



Union of Concerned Scientists
Comments on the Presidential Memo on Scientific Integrity
May 13, 2009

On March 9, 2009 President Barack Obama tasked the Director of the Office of Science and Technology Policy (OSTP)—Dr. John Holdren—with “ensuring the highest level of integrity in all aspects of the executive branch’s involvement with scientific and technological processes.”¹

The Union of Concerned Scientists (UCS) applauds the decision to address the problem of political interference in science through a government-wide process, coordinated by OSTP. High-quality advice on science and technology issues is crucial to the nation’s health, prosperity, and security. The OSTP is in the unique position of offering the president an overview of the state of federal science. As it develops its scientific integrity plan, the OSTP should consult not only with executive branch leaders but also with the public and major outside stakeholders. In addition, the president should give OSTP the authority to fully implement its scientific integrity plan and hold agencies accountable for any abuses of science that might occur.

A critical condition for the success of this process will be the continuing engagement of the OSTP with the scientific and regulatory agencies, with other White House offices such as the Office of Management and Budget (OMB), and with the scientific community and the public. We encourage OSTP and Dr. Holdren to energetically advocate for federal scientists and credible science as the Obama administration makes decisions with a scientific component. OSTP should also push for government-wide reforms in how science is used in the policy making process.

To this end, the director of OSTP should appoint an assistant administrator to oversee the integrity of science in the executive branch. The president should instruct the heads of scientific and regulatory agencies that scientific integrity is crucial to achieving their missions and should require agency heads to monitor their agencies’ efforts to improve scientific integrity, reporting annually to the OSTP regarding their progress. OSTP should also regularly seek and release information to the public regarding potential instances of political interference in science.

In its 2008 report, *Federal Science and the Public Good*,² the UCS Scientific Integrity Program outlined the solutions needed to restore scientific integrity to federal policy making. In this document we adapt those recommendations into three broad categories that address the President’s stated principles:

- A. **Protecting Government Scientists** – Reforms are needed to strengthen the broken federal whistleblower protection system and ensure that scientists who report political interference in their work may do so without fear of retaliation. Such protections address principles (a), (b), (e) and are mentioned specifically in principle (f).
- B. **Making Government More Transparent** – Opening up federal science and decision making to scrutiny from Congress and the public is an important, and inexpensive, means of revealing and ending political interference in science. Transparency reforms address principles (b), (c) and are the primary topic of principle (d).
- C. **Scientific Information and Advice** – Reforms are needed to strengthen federal monitoring programs, the federal scientific advisory committee system and ethics rules governing federal decision makers. Such reforms address principles (a), (b), (e) and (f).

A. Protecting Government Scientists

Federal scientists and researchers need certain rights and protections to fulfill their responsibility to the U.S. public. One frontline defense against political interference in science is to specifically affirm that scientists who report such abuses are protected from retaliation. The administration should support and encourage Congress to pass legislation to strengthen the rights of federal employees who blow the whistle on fraud and corruption, and to ensure wider application and stronger enforcement of those rights.

A.1. OSTP should encourage Congress to pass the strongest possible whistle-blower protection legislation. Improved whistle-blower legislation should:

- Make clear that whistle-blower protections from retaliation apply to federal employees who report efforts to alter or suppress research or technical information
- Give federal employees the same access to jury trials that Congress has given to millions of private sector workers

A.2. The president should direct agency heads to refrain from retaliating against whistle-blowers through reassignments, demotions, or terminations. Agency heads should also issue a statement that encourages staff to speak out internally about concerns—especially those involving an abuse of science—and state that the agency values their input.

A.3. Following enactment of these reforms, the president should instruct agencies to proactively educate government scientists and researchers regarding their rights and protections.

B. Making Government More Transparent

The integrity of federal science is threatened in no small part by decisions made behind closed doors. Opening up federal science and decision making to scrutiny from Congress and the public is an important, and inexpensive, means of exposing and ending political interference in science. The public needs greater access to federal science through better disclosure of regulatory decision making, wider use of information technology, and the reform of agency communication policies to allow scientists and researchers to freely share their expertise. An open government is the best safeguard against corruption and abuse of power, and is a necessary ingredient of democracy.

The America COMPETES Act, enacted in August 2007, requires the OSTP to consult with all federal agencies that conduct scientific research, and to develop principles and guidelines for agencies for disseminating scientific information. While the guidelines released in May 2008 are a step in the right direction, the OSTP should improve upon them to be consistent with the principles of scientific openness outlined below.

B.1. OSTP should develop guidelines and require agencies to adopt policies based on these guidelines that ensure free and open communication between scientists and researchers, and the media, policy makers, and the public. These guidelines should incorporate the following principles:

- **Scientists and researchers may freely express their personal views.** Scientists and researchers, as any federal employees, have a right to express their personal views outside of a few narrow restrictions (such as releasing classified or proprietary information). Provided that a scientist makes an explicit disclaimer that he or she is speaking as a private citizen and is not seeking to represent official agency policy, he or she should be allowed to speak freely about his or her research and to offer his or her **scientific** opinions—even in situations where the research may be controversial or have implications for agency policy. Agency policies governing communication with the media should make this option clear and explicit to employees.
- **Scientists and researchers have the right to review, amend, and comment publicly on the final version of any document or publication that significantly relies on their research, identifies them as an author or contributor, or purports to represent their scientific opinion.** While editing by non-scientists is often necessary and useful, final review by scientific experts is essential to ensuring that accuracy has been maintained in the clearance process.
- **Agency employees have clearly defined responsibilities in working with the media.** Employees are responsible for the accuracy and integrity of their communications and should not represent the agency on issues of politics or policy without prior approval from the agency’s public affairs officer (PAO). Employees are also responsible for working with the PAO to make significant research developments accessible and comprehensible to the public.
- **PAOs have clearly defined roles, such as responding promptly to media inquiries and providing journalists and agency staff with accurate information, but not acting as “gatekeepers” of information.** Scientists and researchers should not be required to obtain pre-approval from the PAO before responding to a media request about their research. However, requiring scientists and researchers to give the PAO prior notice of such interactions when possible, and to recap the interview afterward, is appropriate.
- **Employees who leave federal service should not be required to sign non-disclosure agreements that restrict disclosure beyond classified or proprietary information.**
- **Public affairs staff should have a plan for disseminating the media policy to agency scientists and researchers and should conduct trainings in effective media communication that emphasize scientific openness.** The official agency media policy should be publicly available on the agency website.

B.2. **OSTP should review agency policies on the clearance of official and non-official publications, presentations, and other information.** Information sharing is an essential component of the scientific process. While the broad direction of federal research is dictated by agency missions and funding priorities, federal scientists and researchers should be free to conduct that research and publish findings without fear of retaliation. The science adviser should develop minimum guidelines to ensure the free flow of scientific information and the president should encourage agency heads to adopt policies (or modify existing policies) consistent with these guidelines, including:

- B.2.1. **The administration should review existing legal barriers to the public release of scientific information held by the government, and work with Congress to**

close loopholes that keep valuable information out of the public record. In particular, the administration should:

- Rein in the use of information control markings.
- Shift the burden of proving that scientific information falls under the “confidential business information” exemption from the federal government onto those requesting the exemption.
- Work with Congress to require the disclosure of privately funded research that is used in crafting regulation.

B.2.2. Agencies should affirm that scientific peer review is the appropriate standard for ensuring the quality of agency scientific information, and agencies should require that only qualified and non-conflicted scientists are involved in peer review of scientific publications. Agencies are responsible to the public for providing accurate information and may adopt stricter peer review standards than those found in the private sector—including requirements that both official and non-official materials (e.g., papers submitted to scientific journals by agency employees) be peer reviewed. However, agencies should also have the flexibility to adopt peer review processes that best fit their needs. OSTP should consult with the Office of Management and Budget (OMB) to prevent the adoption of over-prescriptive “one-size-fits-all” policies on peer review.

B.2.3. For non-official materials, authors should have the option of bypassing any policy review and publishing the work with a disclaimer that it does not represent agency policy. A timely and transparent policy review is appropriate and recommended for official agency documents and reports.

B.2.4. Agencies should set reasonable time limits for review and clearance of scientific publications and presentations. The supervisor or other reviewing official shall provide to the author written clearance on the condition of specified changes being made, not later than 30 days after submission. If this deadline is not met, the author may proceed to submit the article for publication or presentation with an appropriate disclaimer stating that the article does not represent agency views or policies.

B.2.5. Draft versions of official agency documents or scientific reports should periodically be made available to the public. A draft version should be released if a document has been completed by agency technical staff yet held up in the policy or interagency review process for longer than six months.

B.2.6. Scientific work done on an employee’s personal time should not be required to be submitted to an internal review process, even if the employee identifies his or her employer, provided that the work includes an appropriate disclaimer.

B.3. The administration should radically improve its use of technology to share information with the public, with the goal of making all government information searchable, shareable, and usable. OSTP should work with the Chief Technology and Information officers to implement this transparency agenda. This initiative should:

- Redesign *www.science.gov* to be a comprehensive source for the government's scientific databases, reports, and other information holdings. The website should be broadly searchable by topic so website visitors do not need to know which agency has the information they seek.
- Require that government websites be searchable by major public search engines and require that government data be distributed in open formats.
- Encourage syndication of government data.
- Undertake a review of government standards for the use of metadata (information about the content of a document, such as keywords or tags, that are not part of the document text) and issue recommendations for improving the use of metadata to improve the usability of the data.
- Digitize older materials and make them available online.
- Encourage the use of open-source software by federal agencies.
- Move toward universal electronic reporting of scientific and other information, so the data can be quickly made available to the public.
- Work with the national network of libraries, including government libraries, to educate the public about resources to access government information.

B.4. OSTP should work with OMB to provide more information to the public on how science is used in regulatory decision making.

B.4.1. OSTP should work with the agencies to disclose more information about how a regulation was developed. The rule-making docket should contain:

- A stated scientific rationale for any decision informed by science.
- All scientific studies in an agency's possession related to a proposed regulation, regardless of whether the study was directly cited or whether it directly informed the ultimate proposal.
- Completed and peer-reviewed drafts of agency documents prepared by scientific or technical staff before they are subjected to White House or interagency review.
- A minority report voicing any significant dissenting scientific evidence or opinions and an explanation of how the agency resolved such differences of opinion.
- All official interagency communications regarding rules under review, including those from the White House.
- Identification by name of each official and employee who participated in the decision.

(Similar transparency requirements have already been incorporated into the FDA Amendments Act of 2007, and should be adapted for other federal agencies.)

B.4.2. The OMB should overhaul *www.regulations.gov* to make it a truly consumer-oriented and user-friendly portal for information about proposed, pending and final regulations. This website is a first step toward bringing rule making into the information age; improving its search and browsing functionality will help it live up to its full potential.

B.4.3. The OMB should encourage the use of interactive technology to engage the public in the regulatory process. Individual agencies should be allowed to

innovate better methods for communicating information to the public and receiving feedback on proposed regulations.

B.4.4. The OMB should also develop a regulatory tracking system that provides information on regulatory proposals earlier in the rule-making process. The OMB currently only produces twice-yearly reports on the president's regulatory agenda and the status of any rules in preparation. A regularly updated tracking system would provide the public with more accurate and timely information about pending regulations and any associated paperwork requirements.

B.5. All federal agencies should institute a transparency policy for meetings with outside entities. This policy should require that the agency post on its website a complete record of all meetings with outside entities including for-profit and not-for-profit organizations, other agencies, and individuals (with the exception of meetings related to national security). Such a policy need not be burdensome, as participants could enter the required information directly into a database before the start of any meeting. The database should include the names and affiliations of meeting attendees as well as the date, time, location, and subject of the meeting.

C. Scientific Information and Advice

The government cannot make fully informed decisions about our health, safety, and environment without access to the best available scientific information and advice. Unfortunately, there are many barriers to this access. The government should collect adequate data, improve the federal scientific advisory committee system, and improve conflict-of-interest policies for government employees.

C.1. The OSTP should coordinate efforts to strengthen the various federal monitoring programs. Such programs include air pollution monitoring networks, satellite observations of Earth systems, and the collection of workplace injury statistics. The OSTP's role would be to identify data gaps, restore important monitoring systems that have been downsized, and convene advisory committees to identify monitoring needs to ensure that policy makers have the proper data needed to make decisions.

C.2. The OSTP should work to reform and strengthen the federal scientific advisory committee system. The Federal Advisory Committee Act became law in 1972 to ensure, among other goals, that the nation has access to the best objective scientific advice. Unfortunately, the integrity of many scientific advisory committees has been compromised in recent years. Strengthening the scientific advisory system should be a priority for the administration.

C.2.1. Agencies should take concrete steps to ensure that inappropriate criteria such as party affiliation and political opinions are never a part of the process for selecting members of scientific committees. Agencies should select members of advisory committees based solely on their experience and technical qualifications in the topic the committees will address.

C.2.2. The process for selecting advisory committee members should be made more transparent through the following reforms:

- Agencies should publicly announce their intent to form a new scientific advisory committee, or to select a new member for an existing committee.
- Agencies should publish criteria for selecting committee members and should solicit nominations for committee membership.
- Agencies should call for public comment on the charge to the committee.
- After the selection process is complete, the agency should make basic information on committee members easily available to the public. This information should describe each member's qualifications and background, and disclose past employers and funding sources.

C.2.3. The OSTP should work with the Office of Governmental Ethics (OGE) to provide clear guidelines for conflicts of interest on federal advisory committees. These guidelines should address the following issues:

- Agencies should specify which advisory committees are expressly scientific and which are designed to gather stakeholder input.
- Agencies should clarify their criteria for appointing advisory committee members as “special government employees” (SGEs) or “representatives,” and ensure that the proper level of scrutiny of conflicts of interest occurs. (SGEs are subject to greater scrutiny than representatives, who are assumed to be stakeholders with special interests.)
- The OGE should work with agencies to explicitly define the type and magnitude of financial ties that constitute a conflict of interest, and it should establish transparent guidelines on the degree to which a conflict of interest would disqualify nominees from participating in a particular committee.
- For committees whose mission is purely to provide objective scientific advice (as opposed to committees designed to gather input from stakeholders), committee members should be appointed as SGEs and should be entirely free of financial conflicts of interest.
- Scientists and researchers with conflicts of interest may provide their expertise to scientific advisory committees, but agencies should take steps to ensure that they do not have decision-making roles on those committees, and that their participation is limited to making presentations and responding to questions.
- Scientists who have taken public positions on issues should not be excluded from an advisory committee because of concerns about bias. Having a point of view does not preclude an objective assessment of the information presented to a committee. A scientist's membership in a scientific association should not be considered evidence of bias, even if that association has a stated policy agenda.

C.2.4. Agencies should track the work of their scientific advisory committees and respond to their findings and recommendations.

- Agencies should clearly state what product they require of each advisory committee, and set a timeline and work plan for creating that product.
- Agencies should establish and enforce clear policies for how to incorporate committee findings and recommendations into agency decision making. Agencies should also publicly document any decision to overrule the recommendations of a scientific advisory committee, and provide a legitimate explanation of the decision.

- Agencies should review which scientific research and peer review work is being handled by outside contractors, with the goal of institutionalizing the input of independent advisory committees whenever feasible.

C.3. The OSTP should work with the Office of Governmental Ethics (OGE) to improve conflict-of-interest policies for government employees.

C.3.1. The OGE should be restructured to:

- Establish clear conflict-of-interest guidelines for federal employees.
- Serve as a central clearinghouse of public records on executive branch ethics rules, violations, and complaints.
- Act as an enforcement entity for federal government ethics rules.

C.3.2. Government employees involved in the writing or enforcement of regulations should disclose all conflicts of interest and any previous employment ties that might affect or be perceived as affecting their ability to do their job in an independent manner. These disclosures should be made in writing, publicly available, and required in all cases.

C.3.3. Employees with significant conflicts of interest may still contribute to a project, but agencies should bar them from holding decision-making authority or other positions where they can influence policy outcomes. Any conflict-of-interest waivers should stipulate the parameters of permitted participation.

C.3.4. Whenever possible the president should avoid appointing agency heads and high-level officials with recent financial ties to the industries regulated by that agency.

C.3.5. Federal employees should be required to recuse themselves from decisions involving a former employer, whether or not they have current financial ties to that employer.

Sincerely,

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About UCS: The Union of Concerned Scientists is a leading science-based nonprofit working for a healthy environment and a safer world. The UCS Scientific Integrity Program mobilizes scientists and citizens alike to defend science from political interference and restore scientific integrity in federal policy making.

¹ Obama, B. Memorandum for the Heads of Executive Branch Departments and Agencies, Subject: Scientific Integrity. March 9, 2009. Online at http://www.whitehouse.gov/the_press_office/Memorandum-for-the-Heads-of-Executive-Departments-and-Agencies-3-9-09/.

² Union of Concerned Scientists. 2008. *Federal Science and the Public Good*. Cambridge, MA. Online at www.ucsusa.org/federalscience.

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