

2007 Emission Inventory Guidelines

(For Air District Staff)

California Air Resources Board

Planning and Technical Support Division

August 2008

Development of 2007 Emission Inventory

The Air Resources Board (ARB) staff is responsible for developing an annual statewide criteria pollutant emission inventory for 2007 based on data ARB develops and data submitted by the air pollution control districts.

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
- Performing neighborhood-level health risk assessments

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).

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, area-wide sources, and off-road mobile sources. Recently, we have also developed statewide emission estimates for locomotives, ships, harbor craft, 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>

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 2007 inventory year data to ARB is November 4, 2008.** We will publish your point source data on our website by February 2009. We will also submit your data to U.S. EPA for the National Emission Inventory (NEI) as required by the Consolidated Emissions Reporting Rule (CERR).

What is the timeline for reporting our inventory?

The table below lists the most important inventory milestones for the 2006 reporting year. District deadlines are shown in bold.

Due Date	Task	Responsibility
July 2008	Create 2007 CEIDARS database	ARB
August 2008	Post 2007 Emission Inventory Guidelines to ARB website	ARB
September 22, 2008	ARB Emission Inventory Workshop	ARB
November 4, 2008	Submit 2007 point source updates and corrections to the ARB.	District
November 4, 2008	Submit area source updates grown and controlled to 2007 to the ARB.	District
February 16, 2009	Complete update of 2007 CEIDARS for submittals received as of November 4, 2008.	ARB
February 16 – April 30, 2009	Review and QA period for the 2007 inventory	ARB/District
June 1, 2009 (tentative)	Submit 2007 inventory to U.S. EPA for the National Emission Inventory (NEI).	ARB
May 4, 2009	Freeze the 2007 inventory for publication in the 2010 <i>California Almanac of Emissions and Air Quality</i>	ARB
January 2010	Publish 2010 <i>California Almanac of Emissions and Air Quality</i>	ARB

What are the reporting requirements and thresholds?

a. Point Sources:

- (i) **Pollutants:** You must report emissions of the following criteria pollutants: TOG, NOx, SOx, CO, and PM. You must also report emissions of all toxics that are

required to be reported in Appendix A of the AB2588 Air Toxics “Hot Spots” Program Emission Inventory Criteria and Guidelines.

Note: You have the option of reporting ROG, VOC, PM10, and PM2.5. If you do not provide emissions for these four pollutants, we will speciate them based upon your TOG and PM data.

You must report NH3 emissions along with the criteria pollutants listed above. NH3 emissions must be reported in pounds per year.

Note: If you report criteria and toxics data together (merged transaction) and you report NH3 as a toxic, please do not report NH3 with criteria pollutants. However, if the facility does not currently report toxics, please report NH3 (in pounds per year) with the criteria pollutants listed above.

If you report criteria and toxics data separately please include NH3 in both reports.

(ii) Reporting Thresholds and Frequency: You should report criteria and toxics emissions on an annual basis 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 criteria emissions every three years 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				
	2003	2004	2005	2006	2007
Point Sources = or > 10 tons/year	X	X	X	X	X
Point Sources < 10 tons/year			X		

In addition, you should report the toxic emissions on an annual basis 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 the AB2588 Air Toxics “Hot Spots” Program.

(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, and PM. We will estimate the toxics emissions for your area source categories by speciating your criteria emissions data.

Note: You have the option of reporting ROG, VOC, PM₁₀, and PM_{2.5}. If you do not provide emissions for these four pollutants, we will speciate them based upon your TOG and PM data. .

You must report NH₃ emissions along with the criteria pollutants listed above. Please report NH₃ emissions in pounds per year.

- (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 *California 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 *California 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 the California Emission Forecast System, 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.

How should my District report data to ARB?

We encourage your District to report 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 the Hot Spots Analysis and Reporting Program (HARP), you can 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/drei/maintain/districtliaisons.htm> for a list of the liaisons and their contact information or see the table at the end of these guidelines).

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 November, we will run these QA tests to ensure your data are valid. The QA tests are also available for district staff to use through the ARB District Resources website.

Why do I need to submit data and what happens if ARB doesn't get my District's data?

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>.

Emission inventory data will be reported on our website, in the *California Almanac of Air Quality and Emissions*, and to the U.S. EPA as being 2007 or earlier 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.

Please note that we have scheduled an Emission Inventory Workshop for September 22, 2008 in Sacramento. You may attend in person or participate via webcast. Information regarding the workshop will be made available on 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.

Who is my inventory liaison?

The table listed below identifies the ARB emission inventory liaison for your District. If you have comments or questions about these guidelines or the emission inventory process please give them a call.

AGENCY	ARB CONTACT	TELEPHONE	E-MAIL
Amador	Darryl Look	(916) 322-2594	dlook@arb.ca.gov
Antelope Valley	Darryl Look	(916) 322-2594	dlook@arb.ca.gov
Bay Area	Vincent Agusiegbe	(916) 322-7078	vagusieg@arb.ca.gov
Butte	Anna Komorniczak	(916) 327-8170	akomorni@arb.ca.gov
Calaveras	Darryl Look	(916) 322-2594	dlook@arb.ca.gov
Colusa	Anna Komorniczak	(916) 327-8170	akomorni@arb.ca.gov
El Dorado	Anna Komorniczak	(916) 327-8170	akomorni@arb.ca.gov
Feather River	Anna Komorniczak	(916) 327-8170	akomorni@arb.ca.gov
Glenn	Anna Komorniczak	(916) 327-8170	akomorni@arb.ca.gov
Great Basin Unified	Darryl Look	(916) 322-2594	dlook@arb.ca.gov
Imperial	Darryl Look	(916) 322-2594	dlook@arb.ca.gov
Kern	Vivian Lerch	(916) 324-4478	vlersch@arb.ca.gov
Lake	Vincent Agusiegbe	(916) 322-7078	vagusieg@arb.ca.gov
Lassen	Vincent Agusiegbe	(916) 322-7078	vagusieg@arb.ca.gov
Mariposa	Darryl Look	(916) 322-2594	dlook@arb.ca.gov
Mendocino	Vincent Agusiegbe	(916) 322-7078	vagusieg@arb.ca.gov
Modoc	Vincent Agusiegbe	(916) 322-7078	vagusieg@arb.ca.gov
Mojave	Darryl Look	(916) 322-2594	dlook@arb.ca.gov

Monterey Bay Unified	Vivian Lerch	(916) 324-4478	vlersch@arb.ca.gov
North Coast Unified	Vincent Agusiegbe	(916) 322-7078	vagusieg@arb.ca.gov
Northern Sierra	Anna Komorniczak	(916) 327-8170	akomorni@arb.ca.gov
Northern Sonoma	Vincent Agusiegbe	(916) 322-7078	vagusieg@arb.ca.gov
Placer	Anna Komorniczak	(916) 327-8170	akomorni@arb.ca.gov
Sacramento Metro	Anna Komorniczak	(916) 327-8170	akomorni@arb.ca.gov
San Diego	Monique Davis	(916) 322-7304	mdavis@arb.ca.gov
San Joaquin Valley	Vivian Lerch	(916) 324-4478	vlersch@arb.ca.gov
San Luis Obispo	Vivian Lerch	(916) 324-4478	vlersch@arb.ca.gov
Santa Barbara	Andy Delao	(916) 324-7169	adelao@arb.ca.gov
Shasta	Vincent Agusiegbe	(916) 322-7078	vagusieg@arb.ca.gov
Siskiyou	Vincent Agusiegbe	(916) 322-7078	vagusieg@arb.ca.gov
South Coast	Vijay Bhargava	(916) 322-7148	vbhargav@arb.ca.gov
Tehama	Anna Komorniczak	(916) 327-8170	akomorni@arb.ca.gov
Tuolumne	Darryl Look	(916) 322-2594	dlook@arb.ca.gov
Ventura	Vijay Bhargava	(916) 322-7148	vbhargav@arb.ca.gov
Yolo-Solano	Anna Komorniczak	(916) 327-8170	akomorni@arb.ca.gov
U.S. EPA	Chris Nguyen	(916) 322-7141	tnguyen@arb.ca.gov