Restoring Scientific Integrity in Policy Making
February 18, 2004

> *Science, like any field of endeavor, relies on freedom of inquiry; and one of the hallmarks of that freedom is objectivity. Now, more than ever, on issues ranging from climate change to AIDS research to genetic engineering to food additives, government relies on the impartial perspective of science for guidance.*
>
> President George H.W. Bush, April 23, 1990

Successful application of science has played a large part in the policies that have made the United States of America the world's most powerful nation and its citizens increasingly prosperous and healthy. Although scientific input to the government is rarely the only factor in public policy decisions, this input should always be weighed from an objective and impartial perspective to avoid perilous consequences. Indeed, this principle has long been adhered to by presidents and administrations of both parties in forming and implementing policies. The administration of George W. Bush has, however, disregarded this principle.

When scientific knowledge has been found to be in conflict with its political goals, the administration has often manipulated the process through which science enters into its decisions. This has been done by placing people who are professionally unqualified or who have clear conflicts of interest in official posts and on scientific advisory committees; by disbanding existing advisory committees; by censoring and suppressing reports by the government's own scientists; and by simply not seeking independent scientific advice. Other administrations have, on occasion, engaged in such practices, but not so systematically nor on so wide a front. Furthermore, in advocating policies that are not scientifically sound, the administration has sometimes misrepresented scientific knowledge and misled the public about the implications of its policies.

For example, in support of the president's decision to avoid regulating emissions that cause climate change, the administration has consistently misrepresented the findings of the National Academy of Sciences, government scientists, and the expert community at large. Thus in June 2003, the White House demanded extensive changes in the treatment of climate change in a major report by the Environmental Protection Agency (EPA). To avoid issuing a scientifically indefensible report, EPA officials eviscerated the discussion of climate change and its consequences.

The administration also suppressed a study by the EPA that found that a bipartisan Senate clean air proposal would yield greater health benefits than the administration's proposed Clear Skies Act, which the administration is portraying as an improvement of the existing Clean Air Act. "Clear Skies" would, however, be less effective in cleaning up the nation's air and reducing mercury contamination of fish than proper enforcement of the existing Clean Air Act.

Misrepresenting and suppressing scientific knowledge for political purposes can have serious consequences. Had Richard Nixon also based his decisions on such calculations, he would not have supported the Clean Air Act of 1970, which in the following 20 years prevented more than 200,000 premature deaths and millions of cases of respiratory and cardiovascular disease. Similarly, George H.W. Bush would not have supported the Clean Air Act Amendments of 1990 and additional benefits of comparable proportions would have been lost.

The behavior of the White House on these issues is part of a pattern that has led Russell Train, the EPA administrator under Presidents Nixon and Ford, to observe, "How radically we have moved away from

regulation based on independent findings and professional analysis of scientific, health and economic data by the responsible agency to regulation controlled by the White House and driven primarily by political considerations."

Across a broad range of policy areas, the administration has undermined the quality and independence of the scientific advisory system and the morale of the government's outstanding scientific personnel:

- Highly qualified scientists have been dropped from advisory committees dealing with childhood lead poisoning, environmental and reproductive health, and drug abuse, while individuals associated with or working for industries subject to regulation have been appointed to these bodies.
- Censorship and political oversight of government scientists is not restricted to the EPA, but has also occurred at the Departments of Health and Human Services, Agriculture, and Interior, when scientific findings are in conflict with the administration's policies or with the views of its political supporters.
- The administration is supporting revisions to the Endangered Species Act that would greatly constrain scientific input into the process of identifying endangered species and critical habitats for their protection.
- Existing scientific advisory committees to the Department of Energy on nuclear weapons, and to the State Department on arms control, have been disbanded.
- In making the invalid claim that Iraq had sought to acquire aluminum tubes for uranium enrichment centrifuges, the administration disregarded the contrary assessment by experts at the Livermore, Los Alamos, and Oak Ridge National Laboratories.

The distortion of scientific knowledge for partisan political ends must cease if the public is to be properly informed about issues central to its well-being, and the nation is to benefit fully from its heavy investment in scientific research and education. To elevate the ethic that governs the relationship between science and government, Congress and the Executive should establish legislation and regulations that would:

- forbid censorship of scientific studies unless there is a reasonable national security concern;
- require all scientists on scientific advisory panels to meet high professional standards; and
- ensure public access to government studies and the findings of scientific advisory panels.

To maintain public trust in the credibility of the scientific, engineering, and medical professions, and to restore scientific integrity in the formation and implementation of public policy, we call on our colleagues to:

- bring the current situation to public attention;
- request that the government return to the ethics and code of conduct which once fostered independent and objective scientific input into policy formation; and
- advocate legislative, regulatory, and administrative reforms that would ensure the acquisition and dissemination of independent and objective scientific analysis and advice.

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