

INTERFERENCE AT THE EPA

SCIENCE AND POLITICS AT THE
U.S. ENVIRONMENTAL PROTECTION AGENCY



Union of Concerned Scientists
Citizens and Scientists for Environmental Solutions

Executive Summary

The U.S. Environmental Protection Agency (EPA) has the simple yet profound charge “to protect human health and the environment.” EPA scientists apply their expertise to protect the public from air and water pollution, clean up hazardous waste, and study emerging threats such as global warming. Because each year brings new and potentially toxic chemicals into our homes and workplaces, because air pollution still threatens our public health, and because environmental challenges are becoming more complex and global, a strong and capable EPA is more important than ever.

Yet challenges from industry lobbyists and some political leaders to the agency’s decisions have

too often led to the suppression and distortion of the scientific findings underlying those decisions—to the detriment of both science and the health of our nation. While every regulatory agency must balance scientific findings with other considerations, policy makers need access to the highest-quality scientific information to make fully informed decisions.

Concern over this problem led the Union of Concerned Scientists (UCS) to investigate political interference in science at the EPA. In the summer of 2007, UCS, working with the Center for Survey Statistics and Methodology at Iowa State University, distributed a 44-question survey to nearly 5,500 EPA scientists, asking for information about political interference in their scientific



work, the use of science in EPA decision making, barriers to communication, employee morale, and the agency's effectiveness. UCS identified these scientists through EPA websites, consultations with current and former employees, and targeted Internet searches.

There are still good scientists producing good science at USEPA. The main problem I see is an administration that considers science only if it supports its agenda. As in other areas, science is used only if it furthers preexisting policy; otherwise it is ignored, marginalized or suppressed (e.g. climate change).

A scientist from the EPA regional offices

We received completed surveys from 1,586 scientists, for a response rate of 29 percent. These respondents represented every scientific program office at EPA headquarters, all 10 regional offices, and more than a dozen research laboratories across the country. Most respondents were agency veterans, with more than a decade of experience at the EPA. Beyond specific survey questions, more than 850 scientists also provided written comments in response to an open-ended essay question. To add to this information, UCS interviewed dozens of current and former EPA scientists.

The results of these investigations show an agency under siege from political pressures. On numerous issues—ranging from mercury pollution to groundwater contamination to climate change—political appointees of the George W. Bush administration have edited scientific documents, manipulated scientific assessments, and generally sought to undermine the science behind dozens of EPA regulations.

These findings highlight the need for strong reforms to protect EPA scientists, make agency decision making more transparent, and reduce politicization of the regulatory process.

Political Interference in Scientific Work

Large numbers of EPA scientists reported widespread and inappropriate interference by EPA political appointees, the White House, and other federal agencies in their scientific work:

- 889 scientists (60 percent of respondents) personally experienced at least one incident of political interference during the past five years.
- Among EPA veterans (scientists with more than 10 years of experience at the agency), 409 (43 percent) said interference occurred more often in the past five years than in the previous five-year period.

EPA scientists also reported personally experiencing specific forms of political interference, from the explicit to the subtle:

- 94 scientists (7 percent) had frequently or occasionally been “directed to inappropriately exclude or alter technical information from an EPA scientific document.”
- 191 scientists (16 percent) had personally experienced frequent or occasional “situations in which scientists have actively objected to, resigned from, or removed themselves from a project because of pressure to change scientific findings.”
- 232 scientists (18 percent) had personally experienced frequent or occasional “changes or edits during review that change the meaning of scientific findings.”
- 285 scientists (22 percent) had personally experienced frequent or occasional “selective or incomplete use of data to justify a specific regulatory outcome.”

- 153 scientists (13 percent) had personally experienced frequent or occasional “pressure to ignore impacts of a regulation on sensitive populations.”
- 299 scientists (24 percent) had personally experienced frequent or occasional “disappearance or unusual delay in the release of websites, press releases, reports, or other science-based materials.”
- 394 scientists (31 percent) had personally experienced frequent or occasional “statements by EPA officials that misrepresent scientists’ findings.”

Respondents indicated that political interference arose from both internal and external sources:

- 516 scientists (43 percent) knew of “many or some” cases where EPA political appointees had inappropriately involved themselves in scientific decisions.
- 560 scientists (49 percent) knew of “many or some” cases where political appointees at other federal agencies had inappropriately involved themselves in decisions.
- 507 scientists (42 percent) knew of “many or some” cases where “commercial interests have inappropriately induced the reversal or withdrawal of EPA scientific conclusions or decisions through political intervention.”
- 329 scientists (28 percent) knew of such interference by “nongovernmental or advocacy groups.”

In essay responses, nearly 100 scientists identified the White House Office of Management and Budget (OMB), which oversees the federal budget and coordinates all federal regulations, as the primary source of external interference.

Respondents reported widespread respect for their direct supervisors, but had fewer commendations for the EPA’s senior leaders:

- 1,282 scientists (81 percent) respected the integrity and professionalism of their direct manager or supervisor, while 686 (43 percent) said the same about the EPA’s senior leaders.
- A majority of respondents (906 scientists, or 59 percent) agreed that their direct supervisor stands behind scientific staff who express politically controversial opinions.



A landfill near the Wasatch Mountains in Utah.



Rates of political interference varied widely among offices and divisions within the agency:

- The percentage of scientists reporting interference was highest in the program offices with regulatory duties, and at EPA headquarters. A total of 337 scientists in the program offices (68 percent), and 379 scientists at headquarters (69 percent), reported at least one incident of interference in the past five years.
- The percentage of scientists reporting interference was lower—although still significant—in the Office of Research and Development (ORD), the EPA’s main research arm. The ORD’s National Health and Environmental Effects Research Laboratory was notably freer of interference (39 percent) than any other EPA division, while its National Center for Environmental Assessment had the highest percentage of scientists reporting interference of all EPA divisions (84 percent).

- The percentages of scientists reporting interference in the 10 regional offices varied widely, from 44 percent (region 6) to 73 percent (region 9).

To place these results in context, we cite specific incidents of interference. For example, political appointees at the White House and in top positions at the EPA manipulated scientific findings and analyses regarding mercury pollution and climate change. These incidents involved pressure to change scientific methods and findings, direct editing of scientific documents by non-scientists, and delayed release of scientific reports.

A third case—involving interagency review of the EPA’s assessment of toxic chemicals—illustrates the growing ability of the OMB and other federal agencies to review and second-guess the work of the EPA’s scientific experts.

Barriers to the Free Communication of Science

The free communication of scientific results is a critical part of the scientific process.

Despite statements by EPA leaders asserting that the agency supports scientific openness, many scientists report that it restricts free communication of the results of taxpayer-funded research:

- 783 scientists (51 percent) disagreed or strongly disagreed that EPA policies allow scientists to “speak freely to the news media about their findings.” Another 556 scientists (36 percent) had no opinion or were unsure. Only 197 scientists (13 percent) agreed that the EPA allows scientists to communicate freely with the media.
- 291 scientists (24 percent) disagreed or strongly disagreed that they are “allowed to publish work in peer-reviewed scientific journals regardless of whether it adheres to agency policies or positions.”

Beyond these restrictive policies, hundreds of scientists said they fear retaliation for speaking candidly about the EPA’s work. More scientists feared retaliation for speaking candidly inside the agency than outside it:

- 492 scientists (31 percent) disagreed or strongly disagreed that they could openly express concerns about the EPA’s work *inside* the agency without fear of retaliation.
- 382 scientists (24 percent) disagreed or strongly disagreed that they could openly express concerns about the EPA’s work *outside* the agency without fear of retaliation.

Interviews with current and former EPA scientists revealed new examples of problems in communicating scientific research. In two cases, EPA scientists were barred from presenting research on climate change at scientific conferences.

Other scientists reported difficulties speaking with the media and obtaining EPA clearance to publish their findings in scientific journals.

Political interference in scientific work combined with barriers to the free communication of scientific findings affect the amount and quality of information the U.S. public receives.

EPA needs dynamic, scientific leadership interested in the well being of the environment and public health. EPA should not be the political agency it has become, the right hand of industry and short economic gain.

A scientist from the Office of Solid Waste and Emergency Response

Undermining the Role of Science in EPA Decision Making

Scientific information is the lifeblood of much of the EPA’s work and the credibility of its decisions depends on the quality of its scientific work.

A plurality of EPA scientists reported that the agency’s regulatory policies are consistent with its scientific findings. However, a similar number felt that the EPA could do a better job of using the best judgment of its scientific staff:

- 745 scientists (48 percent) felt that the EPA’s determinations and actions are frequently or always consistent with the scientific findings in agency documents and reports.
- 719 scientists (47 percent) felt that the EPA’s determinations occasionally, seldom, or never make use of the best judgment of its scientific staff.

Hundreds of EPA scientists also felt that the agency only occasionally incorporates expert advice from advisory committees into policy decisions:

- 553 scientists (36 percent) felt that the agency occasionally, seldom, or never heeds advice from independent scientific advisory committees.

Recent changes in the EPA's process for setting the National Ambient Air Quality Standards provide one prominent example of how political considerations have trumped scientific expertise and sidelined the EPA's scientific advisory committees.

Do not trust the Environmental Protection Agency to protect your environment. Ask questions. Be aware of political and economic motives. Become politically active. Elect officials with motives to protect the environment and hold them accountable.

A scientist from an EPA regional office

Challenges to Agency Effectiveness

Beyond political interference in EPA science, several survey questions asked respondents about other factors that could impair their ability to do their jobs, and the ability of the agency as a whole to fulfill its mission.

Large numbers of EPA scientists indicated that a lack of sufficient or appropriate resources was a serious issue in their office or division:

- 969 scientists (62 percent) disagreed or strongly disagreed that the "EPA division where I work has sufficient resources to adequately perform its mission of protecting human health and the environment."
- 555 scientists (36 percent) agreed or strongly agreed that the "recent changes and closures in the EPA library system have impaired my ability to do my job." This opinion was especially prevalent among scientists in

regions 5, 6, and 7, which had their libraries closed (86 of these scientists, or 48 percent, agreed).

- 574 scientists (41 percent) agreed or strongly agreed that "the trend toward contracting out scientific work is harming the effectiveness of my division."

Survey questions also asked scientists about their job satisfaction, and the morale in their division:

- Twice as many respondents reported a decrease in job satisfaction over the past five years as those who reported an increase (670 versus 328 scientists).
- Opinions about workforce morale varied widely. A total of 564 scientists (37 percent) said morale was fair, and 387 (25 percent) said morale was poor or extremely poor. A total of 570 scientists (37 percent) said morale was good or excellent.

Questions about the overall effectiveness of the EPA elicited a range of responses:

- Respondents were more likely to agree than disagree that the EPA was acting effectively to clean up environmental problems. A total of 812 scientists (52 percent) agreed that the EPA acts effectively to "clean up and/or mitigate existing pollution or environmental problems," while 522 (33 percent) disagreed.
- 694 scientists (44 percent) agreed that the EPA acts effectively to "foster practices that prevent environmental degradation or adverse health effects before they occur," while 629 scientists (40 percent) disagreed.
- Twice as many respondents reported a decrease in the effectiveness of their office or division over the past five years (696 scientists, or 45 percent) as those who reported an increase (321 scientists, or 21 percent).



Multiple sources of air and water pollution along a stretch of the Hudson River in Glens Falls, NY.

- Respondents were evenly split on whether the EPA is moving in the right direction. A total of 685 scientists (44 percent) disagreed that the EPA is moving in the right direction, while 624 scientists (40 percent) agreed.

Recommendations

The many forms of political interference in EPA science revealed through our survey, our interviews, and other sources of information require a suite of solutions in five major arenas: protecting EPA scientists, increasing agency transparency, reforming its regulatory process, strengthening its scientific advisory system, and depoliticizing funding, monitoring, and enforcement.

- **Protecting EPA Scientists:** The agency's scientists have a profound responsibility to the U.S. public. To fulfill that responsibility, they need reassurance that standing behind their scientific work will not open them to official or unofficial retaliation. Congress is considering several bills that would strengthen the federal whistle-blower system. Congress should pass the strongest possible protections, and the next EPA administrator should formally incorporate them into the agency's policies.
- **Making the EPA More Transparent:** Decisions made behind closed doors threaten the integrity of EPA science and the agency's ability to protect public health and the environment.

Opening up these decisions to congressional and public scrutiny is an important step in revealing and ending the misuse of science.

The EPA should institute a transparency policy for all meetings with representatives of other federal agencies and outside entities. The agency should also create procedures that ensure the periodic release of scientific documents and prevent them from remaining in draft form indefinitely. The EPA should publish a summary statement discussing the scientific basis for each significant regulatory decision, and document dissenting opinions. The agency should also reform its policies to allow scientists to communicate freely with the media, and to quickly clear their findings for publication in scientific journals, to ensure the free flow of scientific information.

- **Reforming the Regulatory Process:** The EPA was created to implement and enforce the nation's environmental laws, and it has developed the expertise, experience, processes, and policies needed to fulfill that charge. While the White House is responsible for overseeing federal agencies, it must strike a better balance between administration priorities and agency independence. The White House should respect the agency's reservoir of scientific and technical knowledge and restrain the OMB from reviewing the EPA's scientific and technical documents.

To ensure the central role of the environment in high-level decision making, the next president should elevate the EPA to a cabinet-level agency. Congress should also consider how to reform and strengthen our nation's regulatory structure, to meet the pressing environmental challenges of the twenty-first century.

- **Ensuring Robust Scientific Input to the EPA's Decision Making:** The EPA should review and strengthen how it uses the scientific expertise of its staff and external advisory committees to create policies—especially when scientific input is critical or required by law. Specifically, the next EPA administrator should work with the Clean Air Science Advisory Committee to improve the process for setting the National Ambient Air Quality Standards, to ensure that the administrator relies on the “best available science.” The agency should also tighten its conflict-of-interest restrictions.
- **Depoliticizing Funding, Monitoring, and Enforcement:** Problems with funding, monitoring and enforcement also need to be addressed by Congress and the next president to ensure that the EPA is the robust environmental agency that our country needs. Congress should provide the EPA with resources commensurate with its growing responsibilities and should work to ensure that selective internal budget cuts are not used to punish inconvenient programs or offices. The next president should commit to strong and consistent enforcement of the nation's environmental laws.

Concluding Thoughts

The EPA's scientific enterprise is our nation's first line of defense against threats to public health and the environment. These threats are growing more complex and global, with the potential to harm the nation's health and prosperity. Despite

notable successes, air and water pollution remain serious public health problems. Each year brings new and untested chemicals into our homes, schools, and workplaces. Climate change alone is projected to have profound impacts on public health, agriculture, the economy, and even national security.

These problems are not insurmountable. The environmental and public health successes of the past several decades show that the country can rise to the challenge of environmental threats—but only if the EPA has the proper tools. Given the complexity of today's environmental challenges, a credible scientific knowledge base is essential to an effective response. To foster and sustain a healthy scientific enterprise, Congress and the next president should take concrete steps to protect the EPA's scientists, make the agency more transparent, reform the regulatory process, strengthen the scientific advisory system, and depoliticize funding, monitoring, and enforcement.

Science is not the only element of effective policy making. However, because science enjoys widespread respect, appointed officials will always be tempted to manipulate or suppress scientific findings to support predetermined policies. Such manipulation is not only dishonest; it undermines the EPA's credibility and affects the health and safety of Americans.

The Bush administration's direct abuse of science—combined with systemic changes to the regulatory system that threaten the integrity of EPA science—highlight the need for strong action by the next president and Congress to restore scientific integrity to the agency's decision making. Only then can the EPA fully mobilize to serve the public good and ensure the nation's health.