

## **SIP Inventories Presented Here**

The State Implementation Plans are founded upon quantitative demonstrations of attainment. These demonstrations rely on air quality modeling and depend, in large part, on a series of emissions inventories prepared to represent baseline conditions as well as various projections at certain points in the future.

As SIP development takes place, the inventories will be posted here so that interested parties may examine the information that is being considered by DAQ. The information is presented in varying levels of detail.

### *Source Category Table*

At the most basic level, emissions are tabulated for each source category so that one can see how much of each pollutant is emitted by each category of sources (point sources, area sources, and mobile sources, both on and off road).

### *Detailed Workbooks*

In order to add more detail, the following workbooks have been provided to reveal, within each category, where the emissions are really coming from. This is useful for considering where perhaps emission control measures would be most beneficial. The gross numbers are broken down using Source Classification Codes (SCCs), which are employed at various levels of increasing detail. The workbooks have been prepared to allow the user to look at the emissions within several of these levels. Specifically, each workbook includes five tabs that offer increasing levels of detail/disaggregation when moving from left to right. One will see that different levels of classification are more useful in assessing emissions from one category or another.

### *Point Source Table*

A shortcoming of the SCC categorization, when looking at point source emissions, is that all these sources include many of the same SCCs and so ownership of the emissions is lost. Because this ownership is of interest to many of those following the SIP development process, we have also presented a list of each of the point sources in each of the nonattainment areas, along with their emissions.

### **There are some important things to be kept in mind when reviewing this information.**

- Units of measurement are different in each workbook and each of the two tables. Point source emissions are presented in tons per year, while the workbooks and the source category table report emissions in terms of tons per day. Furthermore, the source category table uses tons per average episode day, but the emissions in the workbooks represent a particular day within the modeled episode; a particular winter weekday. Emissions on weekends differ from weekdays, and there are subtle variations between emissions on M – F as well.

- **Geography:** Obviously the emissions from each point source are discretely located within their respective nonattainment areas, but when comparing the emissions shown in the source category table with those in the workbooks, one should recognize that the source category table is populated with output from the spatially gridded emissions model which is able to recognize the exact boundary of each nonattainment area. By contrast, emissions in the workbooks represent a compilation of county-wide emissions belonging to any of the counties that, in whole or in part, make up each nonattainment area. The nonattainment area maps presented elsewhere on the website will illustrate the differences.
- **Seasonality:** Utah's problem with PM<sub>2.5</sub> is a wintertime problem. As such, some of the emissions have been adjusted to reflect conditions more typical of the winter season. Any comparison with other emission inventories presented on DAQ's website should take this into account.
- **Point Sources** are also defined somewhat differently for treatment in a SIP inventory as they otherwise would be. Any comparison with other emission inventories presented on DAQ's website should take this into account.