

# **Joint Statement on Vision and Goals for the National Air Program**

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## **Introduction**

This document describes a shared 10-year vision and set of strategic goals for the National Air Program. It has been developed through a collaborative strategic planning process involving the different governments—federal, tribal, state, and local—that play a part in air quality management. Organizations involved in developing this vision and goals statement include the U.S. Environmental Protection Agency (EPA), the National Tribal Environmental Council (NTEC), the Institute for Tribal Environmental Professionals (ITEP), the Environmental Council of the States (ECOS), the State and Territorial Air Pollution Program Administrators (STAPPA), and the Association of Local Air Pollution Control Officials (ALAPCO).

The creation of this document reflects that the different governments understand that they all play a key role in air quality protection, and that it is the sum of their collective efforts that constitutes the National Air Program. While the objectives and priorities of each agency and level of government reflect their values and specific focus, it is vital that all parties share a common vision and strategic direction for air quality management. A shared vision is essential so that the different governments can work together efficiently to achieve common ends, communicate easily and without misunderstandings, and present a consistent set of priorities and objectives to the public, stakeholders, and federal and state lawmakers.

The creators of this vision and goals document anticipate that it will serve as a guide and reference for air quality managers at all levels of government. It is not intended to create new requirements for any government; its legitimacy should spring from a consensus on the strategic direction it describes. Further collaborative work will be necessary to expand and implement specific strategies in highlighted areas, as well as to strengthen and deepen the working relationship among the partners.

## **Past Accomplishments and Future Challenges**

The nation has made great strides in improving air quality in the past 30 years, resulting in important health benefits. From 1970 to 1997, total emissions of pollutants governed by air quality standards declined by nearly one-third, while the U.S. economy showed strong growth and the nation's population increased

markedly. (See table and graph on the following pages.) On average, air quality nationwide improved from 1989 to 1998 for all six pollutants subject to air quality standards. Most Americans live in areas that are meeting air quality standards for sulfur dioxide (SO<sub>2</sub>), lead, carbon monoxide (CO), and coarse particulates, and all areas of the country meet the standard for nitrogen dioxide (NO<sub>2</sub>). Ozone smog levels also have improved. Of the 98 areas designated in 1991 as nonattainment for the 1-hour ozone standard, 62 have air quality that meets the standard (based on data through 1998).

One key reason for these air quality improvements is the dramatic emissions reductions achieved through Clean Air Act requirements for motor vehicles and fuels. Today, the average new car is 40 percent cleaner than the average new car in model year 1990, and more than 30 percent of the nation's gasoline is a cleaner-burning blend designed to reduce emissions and health risks. Recently issued standards for cars, light-duty trucks, and gasoline will achieve important additional pollution reductions.

Other achievements in reducing air pollution include the following:

- Annual SO<sub>2</sub> emissions, which react to form acid rain, have been cut by more than 5 million tons from the 1980 level, and rainfall in the eastern United States is as much as 25 percent less acidic.
- Production of the most harmful ozone-depleting chemicals, including chlorofluorocarbons (CFCs), has virtually ceased in the United States and other developed countries. Provided the United States and the world community maintain the commitment to planned protection efforts, the stratospheric ozone layer is projected to recover by the mid-21st century.
- Toxic emissions from industry will be cut an estimated 1.5 million tons annually by national regulations issued since 1990.

These results have been achieved through a variety of approaches—regulations, voluntary measures, market mechanisms, state-EPA partnerships, and stakeholder negotiations.

Despite these achievements, much work lies ahead. Air pollution continues to be a widespread public health and environmental problem in the United States, as well as globally. Almost 50 million people are breathing air with ozone concentrations above the current national standards. Millions of Americans continue to be exposed to fine particulates at levels that are harmful to their health, causing thousands of respiratory-related illnesses and premature deaths each year. More hazardous pollutants (many of whose health impacts are poorly understood) are discharged into the air than are released to surface water, ground water and land combined. Indoor air pollutants pose a substantial health

risk to millions of people in homes, schools, and offices nationwide. Although some progress has been achieved in reducing the pollutants that cause acid rain, emissions of sulfur dioxide and nitrogen oxides remain at levels that are damaging to lakes and forests.

Global air quality issues pose a daunting challenge. Because CFCs are extremely persistent in the atmosphere and are still widely used in many developing countries, stratospheric ozone depletion remains a significant problem with serious long-term health implications. Releases of greenhouse gases, with potentially far-reaching impacts on climate and sea level, will continue to grow worldwide.

Achieving further air quality gains—even maintaining gains to date—will be difficult. Most “easy things” have been done; further reductions will be more contentious and, in some cases, will involve actions by the public. Although the public supports environmental protection, it lacks a sense of urgency about air quality. Additionally, the public does not necessarily recognize that the many dispersed activities of individuals and small businesses are responsible for most of the remaining air quality problems. Resources collectively available to protect air quality have not kept up with growing air quality management challenges and program responsibilities.

Further progress will also present institutional challenges to EPA and the tribal, state, and local governments (the “air management partners”). Sharing responsibilities in the federal system has generally worked well, but the air management partners will need to work even more collaboratively than in the past, and avoid the jurisdictional conflicts and miscommunication that have sometimes taken time and energy away from activities more directly related to better air quality management.

The Clean Air Act Amendments of 1990 recognized tribal sovereignty and articulated Congress’ intent to authorize tribes to carry out federal environmental programs for lands within their jurisdiction. Following the promulgation of the Tribal Authority Rule in 1998, many tribes began the first stages of developing tribal air programs. Challenges include increasing the currently very limited information on air quality on tribal lands, building tribal capacity to administer air programs in Indian Country, and building effective EPA and state mechanisms to work with tribal governments on regulatory development, regional issues, and national policy.

## **Vision and Goals for Air Quality Management**

Clean air is essential to a healthy population, a healthy environment, and, in turn, a healthy economy. The air management partners are committed to making the air in every community healthy to breathe, to reducing ecosystem damage from air pollution, and to doing their share to address global air quality problems.

In the next 10 years, the governments charged with protecting air quality envision substantial additional improvements in air quality, despite countervailing trends in population, economic, and transportation growth. Maintaining gains to date and further improving air quality will require the air management partners to:

- Establish a set of shared goals and strategies for air quality improvement.
- Continue to improve results-based management systems to target resources effectively.
- Involve and educate the public and make greater use of innovative approaches to reducing pollution.
- Conduct sound research and effectively use new information technologies.
- Respond creatively and vigorously to new challenges and emerging issues.
- Improve the working partnership of the air quality managers at all levels of government.

Realizing this vision is necessary to maintain and improve air quality in this country. Good air quality in the future will provide important benefits to human health, welfare, and ecosystems. Achieving the vision is possible, but by no means guaranteed. In addition to carrying out their current functions well, the air management partners will need to develop new skills and approaches, become more efficient, and work together more effectively to solve problems.

Stakeholders, including the public, must be given the opportunity to participate more in developing management strategies. The partners will need to commit themselves to shared goals and the strategies necessary to achieve them. They will need to gain the backing of the public, active stakeholders, and legislatures in support of a vigorous air quality improvement agenda. Highlights of this joint vision are described in the following section.

## **Achieve Further Improvements in Air Quality**

In the next 10 years, the National Air Program will achieve substantial progress in reducing pollution and improving air quality, despite the demographic and economic trends that, other things being equal, would tend to worsen air quality. Ten years from now, all, or nearly all, areas of the country will meet applicable air quality standards for ozone, and gains for other criteria pollutants (i.e., SO<sub>2</sub>, NO<sub>x</sub>, lead, and CO) will be maintained. Large strides will be made toward reducing emissions and meeting new standards for fine particulate matter. Substantial progress will be made in addressing visibility and regional haze. Emissions and risks from toxic air pollutants will be significantly reduced

from current levels. Emissions of SO<sub>2</sub> and NO<sub>x</sub> will be reduced, with corresponding reductions in acid deposition. As a result, many lakes will continue to recover from the effects of acid rain. Indoor air quality will receive substantially more programmatic attention; the public will be more aware of both indoor air risks and safety measures; and exposures to contaminants that pose a health risk will be substantially reduced.

Continued progress in reducing these pollutants will have significant public health benefits, including reductions in thousands of premature deaths, cancer cases, respiratory illnesses, and damaging reproductive impacts. Improved air quality will also increase visibility, reduce damage to crops and buildings, lessen degradation to ecosystems, and help protect tribal cultures and resources.

In 10 years, local and regional air quality issues will be addressed more effectively and routinely. Increasingly tailored approaches will be developed to deal with local hot spots and particular combinations of many small, local sources. Large, multi-state, regional air transport issues (such as acid rain and ozone) will largely have been solved through effective inter-jurisdictional cooperation. Peoples whose cultures and subsistence lifestyles result in greater exposure to environmental contaminants, as well as vulnerable subpopulations—children, the elderly, people with respiratory ailments, and those living in pockets of high exposure—will be protected, and will be routinely considered in the process of developing regulations and air quality control strategies. Widespread measures to address ventilation, building materials, and other indoor air pollution sources will substantially reduce current health risks such as asthma and other respiratory ailments.

Increased attention will be paid to global air pollution issues. The United States will continue to reduce its use of ozone-depleting chemicals. In 10 years, based on a wide, bipartisan consensus, we envision that the United States will work to achieve reductions in fossil fuel consumption and greenhouse gas emissions. In addition to doing its share, the United States will work actively and collaboratively with other nations to fashion workable approaches to global air problems.

EPA's strategic plan should be consistent with the vision expressed in this document. The partners support collaborative efforts to achieve this consistency.

## **Manage for Results**

To achieve continued progress in improving air quality in the next 10 years and fulfill legal mandates, the air management partners will create more “highly tuned” environmental management systems that can effectively assign resources to the most significant problems and most cost-effective strategies, measure performance, and collect and learn from new information. A collaborative environmental management system will assign responsibility and accountability

to the level of government best suited for the job. Where there are not enough available resources to do the whole job, managers will work cooperatively to make the case for critical programs and develop creative mechanisms, such as public/private partnerships, to leverage resources. They will also set priorities on the basis of health and environmental risk and the cost-effectiveness of prospective solutions.

Effective priority-setting will allow environmental managers to work on the problems and sources posing the greatest risk, rather than trying to control all sources and solve all problems. To complete the results-based management “loop,” air managers must be able to interpret and learn from data, and have the flexibility to adjust course (if appropriate) in response to new information. Building upon current efforts, environmental managers and stakeholders will fashion effective measurement systems to track environmental outcomes (e.g., via environmental indicators) and the effectiveness of programs and strategies.

Successfully implementing a management system founded on environmental results will require the air management partners to set clear goals and objectives, develop the analytic tools and skills to translate raw data into information useful to decision-makers, make investments in data to fill key knowledge gaps, and exercise organizational discipline. In 10 years, air quality management will be results-based at all levels of government.

## **Use Innovative Approaches**

The impressive air quality gains achieved in this country during the past 30 years have been accomplished largely through the development and implementation of regulations and controls on large point sources, along with cleaner fuels and motor vehicle emission standards. Air managers must continue to implement this core program effectively. Additionally, if substantial further air quality gains are to be achieved, new approaches will need to be employed. Although major point sources will require continued attention, most remaining air pollution springs from a multiplicity of small, dispersed sources that do not lend themselves easily to traditional regulation. Reducing pollutant emissions from these sources will require strategies that influence behavior and lifestyle, such as transportation choices, which in turn are linked to growth.

Land use and economic development decisions are the primary “drivers” for transportation decisions and the consequent urban air quality issues we currently face. To be successful in our efforts, it is imperative that we develop strong working relationships with federal, tribal, state, and local energy and economic development agencies and organizations, and become influential in guiding the process of transportation planning and funding toward less emissive forms of transportation. Transportation and land use must effectively take into account potential air quality impacts so that when communities grow, the development of air quality problems is prevented.

Air quality management during the next 10 years will include a shift from the traditional emissions control approach to one that emphasizes the prevention of air quality problems. This will include promoting and enabling the design and operation of new or modified process technologies that result in the lowest possible emissions, rather than simply adding controls to process technologies that emit air pollutants.

A critical area of innovation in the next decade will be the development of more holistic approaches to pollution control. Future air quality control approaches will increasingly adopt a multi-pollutant and, where appropriate, a cross-media perspective. Such approaches will result in more comprehensive and effective controls that take account of co-control and cross-media transport, as well as effects on ecosystems. Integrated, collaborative management approaches in specific geographic regions (such as airsheds and watersheds) will help coordinate efforts to control specific pollutants and media, and serve as a vehicle to link the efforts of different levels of governments. Development of such approaches to pollution control will require managers to move beyond their traditional focus on single media and individual pollutants.

In the next 10 years, a variety of voluntary and incentive-based approaches will be developed to influence pollution-producing behavior without the “hammer” of direct regulation. Public education is one tool that has been used successfully to influence behavior in the indoor air program, as well as in other environmental arenas. For example, efforts to reduce radon risk have relied almost entirely on education and voluntary measures, and the recently launched initiative, “Asthma and the Environment: A Strategy to Protect Children,” developed by a Presidential Task Force in January 1999, emphasizes voluntary measures. In the future, education to influence voluntary behavior change will be used more intensively in outdoor air quality protection. Education will inform people of the relationship between their activities and pollution, highlight personal choices and raise awareness of options, and appeal to people’s desire to “do the right thing.” As one example, school curricula that address environmental issues will deepen society’s understanding of air pollution’s effect on ecosystems and human health.

In 10 years, more widespread and effective use of incentives will be used to influence behavior and reduce pollution-causing practices. Regulatory requirements themselves create a powerful market incentive to find cheaper and better control technologies. Past requirements to control VOCs, reduce SO<sub>2</sub> from utilities, phase out CFCs, and reduce motor vehicle emissions have been implemented at a cost that turned out to be far lower than that originally estimated by industry and even EPA. Many other types of public and private incentives are possible, including subsidies to encourage nonpolluting behavior and taxes on polluting sources or behaviors. Publicity has proven to be a powerful motivator in the Toxic Release Inventory (TRI) and hazardous waste programs, and will be used even more effectively to motivate reductions in

emissions of air pollutants in the future. Incorporation of air pollution considerations in planning and growth management decisions will have a significant effect on behavior (e.g., by making it more feasible or attractive to use mass transit or bicycles). Market-based incentives will increasingly be used in combination with regulation (for example, trading and banking programs) to give facilities an extra incentive to undertake reductions beyond those required by regulation, often at a lower cost.

Successful development of these innovative approaches will require air managers to acquire new skills (or learn to partner with groups that have them), including marketing/public education and economic and tax analysis. In addition, air managers must increase their understanding of organizational and individual behavior and find ways to overcome the existing organizational and legal boundaries separating media programs.

### **Conduct Sound Research and Use Information Effectively**

A strong, coordinated research program will be critical to supporting a more efficient, results-based system of air quality management in the future. In the next 10 years, scientific research and new data collection will answer key questions and will be linked to policy questions and program management needs.

Additional health research on the effects of fine particulates will advance scientific understanding in this area. Public health and ecological assessments will be completed for pollution issues of concern, and will guide information-driven program strategies for addressing pollution problems. The establishment of air quality monitoring networks and long-term data collection on tribal lands will greatly increase our knowledge of air quality on these lands. Risk assessments and epidemiological research will increase our collective understanding of the effects of exposure to air contaminants on indigenous populations, as well as increase our understanding of the cumulative risks from multiple pollutants and exposure pathways.

To inform the development of the most effective control strategies, research will continue on controls for mobile, area, and point sources; product formulations; application techniques; and other means for cost-effectively reducing emissions. Through effective use of information technology, new scientific knowledge and research findings will be much more widely available to scientists, decision-makers, and the public.

The information revolution creates both challenges and opportunities for air managers. New information technology creates possibilities for new and more efficient ways of doing business, such as electronic submittal of data, easier interagency data exchange, public access to information, virtual

meetings, and better and more powerful tools (such as Geographic Information Systems) for managing and analyzing information. The increased access to information and the ease of data exchange via the Internet are potentially great boons to environmental managers and stakeholders, who in the past have had difficulty finding and obtaining relevant data. The Internet also creates an increasing expectation by stakeholders and the public that they will have real-time access to good information, both to understand local environmental and public health risks and to support their participation in management decisions.

As environmental data become available to a wider audience of stakeholders and other secondary users, data documentation, quality, and communication will become increasingly important to ensure that data are used responsibly and appropriately. In 10 years, the air management partners will have responded effectively to the challenge of using information technology to accomplish their mission.

## **Respond to New Challenges and Emerging Issues**

In the next 10 years, the National Air Program will be able to respond effectively to a number of new challenges—some of which may not even be apparent yet. Some critical air quality challenges have already been discussed above: the need to reduce pollution from many small sources; the need to deal more effectively with the high exposures and health risks from indoor air pollutants; the need to cooperate with other nations to address critical global issues; and the need to develop more integrated pollution control strategies that deal with multiple pollutant, cross-media, and regional/ multi-state impacts.

Other challenges arise from changing technology, economics, or institutions that have an important effect on air quality. One such trend, as noted above, is the revolution in information technology and the growth of the Internet. In another significant change, already under way, tribal governments are participating far more actively and directly in air quality management. The development of successful tribal air programs will require the air management partners to build ambient air monitoring networks, create a technical and information infrastructure, and identify long-term resources to operate programs.

Another change is the increased recognition of local governments' important role in decisions that directly or indirectly (e.g., through land management decisions) determine environmental quality. Yet another trend is energy deregulation, which will change the economic landscape for a very important class of point sources.

In the next 10 years, the air management partners will build upon their

existing skills in identifying key emerging issues and trends, and enhance their ability to respond to change creatively and effectively. These emerging trends underscore the importance of attracting and retaining excellent, motivated staff with a mix of skills, ranging from science and engineering to information management to education and multi-stakeholder facilitation. Meeting this challenge will require the air management partners to work with academic institutions to ensure that high-quality educational and professional development opportunities are available to future generations of air quality professionals.

## **Build a Better Partnership**

During the next 10 years, EPA, tribal, state, and local governments will transform the generally cooperative working relationship of today into a stronger, deeper partnership that is more effective and efficient in protecting air quality. This partnership will be based upon several key principles that will guide the way governments work with one another:

- *Respect:* Acknowledging the importance of the role of each government and agency, the experience and maturity of state and local programs, and the uniqueness of tribal cultures.
- *Up-front involvement* of tribal, state, and local authorities in early stages of EPA's planning, regulatory development, and other key national air activities that will affect them.
- *Clearly defined roles and responsibilities for all levels of government* that are continually reassessed and modified based upon partners' priorities, capabilities, and resources.
- *Clear "rules of engagement"* in areas of potential conflict (e.g., agreement on the criteria and process for deciding which partner should take the lead on enforcement actions).

The partnership will have the means and the commitment to work jointly to align federal, tribal, state, and local goals, objectives, and strategies, so that all parties are working toward common ends. The partners will routinely work together from the beginning of planning and regulatory development processes, resulting in better products and joint "ownership" of resulting strategies. The partners will cooperate to solve problems and resolve differences. The partners recognize that governments will need to move forward with decisions and actions, and expect to improve their joint efforts through implementation, learning, and adaptation.

Tribes have a unique status under federal law. Tribal sovereignty and Congress' intent to authorize direct tribal administration of air programs in Indian

Country were made explicit in the 1990 Clean Air Act Amendments and implemented through the 1998 Tribal Authority Rule. At the same time, the federal government has a special trust responsibility to protect both the natural resources and the right to self-government of native peoples. During the next few years, many tribes will be taking on a direct role managing their own air programs. Tribes will work to build expertise, capacity, and infrastructure so as to develop and administer air programs, and will benefit from assistance and cooperation from EPA, local, and state agencies. In fashioning their own approaches to air quality protection, consistent with their traditions and culture, tribes can benefit from the experiences—and lessons learned—from state and local programs. Tribes will develop a national “voice” for tribal participation in national policy and operational discussions. The air quality management partners will work together to develop the means for tribes to participate with local and state agencies in regional planning and coordination.

Current disagreements between EPA and state agencies about policies and respective roles in enforcement and compliance will be resolved in a way that respects the maturity of state programs and the legitimate need to maintain federal oversight and national consistency. In dealing with specific issues, the partners will have routine mechanisms for determining the most appropriate respective roles—convener, regulator, participant—each can play in solving that problem. Traditional roles and responsibilities will need to be reevaluated collaboratively to assure that activities are being carried out by the air management partner(s) best suited to doing so. As important new initiatives emerge or priorities change, roles and responsibilities might need to change. This collaborative approach, which will require flexibility from all the partners, will channel efforts efficiently and reduce conflict and duplication.

Resource allocation is a key area where air management partners will need to work together. The resources available to carry out the National Air Program have varied over time and have not kept pace with the challenge and scope of the growing program. Federal, tribal, state, and local governments will need to engage legislators, stakeholders, and the public in a broad dialogue on the importance of air quality issues, resulting in well-informed decisions and public support for sufficient resources to carry out important programs to protect air quality. At the same time, air managers will need to work collectively to make the most effective use of finite collective resources. They must establish sound priorities for allocating limited resources, including (where necessary) cutting program elements to free resources to address higher priorities and new initiatives. They will need to work together to identify additional sources of funding and develop creative approaches to get the job done.

Creating an improved intergovernmental air management partnership will require the effective use of existing forums and mechanisms, and the creation of some new ones. STAPPA and ALAPCO are valuable national voices for state

and local air agencies, with ECOS (which has an Air Quality Committee) providing a forum for state environmental directors to communicate with one another and with EPA on policy issues. Performance Partnership Agreements, tribal agreements, and grants can be effective vehicles for jointly setting priorities and agreeing upon respective roles. New or modified mechanisms may be needed to: create a national voice for tribes; develop better mechanisms for joint, intergovernmental regional planning; develop appropriate multi-state planning and coordination venues; and ensure adequate participation by all partners in setting national direction. Future tribal mechanisms for participating in national policy will build upon the existing activities of NTEC and ITEP to create a national tribal air organization.

## **Realizing the Vision**

Senior management representatives of the air management partners, including the Assistant Administrator for EPA's Office of Air and Radiation, a board member of NTEC, the chair and vice chair of the ECOS Air Committee, and the presidents of STAPPA and ALAPCO, are committed to carrying out concrete next steps that will make this vision real and vital. To this end, they have initiated a set of high-priority implementation actions. These actions will strengthen partnership among air managers and advance air quality management under the themes described in this report. The actions are designed to enhance and work with existing institutions, rather than create new layers of bureaucracy or new initiatives unrelated to existing activities. Through the establishment of a Clean Air Partnership Committee, the senior managers propose to formalize their role in steering this multi-government process. The partnership will serve as a forum for senior managers from different levels of government to continue a healthy dialogue on intergovernmental cooperation and strategic direction for the National Air Program.