



# CLEAN AIR

## *The Breath of Life - For A Healthy America*

Clean air. It's easy to think that our air is pure and clean in the Northwest. Unless we see or smell the clues of air pollution, we don't often think of any problems with air quality.

It's true that we no longer see black smoke billowing from nearby smokestacks, yet there are times in the summer when haze makes it difficult to see the mountains in the distance. The familiar smell of wood smoke brings fond memories of cozy winter nights, but car and truck exhaust can be an unpleasant aroma on many urban streets.

Over the last thirty years, the main sources of air pollution have changed, but the challenge to keep the air free of pollution is as great as ever.

EPA's goal is to ensure that every person in the Northwest can breathe air free of pollutants that cause

significant risks of cancer, respiratory distress and other health problems. We want to clear the air of pollutants that damage our forests and crops, acidify our wilderness lakes, and obscure our view of the natural wonders we have in such abundance here.

Of the thousands of substances that are released to or subsequently form in the air every day, EPA has chosen to set national outdoor standards for just seven of them: carbon monoxide, lead, nitrogen dioxide, ozone, sulfur dioxide and particulate matter.

### **Pollution at Sea**

*Along the Alaska coast line, citizen complaints alerted EPA investigators to a different source fouling the air: Cruise ships. While investigating the complaints, EPA staff observed smoke coming from the ships which exceeded state and federal limits for visible emissions. Consequently, six cruise lines were issued Notices of Violation (NOVs) in early 2000 for emissions in Juneau, Seward and Glacier Bay.*

*Citizen tips are a valuable tool for finding polluters. By working closely with local residents, the EPA and state environmental agencies can better protect the air for those communities and their tourists.*

EPA works with state and local governments to improve air quality, and the results to date are impressive. Since the federal Clean Air Act was passed in 1970, the nation has significantly cleaned up the air: 98 percent of lead, 79 percent of the particles, 41 percent of gaseous sulfur dioxide, 28 percent of the carbon monoxide, and 25



## Asthma and Children's Health

*Asthma remains a persistent problem in the U.S. the number of children afflicted has doubled in the past 10 years, currently affecting almost five million nationwide. Nationally, the asthma rate among children ages 5-14 rose 74% between 1980-94. Asthma can be triggered by irritants and allergens such as smoke, dust, molds, mites and pet dander.*

*The trends related to asthma are not encouraging. For instance, the hospitalization rate for asthma in Washington state is rising much faster than the rest of the U.S. That rate is seven times higher among minority children from the inner city than children from other communities. Low-income and minority children are afflicted at much higher rates. To minimize asthma triggers, EPA promotes the use of common-sense, low-cost solutions for clearing the air in homes and schools.*

*In response to this problem, the EPA has funded several special projects including:*

- *Community-based, inner-city asthma medical intervention clinic and home visit programs.*
- *An inner-city asthma outreach and education program.*
- *Development and distribution of brochures targeting residential air pollution improvements in minority and low-income communities.*

Economic growth and environmental protection can go hand in hand. Industry was the first target of the Clean Air Act rules, and by installing sophisticated pollution control equipment on facilities both large and small, much of the industrial air pollution of the past has been eliminated. Today, less than one-fifth of the total air pollution in the Northwest is caused by industry.

percent of the smog soup now called ozone have been eliminated from the air we breathe. Such improvements are very meaningful, due to the growth that occurred

during the same period. The nation's economy grew by 90 percent, the total U.S. population grew by 27 percent, and the number of motor vehicle miles driven increased by 111 percent!



The quality of the air in the Northwest today is dependent upon the day-to-day choices we make. How do we get from place to place? How do we heat our homes? What do we do with garbage and yard debris?

Cars, trucks and other means of transportation account for more than fifty percent of the total air pollution in the United States, and even more in the Northwest. Vehicle exhaust is a main ingredient of smog during the warm summer months, and it produces carbon monoxide in the wintertime.

Yet despite the improvements in automobile exhaust systems over the last 30 years, pollution caused by cars is still a problem because there are simply more people driving more cars over greater distances

than ever before. A well-tuned vehicle creates less pollution, so vehicle emission check programs in major urban areas of the Northwest help citizens keep their cars and trucks tuned-up and operating efficiently year-round. Oxygenated gasoline in winter helps engines burn fuel efficiently even in the cold winter temperatures.

Wood-burning stoves and outdoor burning together account for approximately one quarter of the particulate pollution in the air we breathe. Road dust, windblown dust, as well as forest-burning and field burns also contribute to problems in some areas. During winter weather inversions, stagnant air traps pollution close to the ground, increasing the levels of pollutants where people breathe. These problems have been solved in many areas of the Northwest: new woodstoves are now certified to meet emission standards, and public education programs teach people how to burn wood efficiently, without excessive smoke. Special



## Controlling Air Quality in Indian Country

*The 1990 Clean Air Act Amendments authorizes Native American tribes to enact their own Clean Air programs, and clarifies EPA's responsibility to directly implement Clean Air programs throughout Indian Country until a tribal nation chooses to conduct its own air pollution control plan. EPA Region 10's work with Northwest Native American tribes is focused in two ways: 1) fostering tribal capacity to manage air quality by providing grant money and technical training; and 2) fulfilling the array of required regulatory responsibilities in Indian Country (for example, issuing clean air operating permits to industrial sources located in Indian Country).*

precautions, such as local burning bans when pollution from particulate matter is measured at unsafe levels, helps keep pollution to a minimum.

Population growth is by far the biggest challenge to keeping the air clean. A growing population means more cars on the road, more construction of new homes and businesses, and greater demand on the surrounding environment.

EPA is determined to do more than simply maintain the progress that's been made; by working together – federal, state and local governments, business, industry and citizens -- we can do what is necessary to improve the quality of the air we breathe.