

## **SOURCE INVENTORY**

### **CATEGORY #49**

#### **GAS PRODUCTION**

#### **1999 EMISSIONS**

##### *Introduction*

Fugitive emissions at natural gas production fields occur from process equipment whenever components in the liquid or gas stream leak. There are several potential sources of leaks, such as valves, flanges, pumps, compressors, and pressure relief valves (PRVs). These emissions are difficult to predict and occur randomly, represent area sources.

##### *Methodology*

Gas production data by county for year 1999 was taken from California's Department of Conservation, Division of Oil, Gas, and Geothermal Resources report. Emission factor used was as follows:

$$\text{E.F.} = 134 \text{ lb}/10^3 \text{ mcf of natural gas processed}$$

The county fraction is apportioned according to the amount of gas produced per the Department of Conservation's report. Monthly and daily factors are assumed to be uniform.

The District also permits certain units at gas production facilities. These units count as point sources. Point source emissions were negligible this Base Year.

#### **TRENDS**

##### *History*

Emissions have generally increased with increase in activity. Natural gas production in California has been on the increase in recent years. Past year emissions were determined by using actual gas production rate for each one of the nine counties taken from the Department of Conservation report.

##### *Growth*

Demand for natural in California and the nation has been growing at approximately 1.5% per year and is expected to remain at that level. Gas use is up due to its competitive price and environmental attractiveness. Based on recent data, gas production in the district is expected to grow approximately 2% per year.

##### *Control*

The District adopted Regulation 8, Rule 37 on March 20, 1985 to control the amount of emissions at natural gas and crude oil production facilities. This rule has a control of 80% on reactive organic compounds, with a rule effectiveness of 72% reached by 1989.