air_quality_brochure6.qxp 5/11/2004 2:36 PM Page 1

How May These Changes Affect Your Community?

As we begin to adjust the air monitoring networks, our primary goal is to continue to protect public health. However, some monitors are no longer needed in their current locations because data from nearby monitors effectively evaluate the air. In such cases, air agencies will move this equipment to other communities where we don't yet have good air quality information. In other cases, we will add monitors to measure more pollutants, or we will replace older equipment with newer, more efficient monitors. With these changes, communities will receive better information about those air pollutants that are the source of serious health concerns. And, you will find that timely information about local air quality is more accessible than ever.

How Often Will Changes Occur?

States will reassess their monitoring networks every 5 years (and many states have already started). These assessments will identify where the greatest needs for monitoring changes exist. Then, state, local, and tribal agencies will realign their networks so that they can be more effective in protecting public health.

How Can You Participate?

As we begin to restructure the air monitor networks, you will have opportunities to provide input—for example, through news media announcements, public meetings, or other public processes. To learn more about changes in your area, contact your state or local air pollution control agency. Please refer to the back panel for contact information.

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This brochure has been prepared by the State and Territorial Air Pollution Program Administrators and the Association of Local Air Pollution Control Officials in cooperation with the U.S. Environmental Protection Agency.

Visit STAPPA/ALAPCO at www.cleanairworld.org, or visit EPA's Web site at www.epa.gov/air/oaqps/index.html, or contact your state, local or tribal air agency (www.ntec.org/NTAC.html).

Where Can You Find Up-to-Date Air Quality Information?

If you have access to a computer, you can find information online. U.S. EPA's AIRNow Web site at *www.epa.gov/airnow* offers daily forecasts as well as real-time air quality information for over 300 cities. It also provides links to more detailed state and local air quality Web sites.

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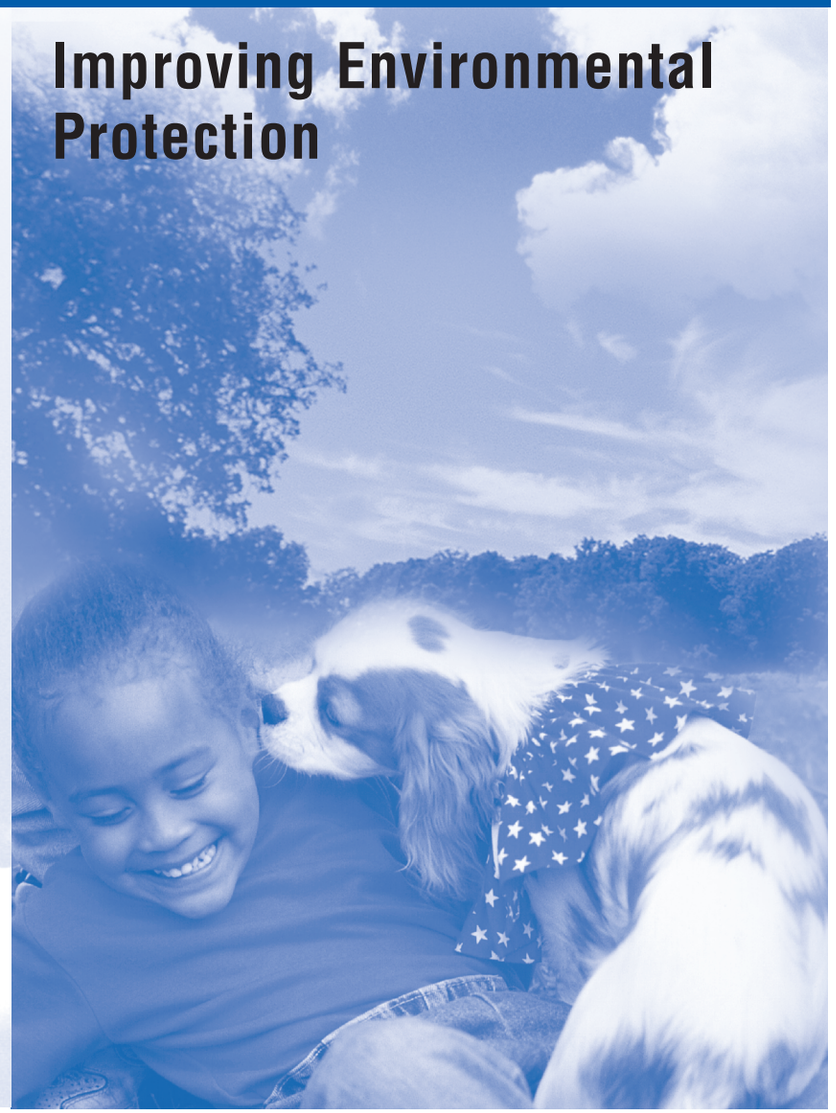
April 2004

EPA United States Environmental Protection Agency

STAPPA/ALAPCO

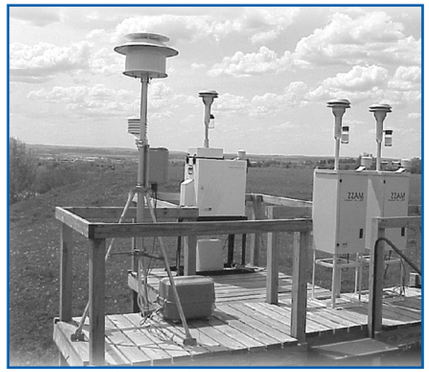
Advances in Air Quality Monitoring

Improving Environmental Protection



How Do You Know If The Air You Breathe Is Clean?

Have you heard about air quality on your local TV, radio station, or the weather forecast in your newspaper? If you haven't, hopefully you will soon. Air quality forecasts are now available in hundreds of U.S. cities. In addition to the local media, you can access the most current air quality measurements from the Internet (www.epa.gov/airnow). This information comes from thousands of air monitors operated by state, local and tribal air agencies in partnership with the U.S. Environmental Protection Agency (EPA).


Equipment used to measure air quality.

Over the years, we have steadily increased the number of monitors to determine where air pollution levels may be unhealthy.

Although we have seen dramatic improvements in the quality of the air we breathe, there are still communities that face difficult air quality problems. To better address these problems, we will be updating our air quality monitoring network on a regular basis to assure that the public is getting the optimal level of timely air quality information.

How Do We Monitor Air Quality?

Since 1970, when the Clean Air Act became law, we have used a coordinated national system to monitor air quality. This system is made up of thousands of individual air monitoring stations located across the United States in communities like yours.

Under this system, each state operates monitoring networks that measure important air pollutants. And each network is made up of carefully placed monitoring stations. Today, about 4,000 monitoring stations are distributed across the nation. Most of these monitoring stations collect data on six key air pollutants: lead, carbon monoxide, particles, sulfur dioxide, nitrogen dioxide, and ground-level ozone (also known as smog). EPA also sets national standards for these pollutants to protect public health. The data from the monitoring system tells us how well a community is doing in meeting these standards.

In representative areas of the country, we are also collecting air quality information for certain toxic pollutants. We know that some toxic air pollutants cause cancer or other serious health problems, so we are building a coordinated, nationwide system to monitor and track these pollutants.

Why Are We Updating The Air Monitoring System?

Air pollution problems in the United States are changing. Over the past 20 years, levels of the six key air pollutants have dropped—sharply. Monitored levels of lead, for example, have decreased 98 percent. But it doesn't mean that all of our nation's air pollution problems are solved. We know that millions of people live in areas where monitored air is unhealthy at certain times. With some areas continuing to have air quality problems, it's time to refocus on new challenges.

We are working to:

- Deliver timely air quality information to the public.
- Improve our ability to identify which sources are contributing to air pollution and how it affects human health.
- Characterize rural air quality conditions.
- Characterize pollution that forms particles and ozone.
- Improve our understanding of air toxics levels in communities.

To support these changing priorities, our nation's air monitoring networks must also change.

What Changes Are Planned?

- We are realigning monitoring networks to focus on pollutants of greatest health concern. These include particles, ground-level ozone, and certain air toxics.
- At some locations, we may reduce monitoring of certain pollutants, such as lead, that are of lesser concern because pollution control efforts have substantially reduced them. However we will keep a smaller network in place to continue to track these pollutants.
- In many states, and on some tribal lands, we will add sites that monitor multiple pollutants. This will help us better understand how air pollutants interact and affect human health.

Why Monitor Air Quality?

- To keep communities informed about their local air quality.
- To find out where air quality needs to be improved.
- To determine whether efforts to improve air quality are working.
- To understand how air pollution may affect human health and the environment.