

2005 Emission Inventory Guidelines

(For District Staff)

California Air Resources Board
Planning and Technical Support Division
March 2006

What's New?

- **No Major Changes from the final 2004 Guidelines:** With the exception of the timeline being updated to 2006-2007, the guidelines are unchanged.

What are the legal mandates that require ARB to request emissions inventory data from my District?

The state and federal legal mandates that require us to compile the statewide emission inventory include:

- State Health and Safety Code
- California Clean Air Act (CCAA) of 1988
- State Air Toxics "Hot Spots" Information and Assessment Act (AB2588) of 1988
- State Atmospheric Acidity Protection Program (AB2930) of 1988
- Federal Clean Air Act Amendments (CAAA) of 1990
- Federal Consolidated Emission Reporting Rule (CERR) of 2002

A more complete description of these mandates is available on the ARB Emission Inventory District Assistance website at:

<http://www.arb.ca.gov/ei/drei/maintain/legalrequirements.pdf>.

When should my District report emissions inventory data to ARB?

You are requested to report emissions data for your district within 10 months of the end of the inventory year. **The deadline for submitting your 2005 inventory year data to ARB is November 1, 2006.** We will publish your point source data on our website by February 2007. We will also submit your data to U.S. EPA by June 1, 2007 for the National Emission Inventory (NEI) as required by the Consolidated Emissions Reporting Rule (CERR).

What are other important inventory milestones for my District?

The table below lists the most important inventory milestones for the 2005 reporting year. District deadlines are shown in bold.

Due Date	Task	Responsibility
March 2006	Post <u>2005 Emission Inventory Guidelines</u> to ARB website	ARB
April 2006	Create 2005 CEIDARS database	ARB
November 1, 2006	Submit point source updates and corrections to the ARB.	District
November 1, 2006	Submit area source updates grown and controlled to 2005 to the ARB.	District
February 15, 2007	Complete update of 2005 CEIDARS for submittals received as of November 1, 2006.	ARB
February 15 – April 30, 2007	Review and QA period for the 2005 inventory	ARB/District
June 1, 2007	Submit 2005 inventory to U.S. EPA for the National Emission Inventory (NEI).	ARB
August 1, 2007	Freeze the 2004 inventory for publication in <u>The 2007 California Almanac of Emissions and Air Quality</u>	ARB
January 2008	Publish 2008 Almanac.	ARB

What data does my District need to report to ARB?

We take responsibility for estimating emissions from on-road mobile and biogenic (non-anthropogenic sources) and work cooperatively with you in developing emission estimates for aggregated point sources, areawide sources, and off-road mobile sources. Recently, we have also developed statewide emission estimates for locomotives, ships, harborcraft, and stationary and portable agricultural engines. With the exception of on-road mobile sources, you have the option of reporting emissions for these source categories instead of using the default emissions estimates we develop. You are responsible for reporting emissions from point sources as well as those area source categories considered as district categories. A list of area source categories is available on the web at: <http://www.arb.ca.gov/ei/areasrc/lstareasccats306.pdf>.

Specific reporting requirements are provided below:

a. Point Sources:

- (i) **Pollutants:** You must report emissions of the following criteria pollutants: TOG, NO_x, SO_x, CO, PM, and NH₃. You have the option of reporting ROG, PM₁₀, and PM_{2.5}. If you do not provide emissions for these three pollutants, we will speciate them based upon your TOG and PM data. You must also report

emissions of those toxics pollutants that are published in the Air Toxics “Hot Spots” Program Emission Inventory Criteria and Guidelines.

- (ii) **Reporting Thresholds and Frequency:** You should report on an annual basis criteria and toxics emissions for all point sources in your district that emit greater than or equal to 10 tons/year of any of the criteria pollutants listed above. NOTE: The federal requirements for CERR may require a lower reporting threshold depending upon the attainment status of your district. You should also report every 3 years criteria emissions for those facilities in your district that emit less than 10 tons per year. The reporting schedule and thresholds for point sources are provided below:

Source Type	Reporting Year				
	2002	2003	2004	2005	2006
Point Sources = or > 10 tons/year	X	X	X	X	X
Point Sources < 10 tons/year	X			X	

In addition, you should report on an annual basis the toxic emissions from the following types of facilities:

- High-risk facilities (those with a risk of 1 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).
- Facilities required to report under AB2588

- (iii) **Reporting Format:** To facilitate updating of the CEIDARS database, you should report emissions using the CEIDARS 2.5 transaction format. For point sources, you should submit all tables included in the transaction format file. For facilities reporting both criteria and toxic pollutants, you should provide emissions in one merged submittal. If a facility is not in the toxic program, you do not need to report toxic emissions. Likewise, if a facility’s only reason for reporting is to meet toxics reporting requirements, you do not need to report criteria emissions.

b. Area Sources:

- (i) **Pollutants:** You should report emissions of the following criteria pollutants: TOG, NO_x, SO_x, CO, PM, and NH₃. You have the option of reporting ROG, PM₁₀, and PM_{2.5}. If you do not provide emissions for these three pollutants, we will speciate them based upon your TOG and PM data. We will estimate the toxics emissions for your area source categories by speciating your criteria emissions data.

- (ii) **Reporting Thresholds and Frequency:** You should update your area sources at least every three years (see <10 tpy point source schedule above) or one third of your categories annually.
- (iii) **Reporting Format:** To facilitate updating of the CEIDARS database, you should report emissions using the CEIDARS 2.5 transaction format available on the ARB Emission Inventory District Assistance website. For area sources, you need to submit only the “Process” and “Emission” tables included in the transaction format file.

c. Control Data:

- (i) **Control Factors:** You should develop and report control factors for each rule that has been adopted by your district. This information is used by ARB in developing emission projections that are published in the annual Almanac of Emissions and Air Quality, as well as on the ARB website.
- (ii) **Reporting Frequency:** To ensure that our emission projections properly reflect the benefits of your rules, we suggest providing control factors as soon as a rule is adopted or at least once a year as part of your CEIDARS submittal. If we do not receive control factors from your district, our projections assume no emission reductions for those categories.
- (iii) **Reporting Format:** To facilitate updating of the California Emission Forecasting System (CEFS), we have developed an Excel template for reporting of control factor data to ARB. To obtain a copy of the reporting template, please contact Martin Johnson at (916) 324-5783 or mjohnson@arb.ca.gov.

d. Growth Data:

- (i) **Growth Factors:** ARB has developed a default set of growth data for each source category in your district. This information is used by the ARB CEFS program to develop emission projections for your district that are published in the annual Almanac of Emissions and Air Quality as well as on the ARB website. At a minimum, you should review the default growth assumptions for the most significant source categories in your district. You have the option of developing and providing your own set of growth factors for all district responsibility source categories.
- (ii) **Reporting Frequency:** We suggest you review your growth data whenever you update a source category and provide the growth assumption updates as part of your annual CEIDARS submittal.

- (iii) **Reporting Format:** To facilitate updating of CEFS, we have developed an Excel template for reporting of growth data to ARB. To obtain a copy of the reporting template, please contact Martin Johnson at (916) 324-5783 or mjohnson@arb.ca.gov.

Should my District report greenhouse gas emissions to ARB?

We have modified the CEIDARS database to allow the reporting of the following greenhouse gas pollutants (GHGs): CO₂, CH₄, N₂O, SF₆ (sulfur hexafluoride), PFCs (perfluorocarbons), and HFCs (hydrofluorocarbons). Executive Order S-3-05, signed by Governor Schwarzenegger on June 1, 2005, calls for a reduction in greenhouse gases. In support of the Governor's Executive Order, and as part of their annual emissions reporting to ARB, districts are encouraged to provide greenhouse gas emissions where available. Similar efforts to collect GHG information are currently underway by the California Energy Commission (CEC) and the California Climate Action Registry. District GHG estimates will be used where possible in place of default estimates to be developed by the ARB. Additional information to assist with reporting of GHGs will be provided through the ARB District Resources website:

<http://www.arb.ca.gov/ei/drei/drei.htm>.

How should my District report data to ARB?

We encourage your district to report your emission inventory data to us electronically using the CEIDARS 2.5 transaction format as it will facilitate updating of the CEIDARS database.

If your district is using HARP, the software program allows you to easily generate an output file in CEIDARS transaction format. The most recent version of HARP can be downloaded from the ARB website (<http://www.arb.ca.gov/toxics/harp/harp.htm>) or a CD can be obtained by calling your CEIDARS Emission Inventory Liaison (see the ARB District Resources website <http://www.arb.ca.gov/ei/district/districtresources.htm> for a list of the liaisons and their contact information).

If your district is using an emission inventory database other than HARP, you should convert your data into CEIDARS 2.5 transaction format and FTP the file to the ARB. Please contact your CEIDARS Liaison if you need assistance with this type of submittal.

What kind of QA process does ARB have to ensure my District's data are correct?

ARB has a number of computerized quality assurance (QA) checks that are run to ensure the data you submit are accurate and reasonable. Following your data submittal in September, we will run these QA tests to ensure your data are valid. We will also post your data submittal to our website for your review and correction prior to public release. The QA tests are also available for district staff to use through the ARB District Resources website.

What happens if ARB doesn't get my District's data?

If you do not submit data or submit incomplete data for the 2004 reporting year, we will rollover data from the previous reporting year. This data will be reported on our web site, in the ARB Almanac of Air Quality and Emissions, and to the U.S. EPA as being 2004 vintage. We encourage you to provide us with timely and complete data submittals.

What tools and assistance are available from ARB to help my District prepare and report emissions data?

We have developed a suite of publications, software packages, and training programs to assist your district in developing and submitting emissions inventory data to us. These documents and tools are available through the ARB Emission Inventory District Assistance website.

The HARP software program, which includes the CEIDARS-Lite emission inventory module, can be downloaded from our website (<http://www.arb.ca.gov/toxics/harp/harp.htm>) or a CD containing the program can be obtained by calling your CEIDARS Emission Inventory Liaison.

How will the emissions data submitted by my District be used?

We will use your emission inventory data for many different programs, including:

- 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
- Publication in the annual Almanac of Air Quality and Emissions

In addition, we will be submitting your emissions data on an annual basis to the U.S. EPA for the National Emission Inventory (NEI) as required by the Consolidated Emission Reporting Rule (CERR). We will also make your data available to the public through our website and tools such as the Community Health Air Pollution Information System (CHAPIS).