall report emissions for all point sources that emit 10 or more tons/year of criteria pollutants and ammonia (NH3).
- Districts shall report emissions for all point sources that emit 0.5 tons/year or more of lead (Pb).
- Districts shall report the high-risk facilities - facilities with a risk of 10 in a million or emitting 10 tons per year of any single hazardous air pollutant (HAP) or 25 tons per year of any combination of HAPs.

Every three years (including this 2023 inventory year):

- Districts shall report criteria pollutant emissions for facilities that emit less than 10 tons per year.

[2] The "EICG Regulation update categories and their differing requirements" refers to all fields in the Facility transaction (FAC-TRANS) and Facility Risk Transaction (FAC-RISK-TRANS) that are related to health risk, facility prioritization, AB 2588 fees, EICG Section IV and V "update levels" of high, intermediate, and low facility update categories, as well as the Facility Search Tool.

Table 4. Reporting Schedule of Criteria and Toxic Pollutants including regulation and source type criteria

Pollutant Type	Source Type	Regulation	2023	2024	2025	2026	2027
Criteria	Point Sources >= 10 tpy	AERR	X	X	X	X	X
Criteria	Lead (Pb) >= 0.5 tpy	AERR	X	X	X	X	X
Criteria	Point Sources < 10 tpy	AERR	X			X	
Toxic	Risk of 10/million, >= 10 tpy for single HAP, or >= 25 tpy for combination of HAPs	AERR	X	X	X	X	X
Criteria and Toxic (CTR)	Point sources >= 4tpy criteria for Group A districts, >= 10 tpy criteria for Group B districts, or facility is in one of the 52 defined sectors	CTR		X	X	X	X
Toxic (EICG)	Point sources >= 10 tpy criteria, or facility is in one of the defined 53 Appendix E sectors	EICG		X	X	X	X

2022 emissions reported in 2023 began the first phase of the amended CTR and EICG requirements. The regulations are being phased in over seven years using two air district reporting groups, A and B. Group A districts are defined as those containing a *designated AB 617 community* and are required to report 2022 data in 2023. Group A districts include the following listed below while Group B districts include all the remaining districts not part of Group A. There is a gap year schedule in 2024 for reporting year 2023 to review lessons learned and address challenges. Group B districts are required to report 2024 emissions subject to the amended CTR and EICG requirements in 2025.

1. Bay Area Air Quality Management District
2. Imperial County Air Pollution Control District
3. San Diego County Air Pollution Control District
4. Sacramento Metropolitan Air Quality Management District
5. San Joaquin Valley Air Pollution Control District
6. South Coast Air Quality Management District

CTR

The amendments effectively lower the criteria pollutant reporting threshold from 250 tpy to 4 or 10 tpy (except for carbon monoxide), based on the air district. Specifically, the amended CTR regulation applies to a facility emitting over 4 tpy of a non-attainment criteria pollutant (except for carbon monoxide) in District Group A starting with the 2022 data year,

and a facility emitting over 10 tpy of a nonattainment criteria pollutant (except for carbon monoxide) in District Group B starting with the 2024 data year. Applicability criteria are also based on whether the facility operates certain equipment, performs certain activities, or is of a certain facility type. There are 52 "sectors" listed in the CTR regulation that are phased into reporting over multiple years[3]. In 2023, consistent with EICG requirements, there are 16 sectors subject to reporting for the 2022 data year (the first phase of CTR).

Notable sectors in the first phase of CTR reporting include diesel fuel combustion, which will make most emergency diesel-fueled engines at permitted facilities subject to reporting, and facilities that have permitted solvent use such as degreasing and paint stripping operations. Full implementation of CTR will be achieved during the 2029 reporting year, and in subsequent years, virtually all permitted facilities will report and update their emissions data annually. Please refer to the regulations to determine the applicable facilities and contact the CTR staff for help in determining which facilities are subject to facility-specific emissions reporting for a given year.

EICG

EICG covers facilities that handle, produce, emit, or use toxic substances, and meet specific facility applicability criteria. EICG contains applicability provisions for facilities that either have over 10 tpy of criteria pollutant emissions or meet one of the 53 sector definitions in Appendix E of the EICG regulation. The 53 sectors included in Appendix E of the regulation are divided into three implementation Sector Phases (1-16; 17-32; 33-53) spanning a multiyear reporting schedule (see Table E-1 from Appendix E). Some of the sectors have specified thresholds for when reporting is triggered (e.g., how much of a specific material or chemical is used at the facility). Other sectors apply only to listed Standard Industrial Classification (SIC) categories. The 16 sectors contained within Sector Phase 1, which begin reporting 2022 data in 2023 for the Group A districts, cover a range of important types of industries and processes that emit air toxics. Sector Phase 1 includes metal plating and anodizing operations, petroleum refining, rubber and plastics manufacturing, post-harvest fumigation, combustion of diesel and other liquid fuels, some types of dry cleaning and paint stripping, use of solvents for cleaning and degreasing above certain thresholds, and various other individually specified chemicals and operations of concern. Please refer to the regulations to determine the applicable facilities and contact the EICG staff for help in determining which facilities are subject to facility-specific emissions reporting for a given year.

Relationship Between CTR and EICG

---

[3] Both the CTR and EICG regulations share the same 52 sectors. The EICG has one additional sector (sector 53) for AB2588 reporting for facilities identified by districts under EICG Section II.E.(3)(a) (where the district has determined that a facility may individually or in combination with other facilities pose a potential risk to public health or be of health concern to the community).

The reporting requirements for the two regulations were aligned so that there are no conflicting or duplicative reporting requirements for a regulated community. Some examples are:

- Toxic substances subject to reporting
- Reporting thresholds for toxics sectors
- Industrial sectors and their phase-in schedules
- Air district groups and their phase-in schedules as well as a common 'gap year' in 2024 (this year), after the first year of reporting in 2023, for CARB, districts, and subject facilities to address challenges
- Unified emissions reporting process across all criteria pollutants and toxics programs

There are some key distinctions between the reporting regulations, including:

- Quadrennial reporting (AB 2588/EICG) vs. annual reporting (CTR)
- Lower criteria pollutant emissions threshold (4 tpy) for CTR applicability in Group A air districts
- For the later phase of chemicals in EICG (ChemSet-2), CTR includes annual reporting only if a health value exists
- AB 2588/EICG is implemented by air districts with guidance from CARB
- CTR does not address cumulative impacts or health risk assessment, notification, risk management, or mitigation

Important Note: If a CTR submittal is not merged with an EICG submittal or previously entered data, data maybe inadvertently overwritten in CEIDARS. In order to mitigate any unintentional deletion, facilities that are subject to both CTR and EICG should be merged and their data submitted in conjunction with one another. The goal of the two regulations is to achieve uniformity of emissions reporting and therefore, there are no conflicting or duplicative reporting requirements for a regulated community.

Additional Reporting Threshold Information

Every three years districts are required to report criteria pollutant emissions for facilities that emit less than 10 tons per year, and in the gap years CARB rolls the data for these facilities from the previous year to the current year. However, for any facility subject to CTR applicability criteria for a given year, emissions of both criteria pollutants and toxics must be reported. To avoid rolling over closed/inactive facilities, districts should specify whether their submittal is a complete replacement of the total inventory or a partial replacement. If submittal is a partial replacement, then districts should indicate which facilities have closed.

- A complete data replacement involves deleting all point source records, since all the records submitted in the transaction file are applicable for the year submitted. No other point source records will exist for the year submitted if not provided in the transaction file.

- A partial data replacement involves leaving some facilities that were rolled over from the previous year to the current year and deleting/updating only the submitted facilities. Districts should notify CARB's Liaisons every year that the data from the previous year is accurate and they would like to roll it over, even if those facilities are not reporting emissions in the current submission.

If a facility is not in the toxic program, and is not subject to any CTR applicability criteria, districts do not need to report toxic emissions. In this case, please report ammonia (NH3) and lead (Pb) emissions with criteria pollutants and use the criteria reporting pollutant codes.

Likewise, if a facility's only reason for reporting is to meet toxics reporting requirements, districts do not need to report emissions of criteria pollutants, unless the facility is subject to the CTR applicability criteria. Facilities that meet any of the CTR applicability criteria for a given year must report emissions of both criteria pollutants and toxics.

Reporting Format

CTR and EICG Requirements:

CEIDARS transaction files are the reporting mechanism for CTR and EICG in addition to all other required regulatory reporting noted above. For CTR and EICG, the transaction related fields needed for reporting include Device (DEV/TDEV), Emissions (EMS/TEMS), Facility (FAC), Facility Risk (FAC_RISK), Process (PRO/TPRO), Stack (STK/TSTK), and the Supplemental (S_UP). Please see *Appendix A* for tables detailing the necessary transaction file structure to comply with these updated reporting requirements.

The parameters in CTR sections 93404(b)(1)(C)6 (Actual emissions unit of measure) and 93404(b)(1)(C)9 (Emission factor unit(s) of measure) do not need to be explicitly reported. See Appendix A for information on units for reporting actual emissions and emission factors. There is also a CTR reporting parameter that could not be accommodated in the existing CEIDARS structure, as noted in the table below, which will be added to facility transactions in the future.

CTR Section	CTR Data Parameter	CEIDARS Field Name
93404(a)(1)	For GHG Facilities subject to reporting under the provisions of 93401(a)(1), the six-digit facility ARB ID, as reported under the California Regulation for the Mandatory Reporting of Greenhouse Gas Emissions (MRR)	Not applicable

For point sources, districts shall report emissions using the CEIDARS 2.5 transaction format and submit all tables included in it. Please download a copy of CEIDARS 2.5 transaction format at *https://www.arb.ca.gov/app/emsinv/dist/doc/transfmt.pdf*.

For facilities reporting both criteria and toxic pollutants, districts could provide the data in one transaction file or in two separate transaction files for criteria and toxic pollutants.

- For facilities reporting both criteria and toxic pollutants in one transaction file, districts shall provide emissions in one merged submittal. Please report ammonia (NH3) and lead (Pb) emissions with both criteria and toxic pollutant codes.
- If districts report criteria pollutants and toxics data separately, please include ammonia (NH3) and lead (Pb) with criteria and toxic pollutant codes in both reports.

Important Note: Please DO NOT change any existing facility IDs from one year to the next. A consistent facility ID is important for tracking emissions data as well as avoiding duplicate facilities.

Area Source Submittal

Required Pollutants

CO, NOx, SOx, one form of PM (PM or PM10, or PM2.5), one form of organic gases (TOG or ROG or VOC), lead (Pb), and ammonia (NH3).

Optional Pollutants

Districts can provide all three forms of PM (PM, PM10 and PM2.5) and three forms of organic gases (TOG, ROG, and VOC). If districts do not provide these set of emissions, CARB will estimate them based on your organic gases and PM data.

Please report either all three forms of PM (PM, PM10, and PM2.5) or one of the three. The same applies to the organic gases, please report either all three forms of organic gases (TOG, ROG, and VOC) or one of the three. DO NOT report two out of three forms for PM and organic gases.

Ammonia and Lead

CARB has assigned pollutant codes for ammonia (NH3) and lead (Pb) for the criteria reporting side. The criteria pollutant codes are 42604 for ammonia (NH3) and 12128 for lead (Pb), and the previously used pollutant codes (7664417 and 7439921) are only valid on the toxic reporting side.

Toxics

CARB will also estimate toxics emissions for your area source categories by speciating TOG and PM data.

Emission Reporting Units

Emissions of CO, NOx, SOx, PM, and TOG must be reported in tons per year.

On the criteria reporting side, emissions of ammonia (NH3) and lead (Pb) with 42604 and 12128 pollutant codes should be reported in tons per year. Emissions of ammonia (NH3) and lead (Pb) with 7664417 and 7439921 pollutant codes should be reported in pounds per year on the toxic reporting side.

Reporting Thresholds and Frequency

Districts shall report emissions of area sources at least once every three years. Alternatively, districts may opt to update emissions of one third of area source categories annually.

Reporting Format

For area sources, districts need to submit only the "Process" and "Emission" tables included in the CEIDARS 2.5 transaction format file.

Utility Tables

Beginning this year, CEIDARS Utility Tables have been updated to comply with U.S. EPA and CTR regulations. Reporting requirements for these updated tables are outlined below. Please see the corresponding table in *Appendix B* for detailed updates.

Districts will need to start using the codes from these utility tables when reporting.

Updated Utility Tables for the Emission Transaction

POLLUTANT

- This table was updated to reflect the pollutants required to be reported under CTR and EICG.

EQSIZEUNIT

- These codes are updated with U.S. EPA's most updated "design capacity units" list.
- These codes are used for field "EQUNITC" on the device transaction file.

Updated Utility Tables for the Process Transaction

DEFPRUN

- This table was updated with U.S. EPA's most updated "emission factor denominator unit of measure" list.
- These codes are used for field "PRUNITS" on the process transaction file.

Submitting Transaction Files

CARB encourages districts to report emission inventory data to CARB electronically using the CEIDARS transaction format as it will facilitate updating the CEIDARS database.

If the district is using the Emission Inventory Module (EIM) of HARP, an output file in CEIDARS transaction format can be generated. If districts have questions about their data in EIM, please contact the district's CEIDARS Emission Inventory Liaison.

If the district is using an emission inventory database other than HARP or HARP2, the district should convert the data into the CEIDARS 2.5 transaction format and transmit the file to CARB. Please contact the district's CEIDARS Emission Inventory Liaison if assistance with this type of submittal or any other issues is needed.

Control Data

Control Factors

Districts shall develop and report control factors for each rule that has been adopted. This information is used by CARB in developing emission projections in the California Emission Projection Analysis Model (CEPAM) as well as on the CARB website. If districts have any questions regarding reporting control factors, please contact Martin Johnson at *martin.johnson@arb.ca.gov*.

Reporting Frequency

To ensure that CARB emission projections properly reflect the benefits of the district's rules, CARB encourages the district to provide control factors as soon as a rule is adopted or at least once a year as part of the district's CEIDARS submittal. If CARB does not receive control factors from the district, CARB's projections assume no emission reductions for those categories.

Reporting Format

To facilitate updating CEPAM, please use the Excel template for reporting control factor data to CARB. To obtain a copy of the reporting template, please contact Martin Johnson at *martin.johnson@arb.ca.gov*.

Growth Data

Growth Factors

Districts have the option of developing and providing their own set of growth factors for source categories under district responsibility. CARB is continuously developing and updating a default set of growth factors for each source category in the emissions inventory. This information is used by the CARB CEPAM program to develop emission projections. At a minimum, districts shall review the projected emission estimates for the district's major

source categories as found in the CEPAM as well as the growth assumptions described in CEPAM and the Area-Wide Source Methodologies. If districts have any questions regarding the default growth factors applied to the district's emissions or would like to provide the district's own growth data, please contact Martin Johnson at *martin.johnson@arb.ca.gov*.

Reporting Frequency

CARB recommends that districts review their growth data whenever they update a source category and provide the growth assumption updates as part of their annual CEIDARS submittal.

Reporting Format

To facilitate updating CEPAM, please use the Excel template for reporting growth data to CARB. To obtain a copy of the reporting template, please contact Martin Johnson at *martin.johnson@arb.ca.gov*.

Helpful Resources

CARB has developed a suite of web publications, software packages, and training programs available to assist districts in developing and submitting emissions inventory data. If login access is required and the district does not have a login, please contact your liaison. Below is a list of helpful online resources.

- EITAC Website Main Page at *https://www.arb.ca.gov/ei/drei/eitac/eitac.htm*
- CEIDARS 2.5 Data Dictionary at *https://ssl.arb.ca.gov/sslapp/emsinv/dist/doc/datadict.pdf*
- CEIDARS 2.5 Transaction Format at *https://ssl.arb.ca.gov/sslapp/emsinv/dist/doc/transfmt.pdf*
- CEIDARS Database Tools to view and update a yearly Emissions Inventory Database at *https://ssl.arb.ca.gov/sslapp/emsinv/dist/invtab/index.php#*
- CEIDARS Database Tools to generate CEIDARS 2.5 Format Batch Transactions at *https://ssl.arb.ca.gov/sslapp/emsinv/dist/trans/cei25trn.php*
- Emission Inventory Module (EIM) of the Hot Spots Analysis and Reporting Program (HARP2) at *http://www.arb.ca.gov/toxics/harp/harp.htm*

CEIDARS Emission Inventory Liaisons

The CEIDARS Emission Inventory Liaisons for all air districts can be found here: *https://ww2.arb.ca.gov/district-resources-emission-inventory-district-liaisons*. Please contact your liaison if comments or questions about the guidelines or the emission inventory process arise.

Appendix A: CTR and EICG Priority Reporting Fields

Columns in the tables below are organized as they appear in the transaction file fields.

Facility (FAC) Transaction Related Fields

(see below for Facility Risk related fields)

Regulation Section	Reporting Parameter	CEIDARS Field Name	Notes
CTR 93404(a)(5)	County	CO	
CTR 93404(a)(1)	Facility ID number	FACID	
CTR 93404(a)(5)	Air basin	AB	
CTR 93404(a)(1)	Facility Name	FSTREET	Facility's physical address
CTR 93404(a)(6)	Facility city	FCITY	
CTR 93404(a)(6)	Facility Zip code	FZIP	
CTR 93404(a)(6)	Facility Zip code extension (as applicable)	FZIPEXT	
CTR 93404(a)(4)	Facility primary SIC code	FSIC	
CTR 93404(a)(3)(A)	Facility primary NAICS code	FNAICS	
CTR 93404(a)(2)	Owner/Operator legal name	MNAME	

Regulation Section	Reporting Parameter	CEIDARS Field Name	Notes
CTR 93404(a)(2)	Owner/Operator Street address	MSTREET	Report the Owner or Operator's mailing address (if different than facility street address). If same as facility address, enter the facility address.
CTR 93404(a)(2)	Owner/Operator city	MCITY	
CTR 93404(a)(2)	Owner/Operator state	MSTATE	
CTR 93404(a)(2)	Owner/Operator zip code	MZIP	
CTR 93404(a)(2)	Owner/Operator zip code extension (as applicable)	MZIPEXT	
CAPCOA 2016 "Hot Spots" Program Facility Prioritization Guidelines; EICG section IV and V	Priority Hot Spots Risk	PRIORITY	
Health and Safety Code section 44323; Hot Spots Fee Regulation 90701(h)	Included in Industrywide	INDUSTRYWIDE	
Health and Safety Code section 44323; Hot Spots Fee Regulation 90701(h)	Is facility record for a "location only" facility	FAC_LOC_ONLY	Related to Industrywide; needed to ensure data base integrity for Industrywide facility reporting.
CTR 93404(a)(7)	Facility longitude	X_USERCOORD	
CTR 93404(a)(7)	Facility latitude	Y_USERCOORD	
EICG Section VIII.B. **CTR 93404(b)(1)(C)1.**	Year of emissions data	VINTAGE_EMS	(This field is not part of the facility transaction file. It is derived during data upload)

Facility Risk (FAC_RISK) Transaction Related Fields

Regulation Section	Reporting Parameter	CEIDARS Field Name	Notes
CTR 93404(a)(5); EICG section VII.C	County Number	CO	
CTR 93404(a)(1); EICG section VII.C	Facility ID	FACID	
CTR 93404(a)(5); EICG section VII.C	Air Basin	AB	
CTR 93404(a)(5); EICG section VII.C	District	DIS	
Hot Spots Fee Regulation 90701	Toxic Program Status	FEE_CAT	
Hot Spots Fee Regulation 90702(a)	Exemption Status and Reason	EXEMPT	
Health and Safety Code sections 44360-44364	Year of Risk Data	VINTAGE_RISK	
Health and Safety Code sections 44360-44364	Year of Prioritization Score	VINTAGE_PS	
Hot Spots Fee Regulation 90701(aa)	Is facility a small business?	SMALL_BUS	
Hot Spots Fee Regulation 90702(a)	SIC Code for facility in Fee Regulation	SIC_FEEREG	
Hot Spots Fee Regulation 90701(l),(m),(n),(p),(q),(r)	Number of SC used by facility	NUM_SCC	
EICG Section II.C.(2)(c)(iv)	Receptor Proximity, meters	PROXIMITY	Receptor proximity in meters (see CAPCOA Guidelines)

Regulation Section	Reporting Parameter	CEIDARS Field Name	Notes
CAPCOA 2016 "Hot Spots" Program Facility Prioritization Guidelines; Health and Safety Code sections 44360-44364	Cancer Priority Score, Emissions and Potency Procedure	CANCEREPP	
CAPCOA 2016 "Hot Spots" Program Facility Prioritization Guidelines; Health and Safety Code sections 44360-44364	Non-cancer Priority Score, Emissions and Potency Procedure	NONCANCEREPP	
CAPCOA 2016 "Hot Spots" Program Facility Prioritization Guidelines; Health and Safety Code sections 44360-44364	Acute Priority Score, Emissions and Potency Procedure	ACUTEEPP	
CAPCOA 2016 "Hot Spots" Program Facility Prioritization Guidelines; Health and Safety Code sections 44360-44364	Chronic Priority Score, Emissions and Potency Procedure	CHRONICEPP	
CAPCOA 2016 "Hot Spots" Program Facility Prioritization Guidelines; Health and Safety Code sections 44360-44364	Cancer Priority Score, Dispersion Adjustment Procedure	CANCERDAP	
CAPCOA 2016 "Hot Spots" Program Facility Prioritization Guidelines; Health and Safety Code sections 44360-44364	Non-cancer Priority Score, Dispersion Adjustment Procedure	NONCANCERDAP	
CAPCOA 2016 "Hot Spots" Program Facility Prioritization Guidelines	Acute Priority Score, Dispersion Adjustment Procedure	ACUTEDAP	
CAPCOA 2016 "Hot Spots" Program Facility Prioritization Guidelines; Health and Safety Code sections 44360-44364	Chronic Priority Score, Dispersion Adjustment Procedure	CHRONICDAP	

Regulation Section	Reporting Parameter	CEIDARS Field Name	Notes
CAPCOA 2016 "Hot Spots" Program Facility Prioritization Guidelines; Health and Safety Code sections 44360-44364; EICG sections IV and V	Total Priority Score	TS	
CAPCOA 2016 "Hot Spots" Program Facility Prioritization Guidelines	Priority Multiplier	PRIORITYMULTIPLIER	
Hot Spots Fee Regulation 90701(o)(1),(s),(w); Health and Safety Code sections 44360- 44364; EICG sections IV and V	Health Risk Assessment Cancer Risk	HRA_CAN	
Hot Spots Fee Regulation 90701(o)(2); Health and Safety Code sections 44360-44364; EICG sections IV and V	Chronic Hazard Index	CHRONIC_HI	
Hot Spots Fee Regulation 90701(o)(2); Health and Safety Code sections 44360-44364; EICG sections IV and V	Acute Hazard Index	ACUTE_HI	

Stack (STK) Transaction Related Fields (TSTK for Toxics Reporting)

Regulation Section	Reporting Parameter	CEIDARS Field Name	Notes
CTR 93404(b)(1)(D)3.a.	Stack ID	STK	Only required for point source, leave it blank if not applicable
CTR 93404(b)(1)(D)3.b.	Stack Name	STKNAME	Only required for point source, leave it blank if not applicable
CTR 93404(b)(1)(D)3.c.	Stack Height (Feet)	STKHT	Only required for point source, leave it blank if not applicable

Regulation Section	Reporting Parameter	CEIDARS Field Name	Notes
CTR 93404(b)(1)(D)3.e.	Stack Diameter at Exit (feet)	STKDIAM	Only required for point source, leave it blank if not applicable
CTR 93404(b)(1)(D)3.c.	Actual Gas Temp at Exit (Deg F)	GT	Only required for point source, leave it blank if not applicable
CTR 93404(b)(1)(D)3.g.	Actual Gas Flow (CFM)	GF	Only required for point source, leave it blank if not applicable
CTR 93404(b)(1)(D)3.f.	Actual Gas Velocity at Exit (Ft/min)	GV	Only required for point source, leave it blank if not applicable
CTR 93404(b)(1)(D)2.	X (East) User Coordinate in COORD_SYS Units	X_USERCOORD	If the release location type is "volume (i.e., fugitive)", then individual equipment components may be aggregated for the purposes of reporting if they are geographically located in a similar area and have similar release parameters and/or constituents.
CTR 93404(b)(1)(D)2.	Y (North) User Coordinate in COORD_SYS Units	Y_USERCOORD	If the release location type is "volume (i.e., fugitive)", then individual equipment components may be aggregated for the purposes of reporting if they are geographically located in a similar area and have similar release parameters and/or constituents.

Regulation Section	Reporting Parameter	CEIDARS Field Name	Notes
CTR 93404(b)(1)(D)1. and 93404(b)(1)(D)3.h.	Type of Release, as specified in ISC: POINT, VOLUME, AREA, or OPENPIT	SRCTYP	

Device (DEV) Transaction Related Fields (TDEV for Toxics Reporting)

Regulation Section	Reporting Parameter	CEIDARS Field Name	Notes
CTR 93404(b)(1)(A)1.	Device ID	DEV	
CTR 93404(b)(1)(A)2.	Local Name of this Device	DEVNM	
CTR 93404(b)(1)(A)4.	Local Permit ID	PERID	
CTR 93404(b)(1)(A)5.	Equipment Size	EQSIZE	Use the codes listed in the *EQSIZEUNIT* utility table
CTR 93404(b)(1)(A)5.	Equipment Size Units Code	EQUNITC	Use the codes listed in the *EQSIZEUNIT* utility table
CTR 93404(b)(1)(A)3.	Equipment Type Code	EQTYPEC	Use the codes listed in the *EQTYPE* utility table

Process (PRO) Transaction Related Fields (TPRO for Toxics Reporting)

Regulation Section	Reporting Parameter	CEIDARS Field Name	Notes
CTR 93404(b)(1)(B)3.	Device ID	DEV	
CTR 93404(b)(1)(B)1.	Process ID	PROID	
CTR 93404(b)(1)(B)2.	Process Description	PRDESC	

CTR 93404(b)(1)(B)4.	SCC or EIC	SCC	
CTR 93404(a)(4)	Standard Industrial Classification or EIC	SIC	
CTR 93404(a)(3)(B)	NAICS Code	NAICS	
CTR 93404(b)(1)(B)5.	Process Rate in SCC Units	PR	
CTR 93404(b)(1)(B)6.	Process Rate Unit Code	PRUNITS	Use the codes listed in the *DEFPRUN* utility table. If emissions are quantified using process rate and an emission factor, the use of default SCC units to quantify emissions is preferred, however report the units of measure that are actually used to quantify emissions regardless of whether the default SCC units, or other units of measure, were used.
CTR 93404(b)(1)(B)7.	Process Rate Origin Code	PRORIG	Use the codes listed in the *DEFPRORIG* utility table

Emission (EMS) Transaction Related Fields (TEMS for Toxics Reporting)

Regulation Section	Reporting Parameter	CEIDARS Field Name	Notes
CTR 93404(b)(1)(C)2.	Device ID	DEV	
CTR 93404(b)(1)(C)3.	Process ID	PROID	
CTR 93404(b)(1)(C)4.	Pollutant Code	POL	

Regulation Section	Reporting Parameter	CEIDARS Field Name	Notes
CTR 93404(b)(1)(C)11.	Control Efficiency (Percent)	CNTLEFF	For CTR this is only required if control efficiency is used to calculate emissions.
CTR 93404(b)(1)(C)7.	Emission Factor (Lbs/SCC Units)	EMFACT	Report emission factor in units of "pounds per PRUNITS (process rate unit)" for toxics and in units of "tons per PRUNITS" for criteria pollutants (for each pollutant emission result reported). EMFACT and EMORIG can be left blank, if emissions are calculated using other methods (CEMS, mass balance, etc.).
CTR 93404(b)(1)(C)8.	Emission Factor Origin Code	EMORIG	EMFACT and EMORIG can be left blank, if emissions are calculated using other methods (CEMS, mass balance, etc.)
CTR 93404(b)(1)(C)5.	Annual Emissions	EMS	Emissions should be reported in pounds per year for toxics, tons per year for criteria pollutants, and Curies per year for radionuclides.
EICG Section VIII.B.(2)	Maximum Hourly Emissions	HRMAXEMS	For EICG reporting for the TEMS Transaction, the MaxHrEMS should be reported in pounds per hour for toxics (except radionuclides, which should be reported in milliCuries per hour)

Regulation Section	Reporting Parameter	CEIDARS Field Name	Notes
CTR 93404(b)(1)(C)10.	Emission Calculation Method Code	METH	

Supplemental (SUP) Transaction Related Fields

Regulation Section	Reporting Parameter	CEIDARS Field Name	Notes
CTR 93404(b)(1)(C)12.	Is this Substance Used?	USED	
CTR 93404(b)(1)(C)12.	Is this Substance Present?	PRODUCED	
CTR 93404(b)(1)(C)12.	Is this Substance Otherwise Present?	PRESENT	
CTR 93404(b)(1)(C)12.	How Substance Is Otherwise Present	HOW_PRESENT	Enter amount and units for substances reported as used, produced, or present.

Appendix B: Updated Utility Tables

EQSIZEUNIT

EQUNITC	EQUNITS	EQUNITDESC
1	BBL	BARRELS
3	E3LB/HR	1000 POUNDS PER HOUR
4	E6BTU/HR	MILLION BTU PER HOUR
5	GAL	GALLONS
6	HP	HORSEPOWER
7	KW	KILOWATTS
8	MW	MEGAWATTS
9	TON/DAY	TONS PER DAY

DEFPRUN

PRUNITS	PRUN	PRUNDESC	LAST_INV_YR
1	ACRE	ACRES	
2	ACRE-DAY	ACRE-DAYS	
3	ACRE-MONTH	ACRE-MONTHS	
4	ACRE-YR	ACRE-YEARS	
5	AMP-HR	AMPERE-HOURS	
6	BALE	BALES	
7	BBL	BARRELS	
8	BBL50GAL	BARRELS (50 GALLON)	

PRUNITS	PRUN	PRUNDESC	LAST_INV_YR
9	BDFT	BOARD FEET	
10	BTU	BRITISH THERMAL UNITS	
11	BUSHEL	BUSHELS	
12	DAY	DAY	
13	E2BBL	100 BARRELS	
14	E2LB	100 POUNDS	
15	E2TON	100 TONS	
16	E3AMP-HR	1000 AMPERE-HOURS	
17	E3BBL	1000 BARRELS	
18	E3BBL31G	1000 BARRELS (31 GALLON)	
19	E3BDFT	1000 BOARD FEET	
20	E3BTU	1000 BTUS	2005
21	E3BU	1000 BUSHELS	
22	E3EACH	1000 EACH	
23	E3FT	1000 FEET	
24	E3FT2	1000 SQUARE FEET	
25	E3FT3	1000 CUBIC FEET	
26	E3FT3S	1000 STANDARD CUBIC FEET	
27	E3GAL	1000 GALLONS	

PRUNITS	PRUN	PRUNDESC	LAST_INV_YR
28	E3HP-HR	1000 HORSEPOWER-HOURS	
29	E3LB	1000 POUNDS	
30	E3MILE	1000 MILES	
31	E3TON	1000 TONS	
32	E3YD3	1000 CUBIC YARDS	
33	E4FT2	10,000 SQUARE FEET	
34	E5HP-HR	100,000 HORSEPOWER-HOURS	
35	E6BDFT	MILLION BOARD FEET	
36	E6BTU	MILLION BTUS	
37	E6EACH	MILLION EACH	
38	E6FT2	MILLION SQUARE FEET	
39	E6FT3	MILLION CUBIC FEET	
40	E6FT3S	MILLION STANDARD CUBIC FEET	
41	E6GAL	MILLION GALLONS	
42	E6LB	MILLION POUNDS	
43	E6MILE	MILLION MILES	
44	E6TON	MILLION TONS	
45	EACH	EACH	
46	FT	FEET	

PRUNITS	PRUN	PRUNDESC	LAST_INV_YR
47	FT2	SQUARE FEET	
48	FT3	CUBIC FEET	
49	FT3S	STANDARD CUBIC FEET	
50	FT3S/M-Y	SCFM-YEAR	
51	FT3SD	DRY STANDARD CUBIC FEET	
52	GAL	GALLONS	
53	GPM-YR	GALLON PER MINUTE-YEAR	
54	HP-HR	HORSEPOWER-HOURS	
55	HR	HOUR	
56	KG	KILOGRAMS	
57	KW-HR	KILOWATT-HOUR	
58	LB	POUNDS	
59	M3	CUBIC METERS	
60	MEGAGRAM	MEGAGRAMS	
61	MGTM	MILLION GROSS TON-MILE	
62	MILE	MILES	
63	MMBTU	MILLION BTUS	2005
64	MW-HR	MEGAWATT-HOUR	
65	THERM	100,000 BTUS	

PRUNITS	PRUN	PRUNDESC	LAST_INV_YR
66	TON	TONS	
67	TON-MILE	TON-MILES	
68	YD2	SQUARE YARDS	
69	YD3	CUBIC YARDS	
70	YD3-MILE	CUBIC YARD-MILES	
71	E3FT3SD	THOUSAND DRY STANDARD CUBIC FEET	
72	E6FT3SD	MILLION DRY STANDARD CUBIC FEET	