Carol M. Browner, JD

n July 19, 1997, the Environmental Protection Agency issued its updated air quality standards for ozone and particulate matter-otherwise known as smog and soot. These standards are the culmination of the most thorough scientific review process in EPA history. Mountains of evidence-all of it thoroughly peer-reviewed by scientists, industry experts, and public health officials-led us to the conclusion that air quality standards developed in the 1970s had to be updated for the 1990s because they were not protective enough and too many Americans faced health risks under them. The final product-the first revision in the ozone standard in 20 years and the first-ever standard

> for fine particulates---is a major step forward for protecting the public health in this country.

> > An overwhelming

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The Evidence

Smog and Soot: **Updating Air** Quality **Standards**

margin of safety.

For example, the evidence shows that repeated exposure to ozone pollution at previously acceptable levels can cause permanent damage to the lungs and that children, exercisers, and outdoor workers face particular risks. Studies have linked ozone to aggravated asthma in children and adults, to increased emergency room visits and hospital admissions, to reduced immune defenses, and to temporary reductions in lung capacity of 15% to 20% in healthy adults. One study linked ozone with lung damage equal to more than half that experienced by pack-a-day smokers, while other studies found consistent loss of lung function in children playing outdoors in the summertime. Emphasizing the importance of these findings, the American Academy of Pediatrics has recommended that pediatricians should advise parents to keep their kids indoors when ozone levels are high.

Also compelling is the scientific evidence on fine particulates, which penetrate deep into the lungs. Each year, thousands of Americans, most of them elderly, die prematurely from respiratory illnesses and heart attacks linked with exposure to them. The American Cancer Society found that the risk of early death is 15% to17% higher in areas where levels of fine particulates are the highest, while another study showed that individual lives are shortened an average of one to two years in the most polluted cities.

Lung disease is the third leading cause of death in this country-killing an estimated 335,000 Americans each year. Asthma is the most common chronic illness in children, who breathe in nearly 50% more air per pound of body weight than adults. Asthma is now the leading cause of hospital admissions for children, and deaths from asthma attacks among children and young people more than doubled between 1980 and 1993.

Setting the Standards

Are we ready to abandon the nation's long-standing commitment to a health-based standard for air pollution? The public debate over these new standards focuses on a simple question: are we prepared to trade the health-even the lives-of large numbers of people because a few industry spokespeople project "high costs" to reduce their pollution of the public's air?

I believe the answer is no. Americans want clean air. They want their children protected. They want EPA to do its job-ensuring that the air they breathe is safe and healthy. They want EPA to never let up in carrying out its responsibility to ensure that the nation's air quality standards reflect the best and latest scientific evidence about the health hazards of major pollutants.

That is why Congress built into the Clean Air Act a process designed to ensure that air quality standards would be set and, if necessary, revised in a manner that puts the public health first and ensures that Americans are protected with an adequate margin of safety.

Congress wanted to be sure we would never get to the point where the government tells Americans that their air is healthy to breathe while the scientific community knows that, in fact, it is not. Thus the law directs EPA to review the public health standards for the six major air pollutants at least every five years in order to ensure that they reflect the best current science. It also lays out specific procedures to obtain the latest scientific findings and, if needed, to revise the standards.

The process next requires that EPA's standard-set-

ting work and the underlying health studies be independently reviewed by a panel of scientists and technical experts from academia, research institutes, public health organizations and industry. Once standards are proposed by EPA, they are subject for a period to public comment, after which comments are analyzed and final standards are set. In the most recent standard-setting, the standards were subject to an extra level of thorough review in a Federal interagency process designed to elicit concerns from other parts of government. Congress envisioned that this extensive and comprehensive process would

protect the public from the health hazards of breathing polluted air.

A spirit of bipartisanship launched the Clean Air Act in 1970 with an u n c o m p r o m i s i n g promise of public health protection. President Richard Nixon proclaimed it to be "a historic piece of legislation that puts us far down the

road toward...[the] goal of clean air." The same bipartisan spirit led to the strengthening of the Act in 1990, with President Bush saying that "every American expects and deserves to breathe clean air." And, in fact, due to the success of the original Act and subsequent revisions, many millions of Americans today are breathing healthier air. Millions more of our children are protected from the harmful effects of air pollution.

The Clean Air Act has worked for America. It has protected the public health without holding our economy back. In fact, since 1970, emissions of the six major air pollutants have dropped by 29% while the population has grown by 28% and the gross domestic product has nearly doubled. Time and time again, American industry and the American people have risen to the challenge of cleaner air.

Public Health Comes Before Costs

The Clean Air Act does not allow EPA to consider costs at the critical public health stage of the standardsetting process, requiring instead that pollution limits be based solely on health, risk, exposure, and damage to the environment, as determined by the best available science.

This is no accident. In the 1970 Clean Air Act debate, Congress deliberated the issue of cost in addition to the technical feasibility of meeting clean air standards. The decision was made that the public health must come first. The current best science must prevail in determining the level of protection the public will be guaranteed. Nothing else can take precedence.

This issue has been revisited both times the Clean Air Act has been amended—in 1977 and 1990. And, each time, Congress and the President have come down firmly on the side of putting the public health first. Not only does the law forbid us from considering costs in setting these standards, but history and real experience tell us we'd be foolish to try.

Almost every time we have begun the process to set or revise air standards, the costs of doing so have been

Mountains of evidence led the EPA to the conclusion that air quality standards developed in the 1970s had to be updated for the 1990s. grossly overstated—by both industry and EPA. Dire predictions of economic chaos—always a part of the clean air debate—have never come to pass. Why? Because industry ultimately rises to the challenge, finding cheaper, more innovative ways of meeting the standards and lowering pollution.

At the implementation stage, it is certainly appropriate, under the law, to consider the costs of compliance. In fact, EPA has assembled an implementation package for the new air quality standards designed to give states, local governments, and businesses the flexibility they'll need to meet protective public health standards in a reasonable, common sense, and cost-effective way. We will work with all who are affected—state governments, local governments, communities, and businesses large and small—to find the best strategies for reducing pollution, providing the public health protections, and, at the same time, doing everything we can to prevent adverse economic impact.

Abandon Public Health? No!

Should the nation abandon its commitment to a public health standard for air pollution? I think not. I believe the American people want us to work together with public health professionals, state and local governments, and industry to improve air quality so that future generations can breathe a little easier.

Ms. Browner is the Administrator of the U.S. Environmental Protection Agency.

Address correspondence to Ms. Browner, Environmental Protection Agency, Rm. 1204 West Tower, 401 M St. SW, Washington DC 20460; tel. 202-260-4700.