



**UNITED STATES SENATE
COMMITTEE ON ENVIRONMENT
AND PUBLIC WORKS**

**BARBARA BOXER
CHAIRMAN**

MAJORITY STAFF REPORT

**A STRONG EPA PROTECTS OUR HEALTH
AND PROMOTES ECONOMIC GROWTH**

OCTOBER 6, 2011

EXECUTIVE SUMMARY

Since implementation of the Clean Air Act in the 1970s, followed by the Clean Water Act, the Safe Drinking Water Act, Superfund, and other important environmental laws, America's gross domestic product (GDP) has risen by 207 percent,¹ and it remains the largest in the world.²

Complying with the nation's public health and environmental protection laws has bolstered a \$300 billion a year clean technology sector that employs an estimated 1.7 million people.³

Our environmental laws provide major health and economic benefits. For example, the Clean Air Act's annual benefits by 2020 are expected to prevent 230,000 premature deaths, 200,000 cases of heart attacks, 2.4 million cases of asthma attacks, 120,000 emergency room visits, and 5.4 million lost school days.⁴

The economic benefits of the Clean Air Act will equal about \$2 trillion per year by the year 2020 if we continue enforcing the Act.⁵

As Chairman Barbara Boxer has often stated, "If you can't breathe, you can't work. If you need to take your child to the hospital or if the breadwinner of the family dies prematurely, a major financial burden is placed on the family and often on society."

The same logic applies to preventing deaths and illnesses from polluted water and toxins.

The conclusion is clear: Our landmark environmental laws are critical to a stronger, healthier and more productive workforce – they are integral to our quality of life and support a strong economy. The Environmental Protection Agency's (EPA) important role was clear at its creation and is just as vital today.



"Clean air, clean water, open spaces – these should once again be the birthright of every American."

President Richard Nixon, Annual message to the Congress on the State of the Union (January 22, 1970).



"For four decades, we have confronted environmental challenges, fostered innovations, and cleaned up pollution..."

U.S. EPA Administrator Lisa Jackson, Special Message from the Administrator, EPA at 40. (December 10, 2010)



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I. BIPARTISAN SUPPORT FOR A STRONG EPA

The establishment of the Environmental Protection Agency (EPA) and the development of our nation's landmark environmental laws reflect a history of bipartisanship over many decades. The legislative history behind these laws is a shining example of the nation's political leaders at their best – working across the aisle to appropriately address threats to families, communities, and the environment.

Republican President Created EPA in 1970 with Bipartisan Congressional Support

- In his 1970 State of the Union address, President Richard Nixon (R) proclaimed the new decade to be a period of environmental transformation.⁶ Later that year, President Nixon sent to Congress his plan for an independent regulatory agency, the EPA. This new agency would be comprised of existing bureaus and offices spread across other federal agencies. Congress supported the President's plan, and on December 2, 1970, the EPA opened its doors.⁷
- Beyond the creation of EPA itself, many of the environmental laws that the agency is charged with implementing and enforcing were passed by Congress with overwhelming bipartisan support and were signed into law by both Democratic and Republican presidents.



“[I]t is easy to forget how far we have come in the past 40 years. We should take heart from all this progress and not, as some in Congress have suggested, seek to tear down the agency that the president and Congress created to protect America's health and environment.”

Former EPA Administrators William Ruckelshaus and Christine Todd Whitman, Washington Post (March 24, 2011).



Clean Air Act and its Amendments Received Strong Bipartisan Support in Congress

- During the Senate debate on the Clean Water Act, Senator Jennings Randolph (D-WV), Chair of the Senate Committee on Public Works, highlighted the importance of protecting public health for our economic prosperity: “I think that we have to ensure the protection of the health of the citizens of this Nation, and we have to protect

against environmental insults – for when the health of the Nation is endangered, so is our welfare, and so is our economic prosperity.”⁸

- The 1970 Clean Air Act passed the Senate 73 to 0 and passed the House of Representatives by a vote of 375 to 1.⁹ Republican President Richard Nixon signed the bill into law, saying: “This is the most important piece of legislation, in my opinion, dealing with the problems of clean air that we have this year and the most important in our history...It came about by a bipartisan effort...”¹⁰



“[W]hen the health of the Nation is endangered, so is our welfare, and so is our economic prosperity.”

Senator Jennings Randolph (D-WV) A Legislative History of the Clean Air Amendments of 1970, Vol. 1, 144 (1974).



- The Clean Air Act amendments of 1977 passed the Senate by a vote of 73 to 7 and were approved by the House by a vote of 326 to 49.¹¹ The amendments were signed into law by a Democratic President, Jimmy Carter.¹²
- The Clean Air Act Amendments of 1990 provided further evidence of bipartisan support for clean air safeguards. The Senate approved the amendments by a vote of 89 to 10, and the House passed the bill by a vote of 401 to 25.¹³ During Senate debate on the amendments, Senator Quentin Burdick (D-ND) stated: “This is an important moment for the United States and a landmark occasion for environmental legislation...This bill has been a truly bipartisan effort...”¹⁴ When President George H.W. Bush signed the bill into law, he stated: “Passage of this bill is an indication that the Congress shares my commitment to a strong Clean Air Act [and] to a clean environment...”¹⁵

Clean Water Act Passed by an Overwhelming Margin in the Senate and House

- Senator Ed Muskie (D-ME) introduced the Clean Water Act of 1972 with bipartisan support, including Senators Jennings Randolph (D-WV), Howard Baker, Jr. (R-TN), Lloyd Bentsen (D-TX), Robert Dole (R-KS), and John Sherman Cooper (R-KY).¹⁶
- During debate of the bill, Senator Muskie highlighted water pollution’s broad range of harmful impacts: “This country once was famous for its rivers....But today, the

rivers of this country serve as little more than sewers to the seas...The danger to health, the environmental damage, the economic loss can be anywhere...”¹⁷

- In addition to the public health and environmental impacts of water pollution, Senator Muskie addressed the economic costs of pollution: “Industries also suffer economic loss...The copper lost through discharge into the rivers, if reclaimed and reused, would be worth \$5 billion a year.”¹⁸
- Senator Dole also spoke out strongly in support of the bill, saying: “The time is past being ripe for a consistent, comprehensive, long-range approach to the problems of water pollution in America. The value of our water resources is incalculable and the damage which their continued deterioration and degradation would inflict on present and future generations is too great to permit us the luxury of inaction or piecemeal attempts at solutions.”¹⁹
- The bill passed the Senate by a vote of 74 to 0, and the House of Representatives passed the bill by a vote of 366 to 11.²⁰ While President Nixon vetoed the bill, both houses of Congress voted to override his veto.²¹



“Nothing is more essential to the life of every single American than clean air, pure food, and safe drinking water.”

President Gerald Ford, Signing Statement, Safe Drinking Water Act (1974).



Safe Drinking Water Act Passed Unanimously in the Senate and House

- Congress acted to address a growing awareness of drinking water problems with the first major statute that required drinking water systems to meet federal public health standards. The Safe Drinking Water Act of 1974²² was supported by Republicans, such as Senators Howard Baker, Jr. and Ted Stevens (R-AK), and by Democratic Senators, such as Birch Bayh (D-IN), Edward Kennedy (D-MA), and Warren Magnuson (D-WA), who introduced the bill.²³
- The bill was introduced in January 1973, and it became law in December 1974 – with both the Senate and House passing the bill unanimously.²⁴
- Congress passed major sets of amendments to the Safe Drinking Water Act in 1986 and 1996. The 1996 amendments were another hallmark of bipartisan support. Senator Dirk Kempthorne (R-ID) introduced the Senate bill, which was cosponsored by more than two dozen Republicans, including Senators Strom Thurmond (R-SC),

Craig Thomas (R-WY), and Mitch McConnell (R-KY).²⁵ Democrats such as Senators Max Baucus (D-MT), Kent Conrad (D-ND), and David Pryor (D-AR) also cosponsored the bill.²⁶ The Republican-controlled House of Representatives agreed to final passage by a vote of 392 to 30, and the Republican-controlled Senate unanimously agreed to final passage.²⁷

II. JOB CREATION AND ECONOMIC GROWTH

Federal safeguards that protect the environment and public health offer a significant return on investment, and they have been put in place while the nation's economy has continued to grow. Office of Management and Budget analyses of ten EPA regulations finalized in recent years found that the total benefits were seven times greater than costs.²⁸ Studies on the accuracy of claims about the adverse costs of clean air, clean water, and other public health protections have found that polluting industries' statements are often exaggerated.²⁹ In addition, the industries that provide environmental protection have become a significant economic sector that has created more than a million jobs.

Robust Economic Growth has Continued While Maintaining Environmental Protections

- Since the Clean Air Act's inception in 1970, which was followed by the Clean Water Act, Safe Drinking Water Act, Superfund, and many other important environmental laws, U.S. gross domestic product (GDP) has risen by 207 percent.³⁰

EPA's Safeguards Offer a Significant Return on Investment

- The Clean Air Act is projected to provide nearly \$2 trillion in annual benefits by the year 2020,³¹ and water quality protections in the Clean Water Act are estimated to provide \$11 billion in benefits annually.³²

EPA's Regulations and Job Creation

- Environmental protections have provided businesses with the opportunity to develop, construct, and sell new and cleaner products and create more efficient methods of production.
- The jobs created cover many areas of expertise and skill sets, including accountants, engineers, computer analysts, clerks, and factory workers.³³

Clean Technology Creates Jobs

- The United States is regarded as a world leader in many environmental technology categories and is the world's largest producer and consumer of environmental technology goods and services.³⁴
- The U.S. environmental technology industry is a significant economic engine comprised of approximately 119,000 firms, 99 percent of which are small and medium-sized companies.³⁵

- According to the Department of Commerce, the U.S. environmental technology industry in 2008 generated approximately \$300 billion in revenues, \$43.8 billion in exports, and supported almost 1.7 million jobs.³⁶
- The U.S. share of foreign environmental technology markets has continued to grow (from 5.7 percent in 1997 to 9.8 percent in 2007), giving the U.S. environmental technology industry a positive trade surplus for the past decade.³⁷

III. BENEFITS OF CLEAN AIR

Every year, the Clean Air Act removes millions of tons of toxic air pollutants that can cause asthma attacks, lost days at school and work, emergency room visits, heart attacks, strokes and premature deaths. This landmark law enjoys broad public support, as multiple polls show that the public expects our air to be clean and wants decisions about clean air regulations to be based on science, not politics. The Clean Air Act is one of the most important, successful, and comprehensive laws that Congress has passed to protect public health and environmental quality. It also has a long track record of bolstering economic health along with public health, as new industries rise to meet clean air goals. Clean air is a job creator.

The Clean Air Act Spurs Economic Growth

- While clean air regulations require capital investment, research has found that implementation of the Clean Air Act increased the size of the U.S. economy, with U.S. GDP growing by an estimated 1.5 percent between 1970 and 2010 because of clean air protections.³⁸
- The Clean Air Act has created opportunities for businesses to grow, spawned new industries, and created jobs. In 2008, the air pollution control sector alone produced \$18 billion in revenue.³⁹

The Benefits of Clean Air Act Safeguards Significantly Outweigh Costs

- The total benefits of the Clean Air Act amount to more than 30 times the cost of the regulation. For every \$1 spent on clean air protections, we get \$30 of benefits in return.⁴⁰



“Our companies’ experience complying with air quality regulations demonstrates that regulations can yield important economic benefits, including job creation, while maintaining reliability.”

PG&E; Calpine Corp.; NextEra Energy, Inc.; Public Service Enterprise Group; National Grid USA; Exelon Corp.; Constellation Energy Group; and Austin Energy, Wall Street Journal, Letter to the Editor (Dec. 8, 2010).



- The Clean Air Act's safeguards not only reduce illnesses, decrease premature deaths, and improve the economic welfare of Americans, but they also create substantial economic benefits. EPA has found that the annual economic value of these benefits will reach almost \$2 trillion in 2020.⁴¹

The Clean Air Act Helps to Ensure People are Healthy So They Can Work and Learn

- In 2010 alone, the Clean Air Act prevented 160,000 premature deaths, 1.7 million asthma attacks, 130,000 heart attacks, 86,000 emergency room visits, 13 million lost work days, and 3.2 million lost school days.⁴²
- By 2020, the Clean Air Act is projected to prevent 230,000 premature deaths, 2.4 million asthma attacks, 200,000 heart attacks, 120,000 emergency room visits, 17 million lost work days, and 5.4 million lost school days.⁴³

The American People Support Clean Air Protections

- The Clean Air Act enjoys broad support from the American people. The public supports stricter limits on air pollution and believes scientific experts should be responsible for setting pollution standards.⁴⁴
- A February 2011 bipartisan poll conducted for the American Lung Association (ALA) showed:
 - o **69 percent** of likely voters think EPA should update Clean Air Act standards with stricter limits on air pollution;
 - o **68 percent** feel that Congress should not stop EPA from updating Clean Air Act standards; and
 - o **69 percent** believe that EPA scientists, rather than Congress, should set pollution standards.⁴⁵
- Another bipartisan ALA poll in June 2011 found that **65 percent** of voters say that stricter standards on air pollution will not damage our economic recovery and **more than 50 percent** believe that updating standards will likely create more jobs – not less.⁴⁶

IV. CLEANER VEHICLES PROMOTE JOBS AND SAVE AMERICANS MONEY

The EPA and the National Highway Traffic Safety Administration are leading a joint effort to reduce greenhouse gas pollution and increase fuel efficiency of vehicles (referred to as the “National Program”). This long-sought improvement won strong support from industries and workers, with agreement from car manufacturers and labor unions. Multiple studies have shown these regulations will strengthen our economy, create jobs, and bolster the auto industry and its supply chain.

New Standards Promote Consumer Savings

- In April 2010, the National Program instituted standards that require cars and light trucks manufactured from 2012 to 2016 to achieve an estimated 35.5 miles per gallon in fuel efficiency.⁴⁷ These standards are projected to save 1.8 billion barrels of oil, reduce greenhouse gas pollution from these vehicles by 21 percent, and save Americans more than \$3,000 over the life of the car.⁴⁸
- In July 2011, the National Program announced an agreement for additional increases in fuel economy and reductions in greenhouse gas emission for cars and light trucks, resulting in vehicles averaging 54.5 miles per gallon by 2025.⁴⁹ These measures will save an estimated 4 billion barrels of oil and reduce greenhouse gas pollution by 2 billion metric tons.⁵⁰



“General Motors Company recognizes the benefit for the country of continuing the historic National Program to address fuel economy and greenhouse gases that the Environmental Protection Agency (EPA) and the National Highway Traffic Safety Administration (NHTSA) began...”

Letter from Daniel F. Akerson, Chairman and CEO, General Motors Co. to Honorable Lisa Jackson, EPA Administrator and Honorable Ray LaHood, Secretary of the U.S. Dept. of Transportation (July 29, 2011).



New Standards Promote Job Growth

- A 2010 United Auto Workers report found that meeting a 31.5 mile per gallon standard would result in up to 54,000 additional jobs in the United States, in such industries as manufacturing and auto parts supply companies.⁵¹

- A 2011 United Auto Workers report showed that the use of technologies to manufacture cleaner, more fuel efficient vehicles can help to promote job growth.⁵² The report found that 300 companies in 43 states that form the supply chain for clean and efficient vehicle technologies directly employ 150,000 workers.⁵³
- According to the 2011 report, “Strong standards will be the most effective way to cut our nation’s oil dependence and carbon pollution, improve our security, and keep billions of dollars in our economy annually instead of sending it overseas to purchase oil. Strong standards will also put automotive engineers and production workers on the job, supplying ingenuity for cleaner, more fuel-efficient vehicles.”⁵⁴

V. ADDITIONAL BENEFITS OF RECENT CLEAN AIR SAFEGUARDS

The EPA has recently proposed or implemented much-needed Clean Air Act protections to reduce hazardous air pollutants, such as mercury, smog and toxic soot pollution from old power plants and industrial facilities. Mercury is a dangerous heavy metal that can damage the nervous system, including the brain, and harm children's memory, language skills and mental abilities.⁵⁵ Pregnant women and infants are especially at risk.⁵⁶ These safeguards will save lives, reduce illnesses that make people miss work, and prevent harm to children's development. Based on past experience, it is also expected to spur investments in clean energy technologies, build our economy, and create jobs.

Recent Public Health Protections Are a Wise Investment

- The Economic Policy Institute examined the combined effects of “major” EPA rules that the Obama Administration has finalized or proposed and found that “the dollar value of the benefits of the major rules finalized or proposed by the EPA...exceeds the rules’ costs by an exceptionally wide margin. Health benefits in terms of lives saved and illnesses avoided will be enormous.”⁵⁷
- That report found that the combined impact of:
 - All final rules, excluding the Cross-State Air Pollution rule, exceeded costs by \$10 to \$95 billion a year – a benefit-to-cost ratio of up to 20 to 1; and
 - Three proposed rules analyzed would exceed their costs by \$62 billion to \$188 billion a year – a benefit-to-cost ratio of up to 15 to 1.⁵⁸

Reducing Mercury Pollution from Old Power Plants

- There are 1,350 coal and oil-fired units at 525 power plants that emit toxic pollutants, such as mercury, arsenic, and other heavy metals, as well as acid gases and dioxins.⁵⁹
- Power plants are the biggest emitters of mercury (50 percent of such emissions), other heavy metals (more than 25 percent), and acid gases (more than 50 percent) in the nation.⁶⁰
- Despite proven control technologies, more than two decades after passage of the 1990 Clean Air Act Amendments, there is no existing federal requirement for power plants to limit their emissions of mercury, arsenic and other dangerous forms of pollution.⁶¹
- In March 2011, EPA proposed requiring modern controls on power plants’ hazardous air pollution emissions that will:

- o Reduce 91 percent of mercury from coal-fired plants' emissions, 91 percent of acid gas emissions, and 55 percent of toxic soot emissions from power plants.⁶²
- o Prevent up to 17,000 premature deaths, 11,000 heart attacks, 12,200 hospital and emergency room visits, 120,000 asthma attacks, 220,000 cases of respiratory illness, and 850,000 lost work days.⁶³
- o Provide up to \$140 billion in annual benefits by 2016 – a benefits-to-cost ratio of up to 13 to 1.⁶⁴
- o Support 31,000 construction jobs and 9,000 long-term jobs in the utility sector.⁶⁵
- o Level the playing field between electric utilities that have invested in modern pollution controls and utilities that have failed to make such investments.⁶⁶

Reducing Toxic Soot, Heavy Metals and Acid Gas Emissions from Cement Plants

- Over 150 cement kilns at approximately 100 facilities emit smog and toxic soot pollution that can contain hazardous air pollutants, including mercury, arsenic, lead and other heavy metals.⁶⁷ These industrial kilns are the third largest mercury source in the country.⁶⁸
- In September 2010, EPA issued controls to reduce hazardous air pollutants from industrial kilns, which will:
 - o Reduce mercury and toxic soot emissions by 92 percent and acid gases by 97 percent.⁶⁹
 - o Prevent up to 2,500 premature deaths, 1,500 heart attacks, more than 1,700 emergency room and hospital visits, 17,000 cases of aggravated asthma attacks, and 130,000 days of lost work.⁷⁰
 - o Provide up to \$18 billion of benefits annually by 2013 – a benefits-to-cost ratio of up to 19 to 1.⁷¹

Reducing Deadly Air Pollution From Upwind Electric Utilities

- Air pollution can travel hundreds of miles from industrial facilities, such as power plants, endangering the health of people in downwind states. The Clean Air Act's "Good Neighbor" provisions require EPA to reduce pollution from such facilities. In August 2011, EPA finalized the "Cross-State Air Pollution Rule" to reduce smog-forming pollution and toxic soot from power plants that seriously impact the health of people in downwind states.⁷²

- By 2014, the pollution controls required by this rule will reduce 6.4 million tons of toxic soot pollution and 1.4 million tons of smog-forming pollution per year, which will improve air quality for more than 240 million people in eastern, central, and southern states.⁷³
- By 2014, EPA estimates the public health benefits of these protections will be up to \$280 billion, including avoiding up to 34,000 cases of premature death, 15,000 heart attacks, 19,000 emergency room and hospital visits, 19,000 cases of acute bronchitis, 400,000 cases of aggravated asthma attacks, and 1.8 million lost work and school days.⁷⁴
- Non-monetized benefits include the reduced acidification of lakes, streams, and forests, improved health of estuaries and coastal waters, which are extremely important areas for fish and wildlife, and increased yields for forests and farmers.⁷⁵

VI. POLLUTER SCARE TACTICS DISCREDITED

Studies on the reliability of claims about the costs of clean air, clean water, and other public health protections have found that polluting industry statements are often exaggerated. A 2011 study by the Economic Policy Institute found that although “[w]ell-designed and strongly enforced regulations are often necessary for the economy to operate effectively, a proposition supported by the history of regulation...,” a wide array of industry cost estimates for regulations “were substantially overstated.”⁷⁶ In addition, independent analysis by the non-partisan Congressional Research Service (CRS) undermines the claims of some in the electric utility industry that EPA’s clean air rules will cause economic hardship for the electric power sector.⁷⁷

Consistently Exaggerated Costs of Public Health Safeguards

- A 1997 study compared cost estimates to the actual cost of implementing 12 rules and found a “clear pattern” that costs were exaggerated. The study found that costs were overestimated anywhere from 29 percent to 2,900 percent, and concluded that “the pattern of overestimating the cost of complying with specific regulations is striking.”⁷⁸
- CRS found that a study by Crain and Crain, which is widely cited by large industry associations, was based on studies “some of which are now more than 30 years old” and cost estimates created before the rules were issued, “some of which are now 20 years old.”⁷⁹



“Environmentally responsible behavior has become good for the bottom line.”

Office of Management and Budget, Report to Congress on the Costs and Benefits of Federal Regulation (Sept. 1997).

Independent Analyses Undermine Polluter’s Negative Claims on Clean Air Safeguards

- In 1995, the *Wall Street Journal* reported on a study that claimed electric utilities had “exaggerated the costs of complying” with required air pollution reductions.⁸⁰
- A 2011 CRS report⁸¹ analyzed electric utilities’ most recent claims against EPA’s clean air rules and found a host of problems, including:
 - Industry’s claims “tend to exaggerate the regulatory burden” of EPA’s rules and “treats as imminent the promulgation of rules that may not be so”;⁸²



- o “The analyses discussed here generally predate EPA’s actual proposals and reflect assumptions about stringency and timing...that differ significantly from what EPA actually may propose or has promulgated”,⁸³

- o “The primary impacts of many of the rules will largely be on coal-fired plants more than 40 years old that have not, until now, installed state-of-the-art pollution controls”,⁸⁴

- o “Many of these plants are inefficient and are being replaced by more efficient combined cycle natural gas plants, a development likely to be encouraged in the price of competing fuel -- natural gas -- continues to be low, almost regardless of EPA rules”,⁸⁵ and
- o “Prior to release of [an] EPA proposal, industry assumed that the agency would propose a more stringent rule with a more rapid timeline for compliance.”⁸⁶



“We estimate that over the past seven years, the implementation of the [Clean Air Interstate Rule] resulted in 200,000 jobs in the [air pollution control industry].”

Institute of Clean Air Companies, Letter to Senator Tom Carper (Nov. 3, 2010).



VII. CLEAN WATER AND JOB GROWTH

Nearly four decades ago, pollution and destruction of our nation's waters had reached crisis levels, because lakes, rivers and streams across the country were filled with industrial pollution and municipal sewage.⁸⁷ To address the water quality crisis, Congress passed the Clean Water Act to replace the prior system—a patchwork of ineffective federal and state laws which had failed to adequately control the discharge of pollution into the nation's waterways. Throughout its history, the Clean Water Act, which is a comprehensive federal-state partnership that restores, protects, and maintains the nation's waters, has enjoyed bipartisan support.⁸⁸ Clean water is essential for industries that support American jobs, including commercial and recreational fishing, tourism and construction.



The Clean Water Act has Successfully Reduced Pollution in Our Nation's Waterways

- In 1972, only 30 percent to 40 percent of assessed waters met water quality goals.⁸⁹ By 2004, the Clean Water Act had achieved major progress, with 56 percent of streams and rivers and 70 percent of bays and estuaries in good condition, meeting federal water quality standards.⁹⁰
- Over the past 40 years, EPA has strengthened water quality standards throughout all the coastal recreation waters in the United States. All 35 states and territories with coastal recreation waters now have water quality standards for pathogens that are as protective of human health as EPA's recommended water quality criteria -- an increase from 11 states and territories in 2000.⁹¹
- States have also significantly improved their assessment and monitoring of beaches. According to EPA data, the number of monitored beaches increased from about 1,000 in 1997 to more than 3,600 in 2010.⁹²

Clean Water Protections are Critical to the Nation's Economy

- A 2000 study commissioned by EPA estimated that the economic benefit of the Clean Water Act's water quality controls is \$11 billion per year.⁹³

More Work is Needed to Reduce Pollution that Harms Our Health

- Pollution of the nation's rivers, streams, and lakes still threatens the health of our citizens and the ability of workers to be productive. In 2000, EPA reported that "at least a half-million cases of illness annually can be attributed to microbial contamination in drinking water."⁹⁴
- EPA's 2004 National Water Quality Assessment reports that pathogens, which indicate possible fecal contamination that may cause illness, are the greatest source of impairment of streams, rivers, bays, and estuaries that were surveyed.⁹⁵
- During 2005–2006, the Centers for Disease Control reported a total of 78 water-borne disease outbreaks associated with recreational waters in 31 states. Illness associated with these outbreaks occurred in 4,412 people, resulting in 116 hospitalizations and five deaths.⁹⁶

Important Industries Rely on Clean Water Act Protections

- Clean water is important for a number of industries, including outdoor recreation, coastal tourism, commercial fishing, and construction.
- In 2006, 87.5 million Americans – 29 percent of the U.S. population -- enjoyed recreational activities relating to fish and wildlife, such as fishing, hunting, and wildlife watching. Expenditures by this group were \$122.3 billion, or about 1 percent of the nation's GDP.⁹⁷
- Beach visitation and recreational fishing contribute from \$16 billion to \$56 billion per year to the U.S. economy.⁹⁸
- The 10 billion pounds of total U.S. commercial fish landings in 2004 were worth over \$3.8 billion, and a large share of these fish species are dependent on healthy and clean estuaries for at least some stage of their life.⁹⁹
- The construction industry plays an important role in the development of the nation's wastewater treatment infrastructure. According to a study by the Clean Water Council, \$1 billion in water infrastructure investment creates up to 26,669 jobs.¹⁰⁰

VIII. SAFE DRINKING WATER AND JOB GROWTH

In the 1960s and 1970s, serious problems with the nation's drinking water supplies were discovered, including deficiencies in the disinfection process, lead from drinking water pipes, and chemical and biological contamination in major cities and rural areas.¹⁰¹ To address a growing awareness of water quality problems, Congress passed the Safe Drinking Water Act of 1974, which was the first major federal statute that required community drinking water systems to meet public health standards. This Act, which reduces health risks and ensures a safe and reliable supply of drinking water, has been crucial to the health and well-being of our nation.

Beyond assuring the health and productivity of workers nationwide, studies have shown that drinking water treatment and pollution prevention systems are themselves job creators.

Benefits of the Safe Drinking Water Act Include Job Creation and Economic Growth

- According to the U.S. Conference of Mayors, every dollar invested in drinking water and waste water infrastructure increases the Gross Domestic Output by \$6.35 over the long term – a 6 to1 return on the investment.¹⁰²
- Each dollar of economic output in the water and wastewater industry also increases the economic output of other industries by \$2.62.¹⁰³ By creating one job in the water and wastewater industry, at least three other jobs are needed in the economy to support that work in the water and wastewater industry.¹⁰⁴



“Safe drinking water is the American people’s first line of defense for public health.”

President Bill Clinton Statement on the Signing of the Safe Drinking Water Act Amendments of 1996 (Aug. 6, 1996).



Safe Drinking Water Act has Improved Public Health

- Waterborne infectious diseases, such as cholera and typhoid, began to dramatically decline in the United States after filtration and chlorination of drinking water was introduced starting around 1900.¹⁰⁵
- In 2009, 92 percent of all community water systems met applicable drinking water standards.¹⁰⁶
- Strong drinking water treatment and distribution systems have resulted in a reduction of lost wages due to illness, improved workplace productivity, fewer trips to the emergency room and doctor's office, and less money spent on medications.¹⁰⁷

IX. CURRENT LEGISLATIVE ATTACKS ON EPA

In the 112th Congress, legislation has been introduced to halt or undermine new clean air safeguards proposed by EPA. Collectively, these public health protections will prevent thousands of premature deaths, reduce hospital visits and asthma attacks, and prevent hundreds of thousands of lost work days. The U.S. House of Representatives has already passed legislation (H.R. 2401) to halt progress on rules to reduce air pollution that travels across state lines and to limit toxic emissions from power plants.¹⁰⁸ The Republican House leadership plans to bring up additional legislation to roll back public health protections in the coming weeks and months.¹⁰⁹

Passing these bills will sacrifice the enormous public health and economic benefits of the new safeguards proposed by EPA. That is why President Obama's Administration has opposed these bills and will recommend the President veto three bills that have either passed the House or will soon be considered by the House to suspend critical clean air protections:

- H.R. 2401 – Transparency in Regulatory Analysis of Impacts of the Nation Act of 2011
- H.R. 2250 – EPA Regulatory Relief Act of 2011
- H.R. 2681 – Cement Sector Regulatory Relief Act of 2011

Despite the Clean Air Act's clear benefits to public health, working families, and the economic growth, the Committee anticipates additional efforts to weaken clean air safeguards and exact crippling cuts to EPA's budget for the remainder of this Congressional session. The Committee stands ready to protect the nation's landmark public health and environmental laws from efforts to undermine these vital protections.

X. CONCLUSION

The Environmental Protection Agency and the nation's landmark environmental safeguards were created with overwhelming bipartisan consensus in Congress and support from Republican and Democratic presidents. Forty years of achievements are now threatened by partisan attacks.

Over the 40 years since the creation of EPA, we have seen the economic and health benefits of protecting our public health and environment. According to the Department of Commerce, an estimated 1.7 million jobs and \$300 billion in revenues are generated by industries that support environmental protection. Clean air protections are estimated to produce \$2 trillion in annual health benefits by 2020. And for every \$1 billion invested in infrastructure to reduce water pollution and treat drinking water, up to 26,669 jobs are created.

These safeguards reduce premature deaths and illnesses, promoting a healthier, more productive work force.

Attacks on the nation's successful public health protections are not supported by the facts. Repeated studies have shown that polluting industry claims of costs and job losses are often inaccurate.

Forty years of experience demonstrates that the Environmental Protection Agency and the laws it enforces protect our health while supporting our economy.

This report has been produced at the request of Environment and Public Works Committee Chairman Barbara Boxer in order to lay out the facts about our strong environmental safeguards and to explode the myth that a clean environment is antithetical to a strong economy. A clean environment and strong economic growth go hand in hand.

XI. ENDNOTES

- ¹ U.S. Environmental Protection Agency (U.S. EPA), Administrator Lisa P. Jackson, Remarks at the 2011 Good Jobs Green Jobs Conference, As Prepared, Accessed at <http://yosemite.epa.gov/opa/admpress.nsf/12a744ff56dbff8585257590004750b6/906ad6a150ffd01185257831005dc69a!OpenDocument> (February 8, 2011).
- ² Organization of Economic Cooperation and Development, *Gross domestic product: GDP, US \$, constant prices, constant PPPs, reference year 2005, millions*, OECD.StatExtracts, Accessed at: <http://stats.oecd.org/index.aspx?queryid=556>.
- ³ Department of Commerce, International Trade Administration, *Environmental Technologies Industry, FY2010 Industry Assessment*, 1, Accessed at: [http://web.ita.doc.gov/ete/eteinfo.nsf/068f3801d047f26e85256883006ffa54/4878b7e2fc08ac6d85256883006c452c/\\$FILE/Full%20Environmental%20Industries%20Assessment%202010.pdf](http://web.ita.doc.gov/ete/eteinfo.nsf/068f3801d047f26e85256883006ffa54/4878b7e2fc08ac6d85256883006c452c/$FILE/Full%20Environmental%20Industries%20Assessment%202010.pdf) (2010) (“*Environmental Technologies Industry Assessment*”).
- ⁴ U.S. EPA, *The Benefits and Costs of the Clean Air Act from 1990 to 2020, Final Report* (March 2011) (“*Clean Air Act Benefits and Costs*”) at 5-25.
- ⁵ *Id.* at 7-3.
- ⁶ President Richard Nixon, *Annual Message to Congress on the State of the Union*, Accessed at: <http://www.presidency.ucsb.edu/ws/index.php?pid=2921#axzz1YPM8DRDD> (1970).
- ⁷ U.S. EPA, *The Guardian: Origins of EPA*. Accessed at: <http://www.epa.gov/aboutepa/history/publications/print/origins.html> (1992).
- ⁸ *A Legislative History of the Clean Air Amendments of 1970*, Vol. 1, 144 (1974).
- ⁹ Cong. Rec. 33120 (September 22, 1970) and Cong. Rec. 19244 (June 10, 1970)
- ¹⁰ *Id.* at 105.
- ¹¹ P.L. 95-95, May 26, 1977, Roll Call 291 and June 10, 1977, Roll Call 190.
- ¹² The American Presidency Project, Jimmy Carter, Clean Air Act Amendments of 1977 Statement on Signing H.R. 6161 Into Law, Accessed at: <http://www.presidency.ucsb.edu/ws/index.php?pid=7946#axzz1ZB5rPW00> (Aug. 8, 1977).
- ¹³ P.L. 101-549, Oct. 27, 1990, Roll Call 324 and Oct. 26, 1990, Roll Call 525.
- ¹⁴ *A Legislative History of the Clean Air Act Amendments of 1990*, Vol. 1, 775 (1993).
- ¹⁵ *Id.* at 728.
- ¹⁶ Cong. Senate Rpt. 92-414, S. 2770 (1971).
- ¹⁷ 117 Cong. Rec. 38797 (Nov. 2, 1971).
- ¹⁸ *Id.*
- ¹⁹ *Id.* at 38814.
- ²⁰ Cong. Rec. 33718 (Oct. 4, 1972) and Cong. Rec. 33767 (Oct. 4, 1972).
- ²¹ Cong. Rec. 36879 (October 17, 1972) and Cong. Rec. 37060 (Oct. 18, 1972) .
- ²² Public Law 93-523 (88 Stat. 1660).
- ²³ S. 433, Safe Drinking Water Act, S. Rpt. 93-231.
- ²⁴ Cong. Rec. 37594 (Nov. 26, 1974) and Cong. Rec. 37874 (Dec. 3, 1974).
- ²⁵ Cong. Rec. S. 15120 (Oct. 12, 1995) and Legislative Information Service, S. 1316.
- ²⁶ *Id.*
- ²⁷ Cong. Rec. S9497 - 98 (Aug. 2, 1996) and Cong. Rec. H9876 – 77 (Aug. 2, 1996).
- ²⁸ U.S. EPA, *Empirical evidence regarding the effects of the Clean Air Act on jobs and economic growth*, Letter and white paper from Administrator Jackson to Reps. Waxman and Rush (Feb. 8, 2011) at 2.
- ²⁹ See, Hart Hodges, Economic Policy Institute, *Falling Prices: Costs of Complying with Environmental Regulations Almost Always Less Than Advertised*, (1997) at 4 and 12, Curtis Copeland, Congressional Research Service, *Analysis of the Estimate of the Total Cost of Federal Regulations*, (April 6, 2011) at Summary, James McCarthy and Claudia Copeland, Congressional Research Service, *EPA’s Regulation of Coal-Fired Power: Is a “Train Wreck” Coming?* (Aug. 8, 2011), and Isaac Shapiro and John Irons, Economic Policy Institute, *Regulation, Employment, and the Economy: Fears of Job Losses are Overblown* (2011).

³⁰ U.S. EPA Administrator Lisa P. Jackson, Remarks at the 2011 Good Jobs Green Jobs Conference, As Prepared, (February 8, 2011).

³¹ *Clean Air Act Benefits and Costs* at 7-3.

³² Research Triangle Institute. *A Benefits Assessment of Water Pollution Control Programs Since 1972: Part 1, The Benefits of Point Source Controls for Conventional Pollutants, Final Report*, EPA Contract Number 68-C6-0021 (2000) (“Benefits of Water Pollution Control Programs”) at xvi.

³³ Bezdek, R. H., Wendling, R. M., DiPerna, P., *Environmental protection, the economy, and jobs: National and regional analyses*, J. of Env’tl Management, 86:1, 63-79 (2008) at 78.

³⁴ *Environmental Technologies Industry Assessment* at 1.

³⁵ *Id.*

³⁶ *Id.*

³⁷ *Id.* at 4

³⁸ Dale W. Jorgenson Associates. *An Economic Analysis of the Benefits and Costs of the Clean Air Act 1970 – 1990 Revised Report of Results and Findings*, Prepared for US EPA, National Center for Environmental Economics, Washington, DC. August 2001, with Appendices January 2002 and Welfare Revision August 2002, Accessed at: <http://yosemite.epa.gov/ee/epa/erm.nsf/vwRepNumLookup/EE-0565?OpenDocument> (2002) at 21.

³⁹ *Environmental Technologies Industry Assessment* at 2.

⁴⁰ *Clean Air Act Benefits and Costs* at 7-8.

⁴¹ *Id.* at 7-3.

⁴² *Id.* at 5-25.

⁴³ *Id.*

⁴⁴ American Lung Association. *Press Release: American Lung Association Bipartisan Poll Shows Strong Bipartisan Support for Lifesaving Clean Air Act*, Accessed at: <http://www.lungusa.org/press-room/press-releases/bipartisan-clean-air-poll.html> (Feb. 2011).

⁴⁵ *Id.*

⁴⁶ American Lung Association. *Press Release: New Poll Shows Overwhelming Support for EPA and Stronger Smog Standards*, Accessed at: <http://www.lungusa.org/press-room/press-releases/survey-epa-support.html> (June 2011).

⁴⁷ U.S. EPA, *EPA and NHTSA Finalize Historic National Program to Reduce Greenhouse Gases and Improve Fuel Economy for Cars and Trucks*, EPA-420-F-10-014, Accessed at: <http://www.epa.gov/otaq/climate/regulations/420f10014.pdf> (April 2010).

⁴⁸ *Id.*

⁴⁹ U.S. EPA, *EPA and NHTSA, in Coordination with California, Announce Plans to Propose Greenhouse Gas and Fuel Economy Standards for Passenger Cars and Light Trucks*, EPA-420-F-11-027, Accessed at: <http://www.epa.gov/oms/climate/420f11027.pdf> (July 2011).

⁵⁰ *Id.*

⁵¹ Baum, Alan and Daniel Luria, prepared for United Auto Workers, Natural Resources Defense Council, and Center for American Progress, *Driving Growth: How Clean Cars and Climate Policy Can Create Jobs* (March 2010) at 5.

⁵² United Auto Workers, Natural Resources Defense Council, and Center for American Progress, *Supplying Ingenuity: U.S. Suppliers of Clean, Fuel-Efficient Vehicle Technologies* (Aug. 2011).

⁵³ *Id.* at 1.

⁵⁴ *Id.* at 3.

⁵⁵ EPA, *Health Effects: Mercury*, Accessed at: <http://www.epa.gov/hg/effects.htm>.

⁵⁶ *Id.* and EPA, *National Emissions Standards for Hazardous Air Pollutants from Coal- and Oil-Fired Utility Steam Generating Units and Standards of Performance for Fossil-Fuel-Fired Electric Utility, Industrial-Commercial-Institutional, and Small Industrial-Commercial-Institutional Steam Generating Units*, 85 Fed. Reg. 24976, 24994 to 24995, and 25000 to 25002 (May 3, 2011).

⁵⁷ Shapiro, Isaac, Economic Policy Institute, *The Combined Effect of the Obama EPA Rules: Total costs of proposed and finalized rules represent only about 0.1 percent of the economy and are far outweighed by cumulative benefits* (September 2011) at 1.

⁵⁸ *Id.* at 2.

⁵⁹ U.S. EPA, *Power Plant Mercury and Air Toxics Standards: Overview of Proposed Rule and Impacts*, Accessed at: www.epa.gov/airquality/powerplanttoxics/pdfs/overviewfactsheet.pdf.

⁶⁰ *Id.*

⁶¹ *Id.*

⁶² *Id.* and EPA, Fact Sheet: Proposed Mercury and Air Toxics Standards, Accessed at: <http://www.epa.gov/airquality/powerplanttoxics/pdfs/proposalfactsheet.pdf>.

⁶³ *Id.*

⁶⁴ U.S. EPA, *Power Plant Mercury and Air Toxics Standards: Overview of Proposed Rule and Impacts*, Accessed at: www.epa.gov/airquality/powerplanttoxics/pdfs/overviewfactsheet.pdf.

⁶⁵ *Id.*

⁶⁶ *Id.*

⁶⁷ U.S. EPA, *FACT SHEET: Final Amendments to National Air Toxics Emissions Standards and New Source Performance Standards for Portland Cement Manufacturing*, Accessed at: http://www.epa.gov/ttn/atw/pcem/pcem_fs_080910.pdf.

⁶⁸ *Id.*

⁶⁹ *Id.*

⁷⁰ *Id.*

⁷¹ *Id.*

⁷² U.S. EPA, *Federal Implementation Plans: Interstate Transport of Fine Particulate Matter and Ozone and Correction of SIP Approvals*, 76 Fed. Reg. 48208 (Aug. 8, 2011).

⁷³ U.S. EPA, Presentation: Cross-State Air Pollution Rule, Reducing Air Pollution Protecting Public Health, Accessed at: <http://www.epa.gov/airtransport/pdfs/CSAPRPresentation.pdf> at 11 to 13.

⁷⁴ *Id.*

⁷⁵ *Id.*

⁷⁶ Shapiro, Isaac and John Irons, Economic Policy Institute, *Regulation, Employment, and the Economy: Fears of Job Losses are Overblown* (2011) at 3-4.

⁷⁷ McCarthy, James and Claudia Copeland, Congressional Research Service, *EPA's Regulation of Coal-Fired Power: Is a "Train Wreck" Coming?*, R41914 (Aug. 8, 2011) ("Train Wreck").

⁷⁸ Hodges, Hart, Economic Policy Institute, *Falling Prices: Costs of Complying with Environmental Regulations Almost Always Less Than Advertised* (1997) at 4 and 12.

⁷⁹ Copeland, Curtis, Congressional Research Service, *Analysis of the Estimate of the Total Cost of Federal Regulations*, R41763 (Apr. 6, 2011) at Summary.

⁸⁰ Bailey, Jeff, Wall Street Journal, *Utilities Overcomply with Clean Air Act, Are Stockpiling Pollution Allowances*, B8, (Nov. 15, 1995).

⁸¹ *Train Wreck*.

⁸² *Id.* at 7.

⁸³ *Id.* at Summary.

⁸⁴ *Id.*

⁸⁵ *Id.*

⁸⁶ *Id.* at 15.

⁸⁷ A Legislative History of the Water Pollution Control Act Amendments of 1972, Ser. No. 93-1, 93rd Cong. (1973) ("1972 Act Legisl. Hist."), at 1253-55.

⁸⁸ See generally 1972 Act Legisl. Hist., and A Legislative History of the Clean Water Act Amendments of 1977, Ser. No. 95-14, 95th Cong. (1978).

⁸⁹ Mehan, T., *Clean Water Act: An Effective Means to Achieve a Limited End*, Water Environment and Technology 19:10, Accessed at: http://www.wef.org/publications/page_wet.aspx?id=4692&page=ca§ion=CWA_35th_Anniversary (Oct. 2007).

⁹⁰ U.S. EPA, *National Water Quality Inventory: Report to Congress, 2004 Reporting Cycle*, EPA 841-R-08-001, 1-2 (Jan. 2009) ("Water Quality Inventory") at 1 and 2.

⁹¹ U.S. EPA, Testimony of Ben Grumbles, Asst Administrator, Office of Water, before House Committee on Transportation and Infrastructure, (October 18, 2007).

⁹² *Id.* and U.S. EPA, *EPA's BEACH Report: 2010 Swimming Season*, EPA 802-F-11-008 (May 2011) at 2.

⁹³ *Benefits of Water Pollution Control Programs* at xvi.

⁹⁴ U.S. EPA, *Liquid Assets 2000: America's Water Resources at a Turning Point*, Office of Water, EPA-840-B-00-001 (2000) at 2.

⁹⁵ *Water Quality Inventory* at 14, 21.

⁹⁶ Centers for Disease Control and Prevention. *Surveillance for Waterborne Disease and Outbreaks Associated with Recreational Water Use and Other Aquatic Facility-Associated Health Events — United States, 2005–2006 and Surveillance for Waterborne Disease and Outbreaks Associated with Drinking Water and Water not Intended for Drinking — United States, 2005–2006*, MMWR Surveillance Summaries 57: SS-9 (2008) at 1.

⁹⁷ U.S. Fish and Wildlife Service, *2006 National Survey of Fishing, Hunting, and Wildlife-Associated Recreation National Overview*, Preliminary Findings (2006) at 4.

⁹⁸ Restore America's Estuaries, *The Economic and Market Value of Coasts and Estuaries: What's At Stake?*, Accessed at <http://www.estuaries.org/images/stories/docs/policy-legislation/final-econ-with-cover-5-20-2008.pdf> (May 2008) ("Value of Estuaries") at 164-65.

⁹⁹ *Value of Estuaries* at 65.

¹⁰⁰ Clean Water Council, *Sudden Impact: An assessment of short-term economic impacts of water and wastewater construction projects in the United States* (2009) at 6.

¹⁰¹ EPA, *The History of Drinking Water Treatment*, EPA-816-F-00-006 (2000) and EPA, *Protecting America's Drinking Water: Our Responsibilities Under the Safe Drinking Water Act*, Accessed at: <http://www.epa.gov/aboutepa/history/topics/sdwa/07.html> (1975).

¹⁰² U.S. Conference of Mayors, *Local Government Investment in Municipal Water and Sewer Infrastructure: Adding Value to the National Economy*, (Aug. 2008) at i.

¹⁰³ *Id.*

¹⁰⁴ *Id.*

¹⁰⁵ U.S. EPA, *Estimating the Burden of Disease Associated with Waterborne Disease Outbreak Surveillance System: Identifying Limitations and Improvements*, (2007) at 1-1.

¹⁰⁶ U.S. EPA, *Factoids: Drinking Water and Ground Water Statistics for 2009*, (2009) at 8.

¹⁰⁷ U.S. EPA, *Estimating the Burden of Disease Associated with Waterborne Disease Outbreak Surveillance System: Identifying Limitations and Improvements*, (2007) at 4-4 and Table 4-1 and U.S. Conference of Mayors, *Local Government Investment in Municipal Water and Sewer Infrastructure: Adding Value to the National Economy*, (Aug. 2008) at 12.

¹⁰⁸ Cong. Rec. H6446 (Sep. 23, 2011).

¹⁰⁹ Memo to House Republicans from Eric Cantor Re: Upcoming Jobs Agenda, Accessed at <http://majorityleader.gov/blog/2011/09/memo-on-the-presidents-jobs-proposal.html> (August 29, 2011).