

## **Unregulated Source Categories**

### **Program Description**

This strategy to reduce ambient ozone levels within the non-attainment area (NAA) involves modifying Colorado Air Quality Control Commission Regulation No. 3 (Reg. 3) and/or Reg. 7 by incorporating emission controls for source categories that are currently unregulated.

Many emission source categories are currently unregulated. To determine which, if any, source categories should be targeted for controls through regulation, emissions from each will be determined and evaluated.

Emissions from some unregulated source categories are available in the Colorado Department of Public Health and Environment (CDPHE) emissions database of permitted sources. Emissions from additional source categories are being provided through the Independent Petroleum Association of Mountain States (IPAMS) Phase III Western Regional Air Partnership (WRAP) emission inventory. Emissions from sources within the Denver-Julesburg (D-J) Basin) were made available in February 2008. Emissions from the remainder of Colorado will be available by June 2008. The D-J Basin encompasses the majority of oil and gas production within the NAA.

Emissions from the following unregulated source categories are available in the CDPHE database:

- Soil land farming
- Amine units

Emissions from the following unregulated source categories are included in the February 2008 IPAMS report:

- Drilling rigs
- Exempt engines (less than 50 horsepower)
- Heaters for gas and oil wells
- Pneumatic devices actuated with field gas
- Fugitive emissions from oil and gas wells
- Tank truck loadout
- Well completions
- Well blowdowns
- Pneumatic pumps
- Produced water tanks
- Workover rigs
- Exempt atmospheric storage tanks
- Exempt truck loading activities
- Exempt flaring

### **Air Quality/Health and Welfare Benefits**

Air quality benefits of requiring controls for source categories that are currently unregulated will be determined by evaluating source category emissions.

While health benefits are not quantified here, it is understood that reducing direct emissions of volatile organic compounds (VOCs), nitrogen oxides (NOx), and carbon monoxide (CO) will reduce air toxics and other criteria pollutants. This will reduce the incidence of human health impacts caused by pulmonary, cardiovascular, respiratory, and nervous system disease. Because ozone damages crops, forests, and

other natural plant life, all would benefit if emissions are reduced. NOx reductions benefit wildlife by reducing contributions to nitrogen deposition. This strategy may also reduce emissions of methane and other greenhouse gases, which contribute to climate change.

**Program Costs**

Costs associated with requiring controls for source categories that are currently unregulated will be determined after source category emissions have been evaluated.

**Implementation/Administration**

This strategy has the potential to significantly increase the number of regulated sources, and has reporting, permitting, and/or compliance assurance impacts to the APCD.