Emission Inventory Overview

Types of Inventories

- Annual Average
- Planning
  - Summer Ozone Planning
  - Winter CO Planning
- Forecasted
- Gridded / Modeling

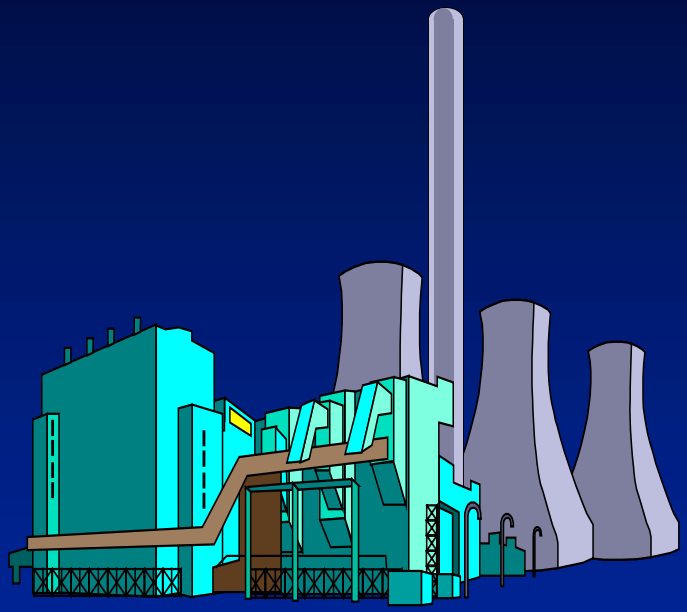
Criteria Pollutants

TOG: Total Organic Gases
ROG: Reactive Organic Gases
CO: Carbon Monoxide
NOX: Oxides of Nitrogen
SOX: Oxides of Sulfur
PM: Particulate Matter
PM10: Particulate Matter ≤ 10 Microns
PM2.5: Particulate Matter ≤ 2.5 Microns

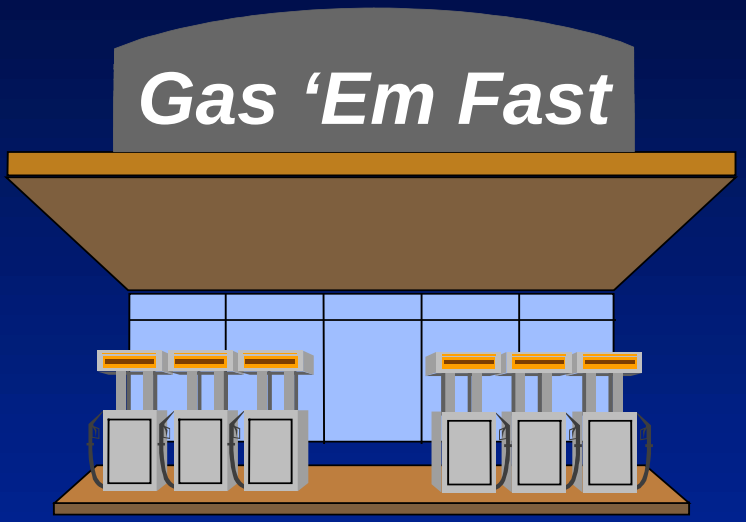
Types of Sources

- Stationary
- Area-Wide
- Mobile
- Non-Anthropogenic

Stationary Sources

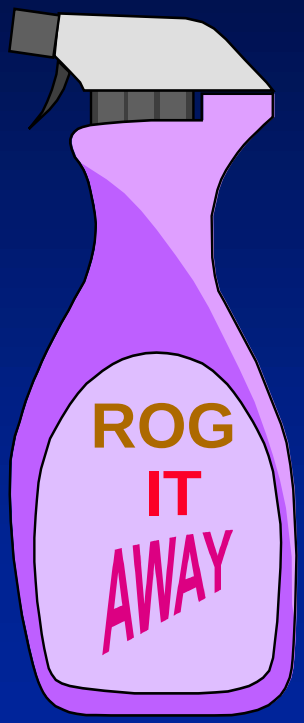


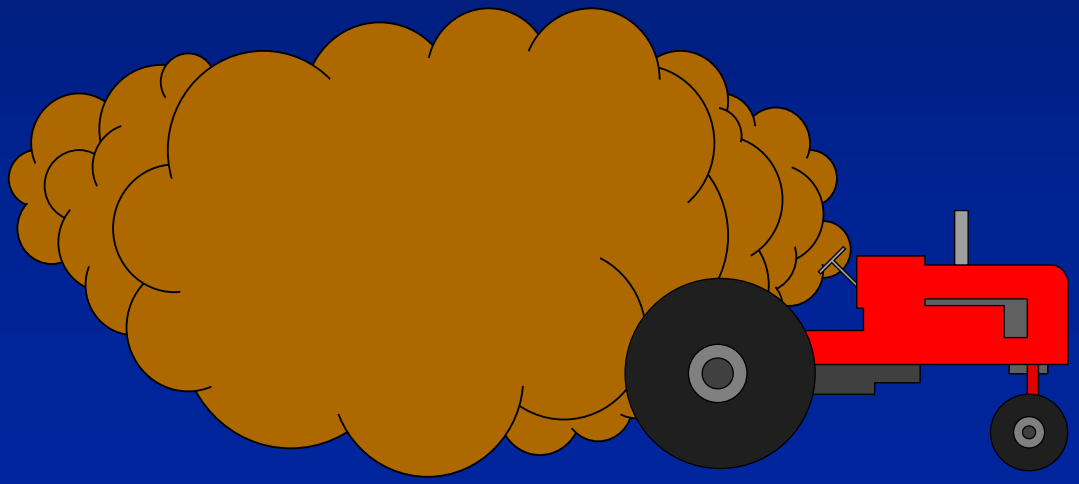
Point



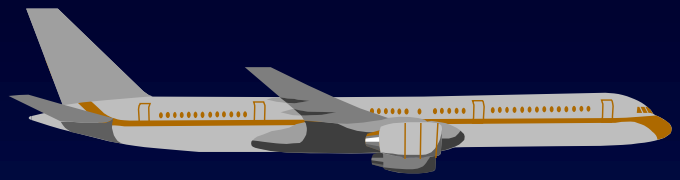
Aggregated Point

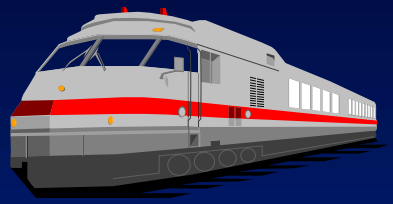
Area-Wide

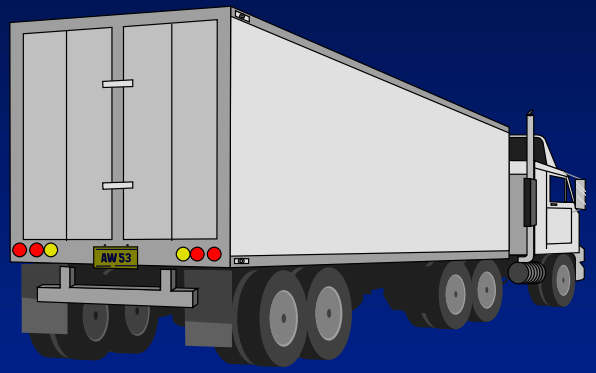




Mobile

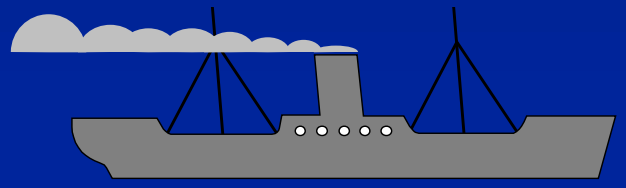




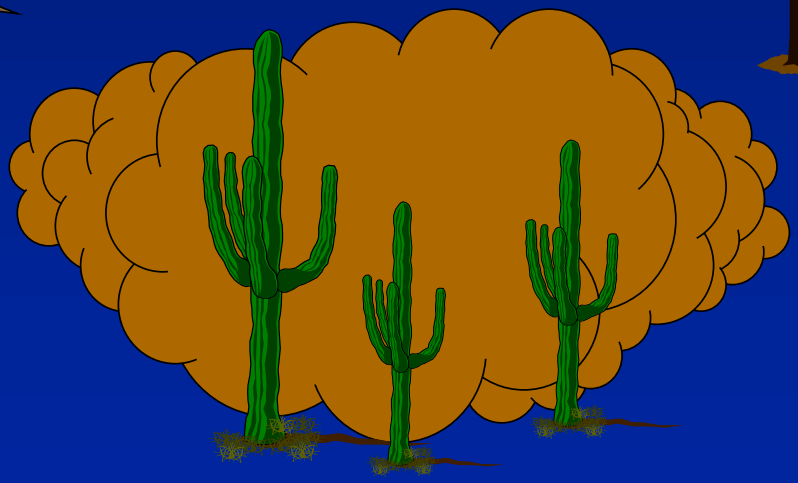


Non-Road

On-Road



Non-Anthropogenic



How Do We Identify and Categorize Sources?

- Point Sources
  - Combination of SCC and SIC Codes
  - Each SCC/SIC Combination is Mapped to an EIC
- Area Sources
  - Each category is assigned a unique EIC

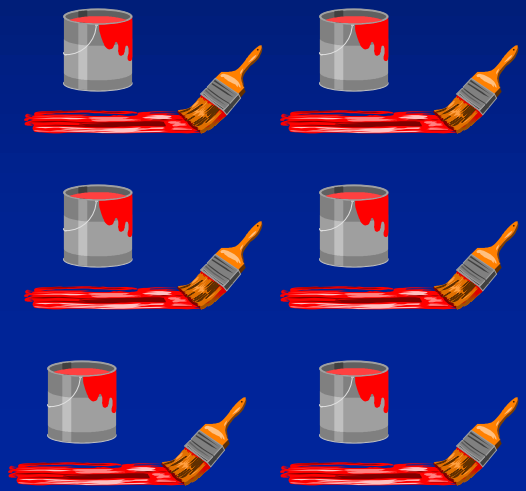
How Do We Estimate Emissions?

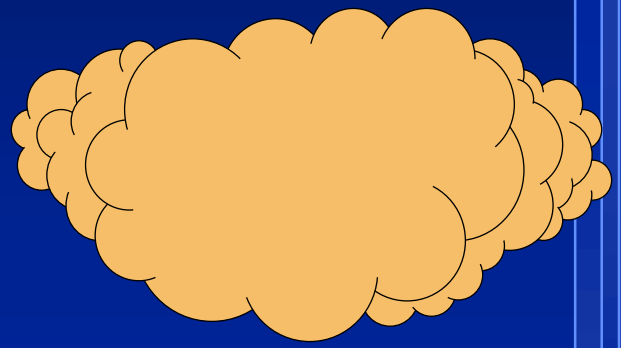
Emission Calculation

Process Rate (Activity)

Emission Factor

Number of Units **x** Emissions per Unit **=** **Total Emissions**





Responsibilities

- Local Districts
  - Develop Local Point Source Inventory
  - Estimate Emissions for 1/3 of Area Source Categories
- ARB
  - Estimate Mobile Source Emissions
  - Estimate Emissions for 2/3 of Area Source Categories
  - Develop and Report Statewide Inventory

CEIDARS

- The California Emission Inventory Development and Reporting System
- A Relational Database System
- Stores Annual Average Emissions for All Source Types

CEIDARS

- Reconciles Point and Area Source Emissions
- Also Stores Temporal and Spatial Data
- Provides Base Year Inventories for CEFS