

A 96-56
V-B-10

Area Source Sector:
Quantification and Reporting of Emissions
for the OTAG NO_x SIP Call
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The group identified two questions that should be answered before the process continues.

1. What is the definition of an area source (e.g., what is the emissions cutoff threshold between a point source and an area source)?
2. Is this inventory only for NO_x or are other ozone related pollutants to be included.

Question 1

1. How are the emissions estimates generated?

* What are the information sources?

Specific data elements and their sources used to compile an area source inventory are:

- *emission factors: EPA AP-42*
- *fuel loading: state wide fuel use from other state agency*
- *SIC: published sources*
- *county populations: state data*

A state-wide inventory is developed using fuel use information and emission factors. Point source estimates are subtracted from the total state estimate to derive area source estimates.

* How often is the information updated?

Area source emissions are updated every 3 years.

* What is the lag time between the ozone season that the information represents, and when the information is available?

An area source inventory is available approximately 2 years after the end of the calendar year. The process includes the following steps. First, activity information used to calculate area emissions is obtained by the State environmental agency from other State agencies. It takes approximately one year for this information to become available. Then, the State environmental agency takes another year to compile all necessary data, perform calculations, and check the quality of the data.



- * How reliable is the information (measurements, estimates, etc.)?

The precision and bias of the estimates are unknown. Data at the State level is more reliable than at the county level. State estimates of fuel use and population are relatively accurate. Different emission factors are used for different source categories; the reliability and accuracy of emission factors varies. For example, point source emission estimates subtracted from overall state estimates are more accurate than total state top down estimate.

- * typically what are the State and EPA roles in generating the information

The States collect activity information and the EPA provides emission factors. EPA Regional Offices review State data.

Question 2

2. What are the existing reporting requirements for the sector and how might they be used for tracking the SIP call budget? Do the current reporting requirements apply Statewide or just in certain designations/classifications? What other emissions information do States routinely gather?

The States do not have reporting requirement for area sources. Currently, States generate all area source emission estimates. The States gather point source data so they can subtract those numbers from State area estimates.

Question 3

3. What are some workable options for reporting requirements for the sector?

- * frequency (annual, periodic)

Periodic reporting is optimal because it is too costly to do State-wide, county-level inventory more frequently than on a 3 year cycle. The amount that emissions change from year-to-year does not justify more frequent reporting. The accuracy of inventory methods will not allow small changes in emissions to be detected.

- * emissions vs. indicators

Some of the activity data used to estimate area emissions could be used as indicators, but most of the work is concentrated on collecting and manipulating activity data. Little savings would result in not estimating emissions.

- * State vs. EPA role

The States collect data, estimate emissions, and report the information to EPA. EPA reviews data and provides storage.

Question 4

4. Under the Consolidated Emission Inventory Reporting Rule (to be proposed), States will be required to submit Statewide periodic inventories on 3-year cycles (e.g., 2002, 2005, 2008..). To have an inventory that will represent the NOx budget target year, presumably the 2005 inventory would need to be adjusted to represent 2007. What is your estimate of when this 2007 adjusted inventory could be ready for the specific sector?

A 2005 inventory will be available in 2007. The 2005 data will have to be grown to 2007.

Question 5

5. What would you recommend as the reporting requirements for the sector for:

A 2005 inventory grown to 2007 will be available in 2007.

Question 6

6. What would you recommend as the reporting format?

We recommend that the reporting format should be the same as described in the current draft Consolidated Emissions Reporting Rule.

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