

# CLEAN AIR

Air quality in the U.S. has improved markedly since the 1960s when, for example, smog in Los Angeles could be seen from space. But much remains to be done, as air pollution continues to cause illness and death. Air pollution aggravates heart and respiratory conditions, such as asthma, and leads to millions of missed days of school and work. Still, the Clean Air Act has saved hundreds of thousands of lives since its enactment in 1970, and recent EPA analyses of the benefits of the Act estimate that they outweigh costs by at least a factor of more than 30 to 1. The Clean Air Act has achieved all these benefits over the last 40 years while Gross Domestic Product has increased by 207 percent.

## I. PRIMARY STATUTES

### ■ CLEAN AIR ACT

Passed by overwhelming bipartisan majorities in 1970 and when amended in 1977 and 1990 (the last significant amendments), the Act requires EPA to limit emissions of air pollution that “endanger public health and welfare.”

## II. MAJOR ACCOMPLISHMENTS

### ■ ILLNESSES AVOIDED

The first 20 years of the Clean Air Act, from 1970 to 1990, resulted in the prevention of more than 205,000 premature deaths in the year 1990 alone. The 1990 amendments to the Act have provided significant additional benefits—nearly 2 million lives have been cumulatively saved from 1990 to 2010, according to NRDC’s analysis of data from EPA’s recent report, “Benefits and Costs of the Clean Air Act from 1990 to 2020.”

### ■ AIR POLLUTION REDUCTIONS

Since 1970, the Act has significantly reduced air pollution. From 1990 to 2008, emissions of the six most common pollutants dropped by over 40%.

### ■ DOLLAR SAVINGS

Net direct monetized benefits of the Clean Air Act from 1970 to 1990 total about \$21.7 trillion from lower mortality, fewer cases of chronic and acute illness, less frequent trips to the hospital, and fewer lost work days. The 1990 amendments have secured even more benefits—\$1.24 trillion in net direct monetized benefits in 2010 alone and \$12 trillion in monetized benefits from 1990 to 2020.



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### III. UPCOMING ISSUES

#### ■ SOOT STANDARDS

In December 2012, EPA finalized new limits on emissions of soot. (Technically, these are National Ambient Air Quality Standards (NAAQS) for particulate matter of 2.5 micrometers in diameter or smaller, “PM2.5” or fine particle pollution.) PM2.5 particles are so small that they can penetrate deep into the lungs and blood stream and cause a variety of serious health impacts including heart attacks, asthma attacks and premature death.

The Clean Air Act requires NAAQS to be set every five years at a level sufficient to protect human health and welfare. Scientists and an independent body of scientific advisors studied the science and recommended that EPA set a standard at 12 micrograms per cubic meter ( $\mu\text{g}/\text{m}^3$ ), down from the previous standard, set in 1997, of  $15 \mu\text{g}/\text{m}^3$ . EPA estimates that meeting this standard will provide health benefits worth up to \$9.1 billion per year in 2020—a return of \$12 to \$171 for every dollar spent on pollution reductions.

#### PUBLIC OPINION

The American public overwhelmingly supports the Clean Air Act. Recent polls indicate that Americans support updating Clean Air Act standards and strongly oppose congressional efforts to block EPA. Three out of four voters support EPA setting tougher standards on specific air pollutants, including mercury, smog and carbon dioxide, as well as setting higher fuel efficiency standards for heavy duty trucks.<sup>1</sup> Two out of three voters believe that strengthening safeguards against pollution will create, rather than destroy, jobs by encouraging innovation.<sup>2</sup>

1 American Lung Association poll, February 16, 2011 (press release available here: <http://www.lung.org/press-room/press-releases/bipartisan-clean-air-poll.html>) (last visited January 4, 2013).

2 American Lung Association poll, March 21, 2012 (press release available here: <http://www.lung.org/about-us/our-impact/top-stories/new-poll-epa-air-pollution.html>) (last visited January 4, 2013).

In 2009, a federal court struck down EPA's 2006 decision to maintain the standard at  $15 \mu\text{g}/\text{m}^3$ , contrary to its science advisors' recommendations, and sent it back to EPA because the agency had failed to explain its reasoning.

This standard could be subject to a resolution of disapproval under the Congressional Review Act (CRA) this spring. NRDC supports the new standards and opposes overturning them. Protective clean air standards are the law's bedrock and let the public know if the air is safe to breathe.

#### ■ INDUSTRIAL BOILERS

EPA also finalized revised toxic air pollution standards cutting mercury, acid gasses, and toxic metals from industrial boilers and incinerators in December 2012. Mercury is a neurotoxin that affects brain development of children and the unborn. EPA's standards will avoid up to 8,100 premature deaths, 5,100 heart attacks, and 52,000 asthma attacks each year in 2015. EPA estimates that meeting this standard will provide health benefits worth up to \$67 billion in 2015—a return of \$13 to \$29 for every dollar spent on pollution reductions. Facilities are not required to comply with the standards until 2016 at the earliest. (These are separate from mercury limits on power plants, which have already survived Congressional challenges.)

EPA initially adopted these standards in March 2011, but agreed to reconsider the standards in response to industry concerns. The revised standards require only the largest and most polluting facilities to limit their pollution, and require natural gas boilers to meet modest maintenance and recordkeeping conditions. These standards are more than a decade overdue, and previous weaker versions have been struck down in court for violating the Clean Air Act. Like EPA's soot standards, these standards could be the subject of a resolution of disapproval under the CRA this spring. These standards will save thousands of lives by for the first time requiring industrial boilers and incinerators to limit their toxic air pollution under the Clean Air Act. NRDC's view is that Congress should support EPA's revised health standards.