

5/14/99

## FACT SHEET

### FINAL AIR TOXICS RULES FOR OIL AND NATURAL GAS PRODUCTION FACILITIES, AND NATURAL GAS TRANSMISSION AND STORAGE FACILITIES

#### TODAY'S ACTION

- ! The Environmental Protection Agency (EPA) is issuing final rules to reduce emissions of hazardous air pollutants (HAPs) from oil and natural gas production facilities as well as natural gas transmission and storage facilities.
- ! Emissions from various processes and operations at oil and natural gas facilities and natural gas transmission and storage facilities typically contain at least 5 different HAPs: benzene, toluene, ethyl benzene, and mixed xylenes, and n-hexane. HAPs, also known as air toxics, are pollutants which are known or suspected to cause cancer or other serious health effects such as birth defects or reproductive effects.
- ! EPA developed today's rules in close partnership with representatives from the affected industries.

#### WHAT ARE THE HEALTH AND ENVIRONMENTAL BENEFITS OF TODAY'S ACTION?

##### Hazardous Air Pollutants

- ! This action will reduce emissions of hazardous air pollutants from major oil and natural gas production facilities by approximately 31,000 tons/year (a 43 percent reduction).
- ! This action will reduce emissions of hazardous air pollutants from natural gas transmission and storage facilities by approximately 430 tons/year for major sources (an 18 percent reduction).
- ! Hazardous air pollutants are pollutants which are known or suspected to cause cancer or other serious health effects such as birth defects or reproductive effects.

##### Volatile Organic Compounds

- ! This action will reduce emissions of volatile organic compounds from major oil and natural gas production facilities by approximately 67,000 tons/year (a 45 percent reduction).
- ! This action will reduce emissions of volatile organic compounds from major natural gas

transmission and storage facilities by approximately 610 tons/year (a 19 percent reduction).

- ! Volatile organic compounds contribute to the formation of ground-level ozone, the primary constituent of smog. Exposure to ozone can damage lung tissue, reduce lung function, and sensitize the lungs to other irritants.

#### Methane

- ! This action will reduce methane emissions from major oil and natural gas production facilities by approximately 7,700 tons/year (a 33 percent reduction).
- ! This action will reduce methane emissions from major natural gas transmission and storage facilities by approximately 250 tons/year (a 19 percent reduction).
- ! Methane is a potent greenhouse gas that contributes to global warming.

### **BACKGROUND**

- ! Under the Clean Air Act Amendments of 1990, EPA is required to regulate sources of 188 listed toxic air pollutants. (Note that this list originally referenced 189 pollutants, but EPA has subsequently removed the chemical caprolactum from the list.) On July 16, 1992, EPA published a list of industry groups (known as source categories) that emit one or more of these hazardous air pollutants. For listed categories of "major" sources (those that have the potential to emit 10 tons/year or more of a listed pollutant or 25 tons/year or more of a combination of pollutants), the Clean Air Act requires EPA to develop standards that are based on stringent air pollution controls, known as maximum achievable control technology (MACT). Oil and natural gas production and natural gas transmission and storage are source categories listed by EPA for regulation.
- ! Emissions of hazardous air pollutants from oil and natural gas production facilities and natural gas transmission and storage facilities occur during the separation, upgrade, transport, and storage of crude oil, condensate, natural gas, and related products and by-products. In addition, emissions occur as a result of vapor leaks from pumps, compressors, valves, flanges, and other equipment in liquid and gas service that contribute to emissions of hazardous air pollutants.

### **WHY IS EPA ISSUING NATIONAL EMISSION STANDARDS FOR OIL AND NATURAL GAS FACILITIES?**

- ! Existing state and local regulations control some of the emission points associated with oil and natural gas facilities. In addition, EPA has previously issued a federal new source performance standard (NSPS) for equipment leaks at newly built or refurbished facilities.

Today's national air toxics standards will supplement and strengthen the existing levels of control on oil and natural gas facilities and expand these controls nationwide.

### **WHAT DO EPA'S RULES REQUIRE?**

- ! **Oil and Natural Gas Production Facilities**  
For major oil and natural gas production facilities, the rule requires controls at the following emission points: (1) process vents at certain size glycol dehydration units; (2) tanks with flashing emission potential; and (3) certain fugitive emission sources at natural gas processing plants.
  
- ! **Natural Gas Transmission and Storage Facilities**  
For natural gas transmission and storage facilities that are major sources of hazardous air pollutants, the rule requires emission controls at process vents at certain size glycol dehydration units.

### **WHAT ARE THE MONITORING REQUIREMENTS IN TODAY'S ACTION?**

- ! EPA is requiring continuous monitoring of the operation of the control devices using automated instrumentation to measure and record operating parameters that indicate whether the control device is in compliance with the final rules.

### **WHO WILL BE AFFECTED BY TODAY'S ACTION AND WHAT IS EPA SPECIFICALLY REQUIRING?**

- ! Based on currently available information, approximately 440 of an estimated 100,000 to 250,000 facilities nationwide will be affected by the final oil and natural gas production emission standards. Today's final rule establishing emissions standards for natural gas transmission and storage facilities will affect 7 of an estimated 2,000 facilities across the country.
  
- ! EPA is requiring affected facilities to apply existing and affordable control technologies to known emission points. In addition, in an effort to increase flexibility, EPA is encouraging the use of pollution prevention to reduce emissions of hazardous air pollutants from the process vents at glycol dehydration systems. These vents constitute the largest single identified hazardous air pollutant emission point for the oil and natural gas production source category.

### **HOW MUCH WILL TODAY'S ACTION COST?**

- ! EPA estimates capital costs of approximately \$6.5 million and annual costs of approximately \$4.0 million to control HAP emissions from affected oil and natural gas production facilities .

- ! EPA estimates that controlling emissions from affected natural gas transmission and storage facilities will result in capital costs of approximately \$280,000 and annual costs of approximately \$300,000 facilities

### **FOR FURTHER INFORMATION**

- ! Interested parties can download the rule from EPA's web site on the Internet under recent actions at the following address: <http://www.epa.gov/ttn/oarpg>. For further information about the final rule, contact Mr. Greg Nizich of EPA's Office of Air Quality Planning and Standards at (919) 541-3078.
- ! EPA's Office of Air and Radiation's homepage on the Internet contains a wide range of information on the air toxics program, as well as many other air pollution programs and issues. The Office of Air and Radiation's home page address is: (<http://www.epa.gov/oar/>).