

# **PROTECTING SCIENTIFIC INTEGRITY**

## **A POSITION PAPER FROM THE CENTER FOR INQUIRY OFFICE OF PUBLIC POLICY**

**AUTHORS: DEREK ARAUJO, J.D., DANIEL HOROWITZ, J.D.,  
RONALD A. LINDSAY, J.D., Ph.D.**

**REVIEWING COMMITTEE: PAUL KURTZ, Ph.D., STUART D. JORDAN, Ph.D.,  
DAVID KOEPEL, J.D., Ph.D., TONI VAN PELT**

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## **PROTECTING SCIENTIFIC INTEGRITY**

### **INTRODUCTION**

Formulation and implementation of public policy in many areas -- from environmental protection to forest management to fostering reproductive health to workplace safety -- depends on scientific research and studies. Accordingly, objective scientific inquiry that produces reliable information that is publicly disseminated is absolutely indispensable for informing sound public policy. The promotion and protection of scientific inquiry is an important part of the mission of the Center for Inquiry (Declaration in Defense of Science and Secularism 2006).

Not unexpectedly, given the importance of scientific inquiry for public policy, the federal government plays a crucial role in funding and supporting scientific research. This support and funding takes several forms, including direct employment of scientists by the federal government, grants to outside contractors, and utilization of scientific advisory committees. Unfortunately, there have been numerous reported instances of interference with scientific inquiry, with scientific reports being altered or suppressed for political reasons. Roger G. Kennedy, the former director of the National Park Service, has stated that, "Tinkering with scientific information, either striking it from reports or altering it, is becoming a pattern of behavior." (Shogren 2003). This conclusion that political interference with scientific inquiry is a significant problem is supported by thorough analyses carried out by various independent organizations, such as the Union of Concerned Scientists and the Government Accountability Project (Maassarani 2007; Union of Concerned Scientists 2004). This obstruction of scientific research not only prevents public policy from being based on accurate, scientifically validated information,

but also threatens to create a loss of confidence in the quality of government-sponsored scientific research.

Based on its own analysis, the Center for Inquiry has concluded that legislation is needed to safeguard integrity in scientific research. In this paper we will first set forth the principles that we believe should govern publicly funded scientific research, including the oversight role of the public and of Congress. Following this summary of governing principles, we will propose specific language that should be included in legislation addressing scientific integrity. In so doing, we will focus on three areas where we believe legislation is most needed and will be most effective, namely the conduct of federally supported research, the role of federal advisory committees, and the dissemination of scientific information by the federal government.

## **GOVERNING PRINCIPLES OF SCIENTIFIC RESEARCH**

Scientific research must never be undertaken with the objective of reaching a predetermined conclusion, nor should a scientific study ever be designed or restricted in order to produce results that favor preferred policies. We recognize, of course, that scientists formulate hypotheses in advance of undertaking research. Indeed, a principal goal of scientific research is to confirm or refute hypotheses formulated in advance of rigorous scientific testing. However, scientific tests, at a minimum, must be designed to allow for results and explanations other than the predictions generated by the hypothesis. Or to put it more bluntly: research must not be rigged to produce the desired result.

Of course, even if research is properly conducted, it is of little value if research data and findings are manipulated, censured, or suppressed. Another principle

fundamental to research integrity is that scientists must be free to disseminate the results of their research to the public, including the media. Progress in scientific understanding cannot be accomplished without the free flow of scientific information.

Some contend that in certain instances disseminating research data and findings may be misleading because the public may not understand the limitations of a particular study (Marburger 2004). Similarly, some have suggested that, under some circumstances, government officials have the right to edit data and findings because policy recommendations are a prerogative of government officials, and not of the scientists conducting the research (Marburger 2004; see also Kueter 2007).

The Center for Inquiry agrees that the limitations of a study must be disclosed, but that does not provide a justification for withholding or suppressing research data and findings. By its very nature, research is always limited and incomplete. With respect to the distinction between research and policy recommendations, we also recognize that scientific input is not the only factor relevant to policy recommendations and decisions. Responsible government officials should be free to recommend and argue for policies that, in their judgment, are in the public interest. However, the discretion to make policy recommendations does not under any circumstance justify altering or suppressing data or findings. For example, a study showing that abstinence-only education does not reduce teenage pregnancy should not have its data or findings suppressed or altered. Nonetheless, a government official would still have the discretion to recommend the funding of abstinence-only education. That official simply would not be able to cite the success of such programs in reducing teenage pregnancy as a basis for his or her

recommendation. In short, the policymaking role of agency officials cannot be used as a pretext for manipulating the results of scientific research.

A third fundamental principle is that, to the extent possible, scientific research and analysis should be free from bias and improper influences, including ideological motivations. One way to accomplish that goal is to prohibit interference with scientific research. However, prohibiting such interference is not sufficient, by itself, to ensure the reliability of scientific research. Conflicts of interest can also affect the objectivity of scientific research.

Scientists are as subject to influence and are as self-interested as other individuals. This is as true for scientists who are directly employed by the government as it is for scientists working for commercial enterprises, universities, or other institutions. However, one distinction between government scientists and scientists outside of government is that the conflict of interest and ethics rules applicable to government employees are not, in general, applicable to scientists working outside of government. In making this observation, we are by no means suggesting that the mere fact that a scientist is employed by Company X implies that her research should be dismissed in advance as irrelevant or biased. To the contrary, much valuable scientific work is performed outside of government -- and is relied upon by policymakers inside the government. However, proper accountability mandates the disclosure of all possible conflicts of interest before scientific research can be used as a basis for public policy. To enable the public to evaluate a scientific report, the public must be made aware of possible influences on the scientists who performed the work.

Among the primary sources of scientific advice from outside experts are the various federal advisory committees that have been established to assist government agencies and the President. Ideally, these committees -- of which there are about 1000 -- provide independent advice from a balanced group of experts that might not otherwise be available. However, although there is legislation that currently governs such advisory committees, namely the Federal Advisory Committee Act (FACA), 5 U. S. C. app. 2, this legislation has not been completely effective in providing public oversight of the work of such committees nor in ensuring that these committees are appropriately balanced with qualified experts. FACA has proven inadequate for a variety of reasons, including judicial interpretations of FACA that restrict its applicability to a number of advisory committees, especially presidential advisory committees.

In this position paper, we will suggest legislative reform that will promote disclosure of conflicts of interest and increase the transparency of the work of advisory committees. These objectives can be accomplished via amendments to FACA or through separate legislation. We will also recommend that Congress reestablish the Office of Technology Assessment, which we believe functioned well as an impartial, nonpartisan resource for Congress prior to its abolition in 1995. Such a congressional agency cannot supplant the work of advisory committees, but it can supplement their work and provide a needed check on the work of such committees, as well as the work of agency scientists.

In summarizing the relevant principles that should govern scientific research, we have heretofore focused on principles that emphasize the need for objective, accurate analysis. However, although pure theoretical research has an important role, most government funded research is designed to fulfill a practical purpose. Regulatory

agencies, in particular, rely on scientific research in promulgating their rules and in advising the public of potential risks. Thus, a core principle of government funded research is that the need for definitive research findings must be balanced and reconciled with the substantive mission of the agency. Delay in agency action can have serious harmful consequences for the public.

In 2001, Congress adopted the Data Quality Act (also known as the Information Quality Act). (The Act is codified at 44 U.S.C. §3504 (d) (1) and §3516; it is attached to this position paper as Appendix B.) This statute requires the Office of Management and Budget (OMB) to establish procedures to ensure the quality of information disseminated by the government. Specifically, the Act requires, in pertinent part, that OMB issue guidelines “that provide policy and procedural guidance to Federal agencies for ensuring and maximizing the quality, objectivity, utility and integrity of information ... disseminated by Federal agencies ....” In the abstract, these appear to be laudable goals. Who could oppose maximizing the “quality, objectivity, utility and integrity” of information relevant to public policy? However, some analysts and scholars have criticized the DQA and have called for its modification or repeal on the ground that it has been utilized by industry groups as a means of delaying the issuance of needed regulations (Rosenstock 2006). Although the number of substantive petitions filed by industry groups varies depending on who is doing the counting, some observers have concluded that at least several dozen petitions under the DQA have been filed by regulated industries or their lobbyists in an attempt to delay regulation (Rosenstock 2006; Weiss 2004). Compounding this problem is the way in which the OMB has defined the key terms of the Act. As part of the requirement for the objectivity and utility of

information, OMB has stated that this implies the data should be reproducible. Again, in theory, this requirement may seem unobjectionable, because the ability to reproduce results is an accepted method of confirming the results of scientific analysis. However, the DQA provides an incentive to parties with an interest in a proposed regulation to conduct superficially similar, but poorly designed, studies; they can then assert that their results conflict with the results obtained by agency scientists, when the difference in results is actually a consequence of the differences in the design of the studies. In effect, there is an incentive to create uncertainty through manipulation of research. This appears to have happened on more than one occasion (Weiss 2004). Eventually, of course, repeated studies, provided they are properly designed, will determine whether the agency's analysis was correct, but in the meantime years may pass -- years in which the industry group saves millions of dollars and the public is put at risk.

We believe that there are ways in which the DQA can be reformed that will preserve the reliability of government funded research while minimizing unnecessary delays in the dissemination of scientific information and the issuance of regulations. This paper will outline our proposals for reform.

## **LEGISLATIVE PROPOSALS**

### **A. Proposed Legislation to Prohibit Scientific Misconduct**

The Center for Inquiry recognizes the pressing need to prohibit interference with scientific inquiry and the altering or suppressing of scientific information for political reasons. For this reason, the Center for Inquiry supports effective legislation to accomplish these goals.

Legislation to promote scientific integrity was introduced in the 109<sup>th</sup> Congress. In particular, the Restore Scientific Integrity to Federal Research and Policymaking Act (H.R. 839) was introduced in the House of Representatives on February 16, 2005. That bill addressed several issues relating to scientific integrity. In particular, the bill would have prohibited federal employees from engaging in a range of scientific misconduct, including the manipulation of scientific research or analysis such that it is not accurately represented or reported; censorship of the results of sound scientific research or analysis; and directing the dissemination of false or misleading scientific information. Because that bill addressed several of the concerns that the Center for Inquiry has regarding the promotion and protection of scientific integrity, we will refer to that bill's provisions in describing some of our own legislative proposals. For ease of reference, that bill is attached as Appendix A to this position paper.<sup>1</sup>

Based on its own analysis, the Center for Inquiry proposes several revisions to the bill that would help to ensure that the bill, assuming it is reintroduced, succeeds in effectuating its stated purpose of “protect[ing] scientific integrity in Federal research and policymaking” (H.R. 839 § 2(b); 2005).

## **1. Preventing Interference with Science in General**

H.R. 839 sought to prohibit political interference with federally funded scientific research and analysis in the forms of “tampering” with research or analysis, censoring the

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<sup>1</sup> Some have criticized this bill as partisan. The Center for Inquiry is a nonpartisan organization and it believes many of the bill's provisions, with some modification, are necessary and appropriate to protect scientific integrity and should be supported by legislators of all parties. To the extent some of the bill's prefatory language could be interpreted as embodying politically inspired criticism, the Center for Inquiry does not endorse such language.

results of research or analysis, and directing the dissemination of false or misleading scientific information. To that end, § 3 of H.R. 839 would have amended subchapter V of chapter 73 of title 5, United States Code, to include the following language:

Sec. 7354. Interference with science

- (a) In General- An employee may not engage in any of the following:
  - (1) Tampering with the conduct of Federally funded scientific research or analysis.
  - (2) Censorship of findings of Federally funded scientific research or analysis.
  - (3) Directing the dissemination of scientific information known by the directing employee to be false or misleading.

This language would prohibit federal employees from directly and overtly censoring scientific research findings or directing the dissemination of information known to be false or misleading. Pursuant to the definition of “tampering” under § 8 of the bill (see discussion of “tampering” below and the Appendix), it would also prohibit an employee from directing others to tamper with the conduct of research. However, the bill’s language would not prevent an employee from censoring research findings or accomplishing the dissemination of misleading information through indirect means. For example, assume Manager A tells Executive Assistant B he needs to make sure, for political reasons, that a certain section of a report is excised. Under the language of H.R. 839, it is unclear whether Executive Assistant B would violate the law if s/he directs another assistant to delete the section in question. Our view is that the actions of Executive Assistant B should be a violation. For this reason, the Center for Inquiry recommends that the opening language of § 7354 should be revised to read:

Sec. 7354. Interference with science

- (a) In General- An employee may not engage in, direct another employee to engage in, or knowingly aid or abet another employee in engaging in, any of the following:

This broader language would ensure that an employee could not interfere with federally funded research through indirect means.

## **2. Preventing Tampering**

Subsection (a)(1) of the bill's proposed § 7354 would prohibit "[t]ampering with the conduct of Federally funded scientific research or analysis." Section 8 of the bill defines "tampering" to mean "improperly altering or obstructing so as to substantially distort, or directing others to do so." The Center for Inquiry suggests that a more precise definition of "tampering" than that presented in § 8 of the bill is desirable. It is unclear, for instance, what would constitute "substantially distort[ing]" research results. There is also a danger that the bill's prohibition of "obstructing" research might be read too broadly, e.g., in a way that would prevent research supervisors from making reasonable resource allocation decisions. "Obstructing" is modified by the adverb "improperly," but "improperly" is itself undefined.

By way of comparison, the Department of Health and Human Services has published regulations prohibiting "research misconduct" in certain federally funded projects. These regulations provide a more specific, precise, and objective definition of tampering with scientific research. *See* 42 C.F.R. § 93.103. Those regulations define "research misconduct" as follows:

*Research misconduct* means fabrication, falsification, or plagiarism in proposing, performing, or reviewing research, or in reporting research results.

- (a) Fabrication is making up data or results and recording or reporting them.
- (b) Falsification is manipulating research materials, equipment, or processes, or changing or omitting data or results such that the research is not accurately represented in the research record.

\* \* \*

(d) Research misconduct does not include honest error or differences of opinion.

Moreover, the regulations require that to constitute “research misconduct,” the misconduct in question must “be committed intentionally, knowingly, or recklessly.” *See* 42 C.F.R. § 93.104(b). As indicated, the regulations also provide that research misconduct does not include “honest error or differences of opinion.”

The wording of these regulations provides at least three significant advantages over that of the H.R. 839. First, the regulations provide a clear, objective definition of scientific misconduct. Second, the regulations prevent interfering with scientific research or analysis both during and after the actual “conduct” of research, i.e., during the proposing and reviewing stages. Third, the regulations explicitly mention the required state of mind. Referencing the required state of mind serves two purposes: it alerts judicial interpreters to the legal possibility of reckless scientific misconduct in addition to knowing or intentional misconduct, while at the same time ensuring that simple negligence or honest errors are not punished. The Center for Inquiry suggests adopting the Department of Health and Human Services’ definition of “research misconduct,” with modification to meet the purposes of H.R. 839. To that end, § 8 of the bill might be modified to read:

SEC. 8. DEFINITIONS.

In this Act:

\* \* \*

(5) TAMPERING- The term ‘tampering’ means, in proposing, performing, or reviewing Federally funded scientific research or analysis, or in recording,

reporting, or publishing Federally funded scientific analysis or research results, intentionally, knowingly, or recklessly:

- (A) fabricating data or results and recording, reporting, or publishing them; or
- (B) manipulating research materials, equipment, or processes, or altering or omitting information, analysis, data, or research results, such that the research or analysis is misleadingly or inaccurately represented.

Tampering does not include honest error.

The Center for Inquiry submits that this language provides a more workable framework for defining and preventing impermissible tampering with scientific research than does the language found in H.R. 839.

### **3. Preventing Censorship**

Subsection (a)(2) of the bill's proposed § 7354 would prohibit “[c]ensorship of findings of Federally funded scientific research or analysis.” Section 8 of the bill defines “censorship” to mean “improper prevention of the dissemination of valid and nonclassified scientific findings.” The Center for Inquiry suggests that at least two modifications to this language would help the bill to better serve its purpose of ensuring the free flow of scientific information.

First, the bill should apply not to censorship of “valid ...scientific findings,” but to the censorship of “the findings or results of scientific research or analysis conducted in accordance with the accepted standards and practices of the relevant research community.” The Center for Inquiry suggests this modification because the term “valid” has both variable, technical meanings within the scientific community and a vague

meaning in colloquial use. These ambiguities may make the term unsuitable for use in this legislative context.<sup>2</sup>

Second, the bill should not limit its application to the “improper” prevention of dissemination of scientific information. “Improper” is itself a vague term and is undefined in the bill. Moreover, if the information in question comprises accurate, nonclassified scientific findings, prevention of its dissemination would constitute *per se* censorship. Any concern that release of the information would be misleading because the public may not understand the limitations or parameters of a particular study or analysis can be addressed by stipulating that a description of the limitations of a study or analysis does not constitute censorship. The Center for Inquiry therefore suggests eliminating the term “improper” from this portion of the bill.

The Center for Inquiry therefore suggests that the definition of “censorship” contained in § 8 of the bill should be revised to read as follows:

SEC. 8. DEFINITIONS.

In this Act:

\* \* \*

- (6) CENSORSHIP- The term ‘censorship’ means prevention of the dissemination of the nonclassified findings or results of scientific research or analysis conducted in accordance with the accepted standards and practices of the relevant research community. Censorship does not include a description of the limitations of scientific research or analysis.

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<sup>2</sup> We recognize that the term “valid” is often used in regulations, scientific publications and court decisions as shorthand for reliable scientific information. *See Daubert v. Merrell Dow Pharmaceuticals*, 509 U.S. 579, 593 (1993). However, the term is usually explicated to eliminate uncertainty about its meaning. For example, in *Daubert*, the Court listed four factors relevant to scientific validity (testability, peer review, known error rate of the methodology, and acceptance in the relevant research community). 509 U.S. at 593-94. We are concerned that use of the term “valid” without defining criteria may provide a rationale for unjustified censorship.

This definition incorporates each of the modifications outlined above and further ensures that the findings of appropriately conducted scientific research are not suppressed.

Finally, in addition to prohibiting the “prevention of . . . dissemination” of scientific information, legislation may be appropriate to prohibit “interference with media access to employees.” The latter practice can constitute a significant hindrance to the free flow of scientific information to the public. As such, the bill might address this practice explicitly. Although the Center for Inquiry makes no recommendation on this particular matter, it is an issue to which further consideration should be devoted.

#### **4. Preventing the Dissemination of False or Misleading Information**

Subsection (a)(3) of the bill’s proposed § 7354 would prohibit an employee from “[d]irecting the dissemination of scientific information known by the directing employee to be false or misleading.” Although employees who make honest misjudgments about the accuracy of information should not be punished, requiring actual “knowledge” of the falsity or deceptiveness of information may set too high a bar. The language in H.R. 839 would make possible an ignorance defense that may prove difficult to overcome in enforcing the bill. In other words, the language in the bill might allow employees to escape penalties simply by claiming that they were unaware the information was false or misleading.

The Center for Inquiry therefore strongly recommends that the knowledge element be revised. We suggest revising the language of the bill to prohibit directing the dissemination of scientific information “that the directing employee knows or reasonably should know to be false or misleading.”

## **5. Penalties**

Subsection (b) of the bill's proposed § 7354 provides that “[a]n employee who violates this section shall be subject to appropriate disciplinary action by the employing agency or entity.” This language provides no specific limit on agency discretion regarding appropriate disciplinary action. Although the Center for Inquiry makes no specific recommendation regarding this provision, it suggests that this is an issue that warrants further consideration. Inconsistency in enforcing the statute could undermine its purposes.

## **6. Prohibited Personnel Practice**

Section 3(b) of the bill would amend section 2302(b) of title 5, United States Code, to protect employees from those who “take or fail to take, or threaten to take or fail to take, a personnel action with respect to any employee because of the development or dissemination, within the scope of employment, of scientific research or analysis that the employee reasonably believes to be accurate and valid.” The Center for Inquiry suggests revising this language. Specifically, this provision should be revised to apply not to the dissemination of “scientific research or analysis that the employee reasonably believes to be accurate and valid,” but to dissemination of “the findings or results of scientific research or analysis conducted in accordance with the accepted standards and practices of the relevant research community, unless dissemination would pose a risk to national security.” The latter language is more objective and would mirror the suggested changes to the bill's provision regarding censorship discussed above.

## **B. Proposed Legislation Governing Advisory Committees**

The foregoing section provides our recommendations concerning statutory language that would prohibit direct interference with scientific research and analysis by federal employees. However, as explained in the Introduction, the government relies heavily on advisory committees for scientific advice, and these committees are often comprised, in part, of individuals who are not regular federal employees. Although these advisory committees are governed by a statute, the Federal Advisory Committee Act (FACA), 5 U. S. C. app. 2, many commentators have argued that this statute is deficient in certain respects, in part because of the way in which it has been interpreted by the courts. The Center for Inquiry agrees.

Judicial interpretations of FACA have narrowed its scope considerably. By its own terms, FACA does not apply to committees unless they are “established or utilized” by the President or an agency. 5 U. S. C. app. 2 §3. The courts have interpreted these terms as requiring a showing that the government directly formed the committee or the committee is managed or controlled by government officials. Thus, a panel of experts providing advice to the Food and Drug Administration (FDA) on food and cosmetic safety was held not be governed by FACA because a private contractor formed the panel -- albeit at the direction of the FDA -- and the contractor managed the panel. *Food Chemical News v. Young*, 900 F.2d 328 (D. C. Cir. 1990). FACA also does not apply if the advisory committee is “composed wholly of full-time, or permanent part-time, officers or employees of the Federal Government.” 5 U. S. C. app. 2 §3. Courts have ruled that no one is a member of an advisory committee unless that person has a vote or veto power. *In Re Cheney*, 406 F.3d 723, 728 (D. C. Cir. 2005).

These narrow readings of FACA are troubling for a number of reasons. First, narrow interpretations of FACA obviously affect the extent to which the public can monitor the work of advisory committees, thus frustrating one of the primary purposes of the statute. Second, there is no warrant in the legislative history for such narrow interpretations of the statute. To the contrary, the legislative history indicates Congress was concerned about curbing improper influence on advisory committees from those outside government. The House Report on the bill expressly stated that: “One of the great dangers in the unregulated use of advisory committees is that special interest groups may use their membership on such bodies to promote their private concerns.” (H. Rep. No. 92-1017 1972). Such improper influence by special interest groups can be exercised more, not less, surreptitiously when those participating in a committee’s work do not have a formal vote or veto power.

The usual justification provided for these narrow interpretations of FACA is that the statute would be deemed unconstitutional otherwise because it would constitute an impermissible restriction on the President’s power to seek advice (Mongan 2005). As the D. C. Circuit observed, “we most construe the statute strictly” because “of the severe separation-of-powers problems in applying FACA” to presidential advisory committees. *In Re Cheney*, 406 F.3d at 728. We believe this concern is exaggerated. In any event, we believe there are ways to address this problem without unduly restrictive interpretations of FACA.

Another important deficiency of FACA is the inability to ensure the objectivity and disinterestedness of a committee’s members. Although fairly rigorous conflict of interest regulations apply to government employees, such regulations do not apply to

individuals outside the government. In order to assess the recommendations of an advisory committee, it is important to know what other interests committee members have that might influence their recommendations. In appointing members, advisory committees have made use of the category of “Special Government Employee” (or SGE). SGEs are subject, with some exceptions, to the conflict of interest regulations that govern regular government employees. However, advisory committees are not usually required to classify outside members as SGEs. (Some agencies have adopted this requirement via their own internal regulations.) Instead, members may be classified as “representatives.” Representatives are not bound by conflict of interest regulations. The fact that representatives are not bound by such regulations, combined with the fact that individuals from the private business sector and other outside interests may participate and influence advisory committees without even being considered committee members, creates a huge “blind spot” in the public’s ability to oversee and evaluate the work of advisory committees.

In addition to the problems already outlined, there are some additional concerns relating to the integrity of advisory committees. One concern deals with the selection process for committee members. Conflict of interest regulations are important for ensuing objectivity, but so too is the transparency and nonpartisan character of the selection process. There is at least some anecdotal evidence that candidates for appointment to advisory committees have been screened for their political views and opinions on moral or social issues (Steinbrook 2004). Clearly, such screening, especially for potential members of scientific advisory committees, is completely inappropriate. Furthermore, although some agencies post or publish the names of proposed appointees,

this practice is not required or common. It should be. This will enable the public to evaluate potential committee members in a timely fashion.

Finally, there is one potential loophole to public oversight of advisory committees that should be closed. As indicated, FACA does not apply to advisory committees comprised entirely of full-time government employees. As also indicated, outside experts are often appointed to advisory committees as SGEs. Could SGEs be considered full-time government employees? The D. C. Circuit, in *Association of American Physicians and Surgeons, Inc. v. Clinton*, 997 F.2d 898 (D. C. 1993), raised this issue without resolving it. The court stated that it was “unsure whether FACA’s definition of ‘full-time’ extends to a person who works for the government less than 130 days out of a year” (which is part of the definition of a SGE) and characterized this as “a factual issue” that would need to be developed through discovery. 997 F.2d at 914, 915. If SGEs were to be considered full-time government employees, at least in some cases, this obviously would allow agencies to circumvent FACA by having committees comprised entirely of regular government employees and SGEs. This issue should be resolved through legislation rather than litigation on a case-by-case basis.

The Center for Inquiry recommends legislation to address these issues. This legislation could take the form either of amendments to FACA or a separate statute specifically addressing scientific advisory committees. We note that H.R. 839 proposed statutory language that would deal specifically and exclusively with scientific advisory committees (see Appendix, especially Section 5 of H.R. 839). The Center for Inquiry neither endorses nor disagrees with that approach. Our primary concern is to ensure that

advisory committees function openly and effectively, including, but not necessarily limited to, scientific advisory committees.

To ensure that advisory committees that are not truly independent of the government are covered by FACA (or a comparable statute governing scientific advisory committees), we recommend that legislation be adopted to clarify what “establishing” an advisory committee encompasses. Specifically, we recommend that the following definition be adopted:

An advisory committee is “established” for purposes of this section if it is formed, created, or organized by, or at the request or direction of, an agency or the President.

This definition will bring within the ambit of FACA committees that were organized by a contractor or other outside entity, provided the committee was organized at the request or direction of an agency or the President. At the same time, it will exclude those groups or committees that are truly independent, such as the American Bar Association’s Standing Committee on the Federal Judiciary.

On the issue of membership, we recommend that membership not be predicated on the ability to vote or veto a committee’s proposals. This narrow view of FACA allows agencies or the President to circumvent FACA with ease. An agency could have a committee with just a handful of government employees who relied almost entirely on a battalion of consultants from private industry for the research and drafting of reports, yet this committee would be exempt from FACA’s disclosure requirements provided the outside consultants were denied a formal vote on committee decisions, including a vote

on whether to adopt the reports that they drafted. We recommend that membership on an advisory committee be defined as follows:

For purposes of this section, an individual is a member of an advisory committee if that individual is appointed to serve on the advisory committee, and an individual who is not a full-time, or permanent part-time, officer or employee of the Federal Government will be deemed to have been appointed to serve on an advisory committee if the individual is: (i) invited to participate in the work of the committee; (ii) attends at least two meetings of the committee; (iii) participates in the work of the committee by the submission of research, analysis, or recommendations, either orally or in writing; and (iv) the individual's submission is considered by the committee.

We concede that, depending on the circumstances, this definition may be considered either over inclusive or under inclusive, but we believe it addresses a major concern and provides sufficiently clear guidance to allow it to be applied by the courts. The definition excludes the outside consultant who is brought in for a one-time meeting, as well as committee staffers or aides. However, it would encompass individuals representing private business concerns or other outside interests who function as members of the committee, whether they are formally appointed or not, and whether they possess a formal vote or not. Admittedly, some committees might try to circumvent this definition by having outside consultants just happen to “show up” at meetings and claim they were uninvited. However, records of these meetings would reveal the attendance of such individuals and lead to questions about the reasons for their “uninvited” attendance.

We do not view the separation-of-powers issue as a reason for narrowing the scope of FACA (or a comparable statute). To begin, the separation-of-powers problem is a concern only for Presidential advisory committees. Moreover, we do not believe that it is a legally sound argument to maintain that FACA unconstitutionally impedes the

President's ability to obtain advice. Those who argue for the unconstitutionality of FACA assert that the President must be able to obtain candid advice and guidance and that individuals who know their comments would become public through FACA's disclosure requirements would be inhibited in providing such advice. However, a blanket exemption from disclosure requirements is unwarranted (Kello 2003). The specific burden placed on the President through FACA disclosure requirements should be evaluated on a case-by-case basis. This evaluation would consider the nature and purpose of the advisory group and the topics on which the President is seeking guidance. Especially with respect to scientific advisory committees, we believe it is inappropriate to interpret FACA narrowly. Little burden is placed on the President by requiring public disclosure of the meetings and reports of scientific advisory committees. We believe the best solution to the separation-of-powers problem is to allow the President to request an exemption from the mandates of FACA on a case-by-case basis. This will allow the President to maintain the confidentiality of advice where such confidentiality is truly needed while at the same time allowing public oversight of the work of advisory committees, including Presidential advisory committees.

With respect to the issue of ensuring that members of advisory committees be objective and not subject to outside influence, including their own financial interests, we believe that, whenever possible, individuals appointed to advisory committees should be designated Special Government Employees (if they are not full-time or permanent part-time federal government employees). We also suggest that the names of proposed appointees be published in the Federal Register or posted on an agency website to allow the public to comment on proposed appointees.

To prevent improper screening of potential appointees, we recommend that the following statutory language be adopted:

Political affiliation will not be considered in making appointments to advisory committees, unless specifically required by federal statute, nor will prospective appointees be required to express their opinion on political, social, religious or moral issues.

Finally, to preclude the argument that SGEs are full-time employees (and, therefore, that committees composed of regular federal employees and SGEs are not covered by FACA) we recommend that legislative language be adopted that would specifically provide that:

Special Government Employees who are serving as members of advisory committees are not considered full-time or permanent part-time officers or employees of the Federal Government.

### **C. Reestablishing the Office of Technology Assessment**

Some of the problems relating to federal advisory committees, in particular how to reconcile oversight of such committees with the independence of the executive branch, could be resolved through the use of expert advisory groups that are *not* part of the executive branch. From 1972 until its abolition in 1995, a small congressional agency, the Office of Technology Assessment (OTA), functioned as a very effective means of providing Congress with impartial, expert analysis. Although a reestablished OTA will not substitute for the work of advisory committees within the executive branch, it could supplement their work. Furthermore, the reestablishment of the OTA could reduce the alleged need for outside peer review of the work of regulatory agencies. A full discussion of regulatory peer review is outside the scope of this paper (but see the discussion below of the Data Quality Act). Suffice it to say that regulatory peer review is a controversial

process for assessing the scientific and technical work of regulatory agencies through the use of outside experts and consultants. Many are concerned that regulatory peer review allows private interests to interfere with and delay the work of regulatory agencies.

The OTA had several features that made it valuable to Congress's policy process. Among other things, it was governed by a bipartisan board of politicians and it had a highly qualified, multidisciplinary staff that helped minimize ideological bias in analysis. Perhaps most importantly, it was subject to direct oversight by, and responsive to the demands of, Congress. As part of any legislative reform relating to federally funded scientific research, the Center for Inquiry strongly recommends the reestablishment of the OTA.

#### **D. Proposed Legislation on the Data Quality Act**

As set forth in more detail below, it is the position of the Center for Inquiry that the Data Quality Act (DQA), also known as the Information Quality Act, should be repealed or clarified to ensure that federal agencies which develop, use and disseminate scientific information are able to conduct their activities efficiently. There is considerable doubt whether enactment of the DQA was justified because other mechanisms exist to ensure data quality. Moreover, due to its vagueness, the DQA is susceptible to misinterpretation or misapplication that can interfere with the ability of federal agencies to discharge their responsibilities.

The DQA was enacted without hearings, debate or committee reports as an unnamed rider to the 2001 Consolidated Appropriations Act (Pub. L. 106-554, § 515

2001). It directs the Office of Management and Budget (OMB) to issue “policy and procedural guidance to Federal agencies for ensuring and maximizing the quality, objectivity, utility, and integrity of information (including statistical information) disseminated by Federal agencies in fulfillment of the purposes and provisions of . . . the Paperwork Reduction Act” (see Appendix B to this paper for the full text of the DQA).

In 2002, OMB issued its guidelines (OMB Guidelines) which: define the terms of the DQA;<sup>3</sup> require that information disseminated by federal agencies be accurate, complete, reliable and unbiased; and direct federal agencies to issue their own DQA guidelines, including establishment of administrative mechanisms allowing affected persons to seek and obtain timely correction of information disseminated by the agency. Various agencies have issued their own guidelines restating and elaborating on the OMB Guidelines (Department of Health and Human Services 2002). The OMB and agency guidelines set forth extensive substantive rules and create detailed new procedures for responding to public requests for changes in information disseminated by the agencies. OMB has also published the Information Quality Bulletin for Peer Review which sets forth extensive new rules governing “peer review of scientific information disseminations that contain findings or conclusions that represent the official position of [a Federal agency]” (OMB 2005).

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<sup>3</sup> Section V of the OMB Guidelines provides, among other things, the following definitions: “Quality” is an encompassing term comprising utility, objectivity, and integrity. “Utility” refers to the usefulness of the information to its intended users, including the public. “Objectivity” includes whether disseminated information is being presented in an accurate, clear, complete, and unbiased manner and involves a focus on ensuring accurate, reliable and unbiased information. “Integrity” refers to the security of information (OMB Guidelines 2002).

## 1. Concerns

The Center for Inquiry fully agrees that federal agencies should base their actions and publications on accurate, complete, reliable and unbiased scientific information. Sound decision making requires such information. However, it is not clear that the DQA and the OMB and federal agency guidelines are necessary to achieve this goal or are even helpful in this regard. We are not aware of any reliable research demonstrating common or systematic problems with the quality of data or scientific analysis underlying federal agency actions. Nor are we aware of any demonstration that these guidelines are more effective for ensuring data quality than are pre-existing agency rules and professional standards applicable to federal agency scientists and other employees.

Moreover, even if the DQA *could* play a useful role, it could do so only if properly implemented. Conversely, the goals of the DQA will be undermined if it is implemented in a manner that inappropriately interferes with the ability of federal agencies to operate objectively and efficiently.

There are varying views about the manner in which the DQA has been implemented. OMB issued a report which generally concluded that the Act has been operating appropriately (OMB 2004). However, at least one public interest group, OMB Watch, has characterized the OMB Report as “seriously flawed” and the OMB Guidelines as “overly strict and complex” (OMB Watch 2004). In addition, various independent scholars and commentators have criticized the DQA as a “cause for great concern” as it appears to be a tool “primarily [for] those who have reason to silence or politicize objective scientific research” (Rosenstock 2006). A Congressional Research Service (CRS) report presents various viewpoints without reaching firm conclusions

(Congressional Research Service 2004). According to CRS, supporters of the DQA, “many of whom represent businesses and other regulated parties, considered it an extremely important tool to oversee the work of rulemaking agencies.” These supporters contend that the DQA “would improve the quality of agency science and regulation and force agencies to regulate based on the best science available.” On the other hand, critics of the DQA “including many environmental and public interest groups,” believe the law is “a tool by which regulated parties can slow and possibly stop new health, safety, and environmental standards” and “could have a chilling effect on agency distribution and use of scientific information” (Congressional Research Service 2004, p. 3).

Although the Center for Inquiry is troubled by the issues raised by various critics of the DQA, we have not been able to reach a definitive conclusion about the extent to which it has been operating appropriately. Nonetheless, it is undeniable that the language of the DQA and the extensive OMB and agency guidelines reveal clear areas of concern. These provisions have great potential for imposing excessive procedural obstacles to effective federal agency action to protect the public interest and for inhibiting the ability of agencies to exercise sound scientific judgment in discharging their duties. Moreover, because Congress did not conduct hearings when enacting the DQA, there is no objective record available to assess the need for the statute. The lack of evidence demonstrating any need for the DQA raises the question of whether its benefits could ever justify its costs, even if it were administered as well as possible.

## **2. Recommendations**

### **a. Consideration should be given to repealing the DQA**

The DQA, even if implemented in the most efficient manner possible, inevitably imposes costs and delays on the federal agencies to which it applies. These burdens are justified only if they are necessary to achieve some goal that is in the public's interest.

No congressional hearings were held before enactment of the DQA, and to our knowledge no convincing case has been made that the DQA is needed to ensure data quality. While some problems with data quality are inevitable in any organization, public or private, we know of no reason to believe that such problems are systematic within federal agencies or are more prevalent within these agencies than other comparable organizations. To the contrary, the history of federal regulation demonstrates that the information used and disseminated by federal agencies is generally, in the terms of the OMB guidelines, "accurate, clear, compete, and unbiased" as well as "reliable." Moreover, there are effective mechanisms apart from the DQA for ensuring data quality: The Administrative Procedure Act (APA), 5 U.S.C. § 551 *et seq.*, requires federal agencies to provide extensive opportunity for the public to comment on and criticize the quality of data underlying proposed agency rulemaking. In addition, final agency rules are subject to judicial review.

Accordingly, we recommend that Congress thoroughly investigate the need for the DQA, focusing in particular on whether there are sufficient problems with federal agency data quality to justify the DQA. If no such justification is demonstrated, the DQA should be repealed.

**b. In lieu of repeal, the DQA should be amended**

If Congress determines that the DQA could play a useful role, we have several recommendations for clarifying the DQA to help ensure its effective and efficient implementation. The discussion of these recommendations is followed by proposed legislative language.

Our first recommendation is that Congress should clarify the DQA to ensure it does not subject agency actions to judicial review.

The DQA does not specify whether a court may review a federal agency's compliance with its provisions. To date, cases addressing that issue have held that no judicial review is available. *See Salt Institute v. Leavitt*, 440 F.3d 156 (4<sup>th</sup> Cir. 2006); *In re Operation of the Missouri River Sys. Litig.*, Case No. 03-MD-1555 (D. Minn. June 21, 2004) (order granting motions for summary judgment). Moreover, the Department of Justice has taken a similar position in a brief filed in another case (Congressional Research Service 2004, p. 16). The issue is still being litigated in other courts, however. Until the issue is definitely resolved, Justice Department and federal agency resources must be expended on these lawsuits and it is possible that other courts will reach a contrary conclusion.

Rulemaking procedures, the most important agency actions, are already subject to judicial review without the DQA. A private party that believes an agency has relied on erroneous or inaccurate information, or has not complied with the public comment or other requirements of the APA, may challenge the rule in court. In the context of agency rulemaking, courts have extensive experience evaluating proposed agency regulations, according the proper deference due the actions and judgments of expert agencies. The

creation of a new private cause of action under the DQA would be duplicative and would unduly interfere with the implementation of agency regulations.

Agency actions other than rulemaking – for instance, the issuance of scientific reports – have not generally been subject to judicial review for sound reasons: Courts are ill-suited to substitute their judgments on scientific matters for those of expert agencies entrusted with responsibility for complex technical matters by Congress. Moreover, subjecting such agency actions to judicial review would unduly burden judicial and agency resources. Finally, until an agency promulgates a rule, there is no issue that is sufficiently ripe to justify judicial review. These reasons are equally applicable to agency actions taken under the DQA.

As our second recommendation, we recommend that Congress clarify that in the context of past, present or possible future rulemaking, the DQA does not require any administrative mechanisms or safeguards beyond those provided by the APA.

The DQA is silent about how its procedural requirements relate to the APA provisions governing federal agency rulemaking. In general, the APA requires agencies to publish a notice of proposed rulemaking in the Federal Register, to allow public comments on proposed rules, and to publish a final rule after consideration of any such comments. During the public comment period, affected parties can challenge the adequacy of information relied upon by the agency in developing the proposed rule. When publishing the final rule, agencies normally explain why they have or have not made changes in response to these comments.

Thus, in the context of rulemaking, the APA already provides a sound mechanism for carrying out the DQA's directive that agencies allow "affected persons to seek and

obtain correction of information . . . that does not comply with the guidelines” governing the quality of information. There is no need for additional mechanisms under the DQA.

Our next recommendation is that Congress should clarify that the DQA does not prevent an agency from taking action (or refraining from taking action) based on a reasonable weighing of the best available evidence.

The DQA requires issuance of guidelines “ensuring and maximizing the quality” of information. There is no elaboration on the scope of the quoted phrase and, therefore, there are no criteria to determine how high a standard it sets. Issues of public health, safety, and protection of the environment are often complex. The policy implications of the scientific research relating to these issues may be subject to reasonable disagreement. Under these circumstances, a federal agency may be required to evaluate evidence that in some respects may appear ambiguous, and to decide whether or how to act in the face of some uncertainty. Indeed, a degree of uncertainty is inherent in any scientific research and analysis, since science is by its very nature incomplete.

While there is a risk that agencies will impose undue costs by acting without sufficient supporting evidence, there is also a risk that the public will be unduly harmed or endangered if near or absolute certainty is required before any action is taken or any report is issued. The DQA should strike an appropriate balance between these valid concerns; it should not impose an unrealistically and inappropriately high standard for data quality or require unrealistic standards of reproducibility or impose unwieldy processes for peer review. Federal agencies are expert at evaluating scientific data, and the DQA should not prevent them from acting on reasonable conclusions, even if there is

some degree of uncertainty. The judgment of others should not be substituted for the judgment of the expert agencies created by Congress to protect the public interest.

As our fourth and final recommendation, we recommend that Congress should clarify that the DQA applies only to data underlying major agency actions, such as rulemaking and the publication of agency reports, and does not apply to policy decisions (as opposed to the data underlying such decisions).

The DQA applies to information “disseminated” by federal agencies and requires administrative mechanisms for challenging the quality of disseminated information. There is no indication as to what types of agency communications are considered disseminations covered by the DQA.

Without clarification, the DQA could be interpreted to apply, for instance, to every agency letter responding to a congressional or public inquiry, every agency statement made in a meeting with members of the public or parties affected by agency action, every speech given or article published by an agency employee, and every sentence and number on an agency website. While CFI is not aware of assertions that the DQA has such extreme scope, there is significant dispute about the degree of burden the DQA has imposed on agencies (OMB Watch 2004, pp. 5-6, 8-11). It is troublesome that there is no explicit limitation on the scope of the DQA. Some limitation is needed to prevent agencies from becoming mired in the process of responding to challenges regarding relatively insignificant agency actions.

In addition, although the DQA refers only to “information,” it has sometimes been used to challenge policy decisions made by federal agencies as opposed to the quality of data underlying those decisions. While such challenges are not supported by the

language of the DQA, they have required agencies to expend resources to respond and have occasionally been successful. For instance, OMB Watch has reported that the DQA was successfully used to challenge certain mining safety rules in part based on the "feasibility" of complying with the rule, the "regulatory confusion" that the rule would cause, and the "significant loss of jobs" that instituting the rule would cause, even though none of these considerations relates to data quality (OMB Watch 2005).

**c. Proposed legislative language**

The Data Quality Act should be amended by inserting after subsection (b) a new subsection to read substantially as follows:

(c) Additional Rules.

- (1) No act or failure to act by a Federal agency shall be subject to review by any court by reason of this section.
- (2) Guidelines issued pursuant to this section shall not require any administrative mechanism beyond those required by the Administrative Procedure Act with respect to information that has or may be considered by a Federal agency in the context of past, present or possible future rulemaking, regardless of whether a rule is promulgated pursuant to that consideration.
- (3) This section shall not prevent a Federal agency from taking or refraining from taking any action based on a reasonable weighing of the best available evidence.

(4) This section –

- (A) shall apply only to data underlying rulemaking by a Federal agency or contained in a report published by a Federal agency and not to data underlying any other action; and
- (B) shall not apply to any action or decision of a Federal agency, as opposed to the data underlying such an action or decision.

## **CONCLUSION**

Reliable expert advice is indispensable for sound public policy and effective regulation. Obviously, this is one reason administrative agencies and advisory committees have been created and the government devotes an enormous amount of its resources to scientific research. Some flaws in the conduct and application of scientific research are unavoidable given the fallibility of human nature. However, recognition of the imperfections inherent in any human enterprise does not excuse ignoring the problems that are preventable. Intentional interference with scientific research can be prevented, at least in part, by appropriate legislation. Federally funded scientific research and analysis must be unobstructed, transparent, and timely. It is no exaggeration to state that safeguarding the integrity of scientific research is essential both to maintain a free, democratic society and to maintain the leadership of the United States in scientific and technological innovation. For these reasons, the Center for Inquiry recommends legislation to address scientific misconduct, the structure and operations of advisory committees, and reform or repeal of the Data Quality Act.

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109th CONGRESS  
1st Session  
**H. R. 839**

To protect scientific integrity in Federal research and policymaking.

**IN THE HOUSE OF REPRESENTATIVES**

**February 16, 2005**

Mr. WAXMAN (for himself and Mr. GORDON) introduced the following bill; which was referred to the Committee on Government Reform, and in addition to the Committee on Science, for a period to be subsequently determined by the Speaker, in each case for consideration of such provisions as fall within the jurisdiction of the committee concerned

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**A BILL**

To protect scientific integrity in Federal research and policymaking.

*Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,*

**SECTION 1. SHORT TITLE; TABLE OF CONTENTS.**

- (a) Short Title- This Act may be cited as the 'Restore Scientific Integrity to Federal Research and Policymaking Act'.
- (b) Table of Contents- The table of contents for this Act is as follows:
  - Sec. 1. Short title; table of contents.
  - Sec. 2. Findings and purpose.
  - Sec. 3. Prohibition of political interference with science.
  - Sec. 4. Whistleblower extension for disclosures relating to interference with science.
  - Sec. 5. Requirements relating to Federal scientific advisory committees.
  - Sec. 6. Peer review.
  - Sec. 7. State of scientific integrity report.
  - Sec. 8. Definitions.

**SEC. 2. FINDINGS AND PURPOSE.**

- (a) Findings- Congress finds the following:
  - (1) America has for its history served as a world leader of scientific innovation and research.

(2) Multiple policy and legislative decisions affecting the health and safety of the American public and the state of the environment depend upon comprehensive, accurate scientific information.

(3) The Federal Government plays a key role in fostering and supporting scientific research.

(4) The conduct of such research depends on free investigation and open exchange of ideas.

(5) Scientific advisory committees must comprise individuals with the appropriate expertise regardless of political affiliation.

(6) Over the past four years, leading scientific associations and scientific journals, Inspectors General, senior scientists within the Federal Government, former scientific officials from both Republican and Democratic administrations, and 48 Nobel Laureates have raised concerns about political interference with science in the executive branch of the Federal Government.

(7) This interference has included tampering with the conduct of research, gagging of government scientists, distortion of scientific information presented to Congress and the public, and manipulation of Federal scientific advisory committees.

(b) Purpose- The purpose of this Act is to protect scientific integrity in Federal research and policymaking.

### **SEC. 3. PROHIBITION OF POLITICAL INTERFERENCE WITH SCIENCE.**

(a) In General- Subchapter V of chapter 73 of title 5, United States Code, is amended by adding at the end the following:

#### **Sec. 7354. Interference with science**

(a) In General- An employee may not engage in any of the following:

(1) Tampering with the conduct of Federally funded scientific research or analysis.

(2) Censorship of findings of Federally funded scientific research or analysis.

(3) Directing the dissemination of scientific information known by the directing employee to be false or misleading.

(b) Penalties- An employee who violates this section shall be subject to appropriate disciplinary action by the employing agency or entity.'

(b) Prohibited Personnel Practice- Section 2302(b) of title 5, United States Code, is amended--

(1) in paragraph (11), by striking 'or' at the end;

(2) in paragraph (12), by striking the period and inserting ' ; or'; and

(3) by inserting after paragraph (12) the following:

` (13) take or fail to take, or threaten to take or fail to take, a personnel action with respect to any employee because of the development or dissemination, within the scope of employment, of scientific research or analysis that the employee reasonably believes to be accurate and valid.'

(c) Clerical Amendment- The table of sections for chapter 73 of title 5, United States Code, is amended by inserting after the item relating to section 7353 the following:

` 7354. Interference with science.'

#### **SEC. 4. WHISTLEBLOWER EXTENSION FOR DISCLOSURES RELATING TO INTERFERENCE WITH SCIENCE.**

(a) In General- Subparagraphs (A) and (B) of section 2302(b)(8) of title 5, United States Code, are amended--

(1) in clause (i), by striking `or' at the end;

(2) in clause (ii), by adding `or' at the end; and

(3) by inserting after clause (ii) the following:

` (iii) tampering with the conduct of Federally funded scientific research or analysis, censoring the findings of Federally funded scientific research or analysis, or directing the dissemination of scientific information known by the directing employee to be false or misleading,'.

(b) Conforming Amendments-

(1) Section 1212(a)(3) of title 5, United States Code, is amended--

(A) by striking `regulation, or gross' and inserting `regulation; gross'; and

(B) by adding at the end the following: `or tampering with the conduct of Federally funded scientific research or analysis, censoring the findings of Federally funded scientific research or analysis, or directing the dissemination of scientific information known by the directing employee to be false or misleading;'

(2) Section 1213(a) of such title is amended--

(A) in paragraph (1)--

(i) by striking `or' at the end of subparagraph (A);

(ii) by inserting `or' at the end of subparagraph (B); and

(iii) by inserting after subparagraph (B) the following:

` (C) tampering with the conduct of Federally funded scientific research or analysis, censoring the findings of Federally funded scientific research or analysis, or

directing the dissemination of scientific information known by the directing employee to be false or misleading;'; and (B) in paragraph (2)--

(i) by striking `or' at the end of subparagraph (A);

(ii) by striking the period at the end of

subparagraph (B) and inserting `; or'; and

(C) by inserting after subparagraph (B) the following:

`(C) tampering with the conduct of Federally funded scientific research or analysis, censoring the findings of Federally funded scientific research or analysis, or directing the dissemination of scientific information known by the directing employee to be false or misleading.'.

## **SEC. 5. REQUIREMENTS RELATING TO FEDERAL SCIENTIFIC ADVISORY COMMITTEES.**

(a) Bar on Litmus Tests- All appointments to Federal scientific advisory committees shall be made without regard to political affiliation, unless required by Federal statute.

(b) Designation of Members as Special Government Employees or Representatives-

(1) An individual appointed to a Federal scientific advisory committee who is not a full-time or permanent part-time officer or employee of the Federal Government shall be designated, by the agency to which the committee reports, as either--

(A) a special Government employee, if the individual is providing advice based on the individual's expertise or experience; or

(B) a representative, if the individual is representing the views of individuals or entities outside the Federal Government.

(2) An agency shall review the members of each Federal scientific advisory committee that reports to the agency to determine whether each member's designation is appropriate, and to redesignate members if appropriate. Such review shall be made when the committee's charter expires or, in the case of a committee with an indefinite charter, every 2 years.

(c) Ensuring Independent Advice and Expertise-

(1) Each agency shall, to the extent permitted by law, appoint individuals to Federal scientific advisory committees as special government employees.

(2) Each agency shall make its best efforts to ensure that--

(A) no individual appointed to serve on a Federal scientific advisory committee has a conflict of interest that is relevant to the functions to be performed, unless such conflict is promptly and publicly disclosed and the agency determines that the conflict is unavoidable; and

(B) each report of the advisory committee will be the result of the advisory committee's independent judgment and include a statement indicating the process used by the advisory committee in formulating the recommendations or conclusions contained in the report.

(3) Each agency shall require that individuals that the agency appoints or intends to appoint to serve on a Federal scientific advisory committee inform the agency of the individual's conflicts of interest that are relevant to the functions to be performed.

(4) If an agency determines that representative members are required on a Federal scientific advisory committee, the Advisory Committee Management Officer of the agency shall consult with the designated agency ethics official to ensure that the designation is appropriate and necessary to fulfilling the committee's purpose.

(5) The designated agency ethics official of each agency shall issue guidance to ensure that Federal scientific advisory committees are providing sufficiently independent advice and expertise.

(6) The Administrator for General Services shall conduct an annual review of compliance by agencies with this subsection and shall submit to the Committee on Government Reform of the House of Representatives and the Committee on Governmental Affairs and Homeland Security of the Senate a report on the results of the review.

(d) Disclosure of Information-

(1) ITEMS REQUIRED TO BE DISCLOSED- With respect to each Federal scientific advisory committee established before, on, or after the date of the enactment of this Act, the agency to which the committee reports shall make available as described in paragraph (2) the following information, at a minimum:

(A) The charter of the committee.

(B) A description of the committee formation process, including at least--

(i) the process for identifying prospective members;

(ii) the process of selecting members for balance of viewpoints or expertise; and

(iii) a justification of the need for representative members, if any.

(C) A list of all current members, including, for each member, the following:

(i) The name of any person or entity that nominated the member.

(ii) Whether the member is designated as a special Government employee or a representative.

- (iii) In the case of a representative, the individuals or entity whose view point the member represents.
  - (D) A list of all special Government employees who have received conflict of interest waivers under section 208(b) of title 18, United States Code, under regulations issued by the Office of Government Ethics, a summary description of the conflict necessitating the waiver, and the reason for granting the waiver.
  - (E) A summary of the process used by the committee for making decisions.
  - (F) Transcripts of all meetings of the committee.
  - (G) Notices of future meetings of the committee.
- (2) METHODS OF DISCLOSURE-
- (A)(i) Except as provided in clause (ii), the information required to be disclosed by an agency under this subsection shall be available electronically, including on the official public Internet site of the agency, at least 7 calendar days before each meeting of a Federal scientific advisory committee.
  - (ii) In the case of a transcript of a meeting of a Federal scientific advisory committee, the transcript shall be disclosed by an agency under this subsection not later than 7 calendar days after the meeting.
  - (B) The Administrator of General Services shall provide, on the official public Internet site of the General Services Administration, electronic access to the information made available by each agency under subparagraph (A).

## **SEC. 6. PEER REVIEW.**

- (a) Agency-Directed Peer Review- Each agency shall determine a peer review process appropriate for the agency's functions and needs.
- (b) Ineffectiveness of Information Quality Bulletin for Peer Review- The Information Quality Bulletin for Peer Review, issued in final form by the Office of Management and Budget on December 16, 2004 (70 Fed. Reg. 2664; January 14, 2005), shall have no force or effect as of the date of the enactment of this Act, and shall not apply to information disseminated by the Federal Government to the public before, on, or after such date.

## **SEC. 7. STATE OF SCIENTIFIC INTEGRITY REPORT.**

By January 15 of each year, beginning with January 15, 2006, the Director of the Office of Science and Technology Policy shall provide to Congress a report addressing--

- (1) major controversies regarding scientific integrity that arose during the year, and the current status of such controversies,

including controversies brought to the attention of the Director by members of Congress;

(2) by agency and with respect to the period covered by the report--

(A) the number of instances in which the amendments made by sections 3(a), 3(b), and 4(a), respectively, were violated; and

(B) a brief description of the violations to which the information under subparagraph (A) relates, excluding any information that identifies or makes possible the identification of any individual;

(3) Federal policy changes during the year related to scientific integrity, including changes that affect the right to publish, the use of data, communications with the public, participation in professional scientific activities, and Federal advisory committee membership; and

(4) administration efforts specifically designed to further scientific integrity.

## **SEC. 8. DEFINITIONS.**

In this Act:

(1) FEDERAL SCIENTIFIC ADVISORY COMMITTEE- The term `Federal scientific advisory committee' means any advisory committee established in whole or in part to provide expert scientific advice, or to provide policy advice based in whole or in part on an assessment of scientific information.

(2) ADVISORY COMMITTEE- The term `advisory committee' has the meaning provided in section 3(2) of the Federal Advisory Committee Act (5 U.S.C. App.).

(3) AGENCY- The term `agency' has the same meaning as in section 551(1) of title 5, United States Code.

(4) SCIENTIFIC- The term `scientific' means relating to the natural, medical, or social sciences or engineering, encompassing, but not limited to, the fields considered related to science and engineering by the National Science Foundation.

(5) TAMPERING- The term `tampering' means improperly altering or obstructing so as to substantially distort, or directing others to do so.

(6) CENSORSHIP- The term `censorship' means improper prevention of the dissemination of valid and nonclassified scientific findings.

(7) SPECIAL GOVERNMENT EMPLOYEE- The term `special Government employee' has the same meaning as in section 202(a) of title 18, United States Code.

(8) ADVISORY COMMITTEE MANAGEMENT OFFICER- The term `Advisory Committee Management Officer' means the officer

designated under section 8(b) of the Federal Advisory Committee Act (5 U.S.C. App.).

(9) DESIGNATED AGENCY ETHICS OFFICIAL- The term 'designated agency ethics official' has the same meaning as in section 109(3) of the Ethics in Government Act of 1978 (5 U.S.C. App.).

## APPENDIX B

In its entirety, the Data Quality Act provides as follows:

- (a) In General. The Director of the Office of Management and Budget shall, by not later than September 30, 2001, and with public and Federal agency involvement, issue guidelines under sections 3504(d)(1) and 3516 of title 44, United States Code, that provide policy and procedural guidance to Federal agencies for ensuring and maximizing the quality, objectivity, utility, and integrity of information (including statistical information) disseminated by Federal agencies in fulfillment of the purpose and provision of chapter 35 of title 44, United States Code, commonly referred to as the Paperwork Reduction Act.
- (b) Content of Guidelines. The guidelines under subsection (a) shall –
  - (1) apply to the sharing by Federal agencies of, and access to, information disseminated by Federal agencies; and
  - (2) require that each Federal agency to which the guidelines apply –
    - (A) issue guidelines ensuring and maximizing the quality, objectivity, utility, and integrity of information (including statistical information) disseminated by the agency, by not later than 1 year after the date of issuance of the guidelines under subsection (a);
    - (B) establish administrative mechanisms allowing affected persons to seek and obtain correction of information maintained and disseminated by the

agency that does not comply with the guidelines  
issued under subsection (a); and

(C) report periodically to the Director –

- (i) the number and nature of complaints received by the agency regarding the accuracy of information disseminated by the agency; and
- (ii) how such complaints were handled by the agency.