# U.S. Environmental Protection Agency
# Scientific Integrity Policy

## I. Purpose

The Agency has established, and continues to promote, a culture of scientific integrity for all of its employees. This policy provides a framework intended to ensure scientific integrity throughout the EPA and promote scientific and ethical standards, including quality standards; communications with the public; the use of peer review and advisory committees; and professional development. It also describes the scope and role of a standing committee of Agency-wide scientific integrity officials to implement this policy.

## II. Background

Science is the backbone of the EPA's decision-making.[1] The Agency's ability to pursue its mission to protect human health and the environment depends upon the integrity of the science on which it relies. The environmental policies, decisions, guidance, and regulations that impact the lives of all Americans every day must be grounded, at a most fundamental level, in sound, high quality science. When dealing with science, it is the responsibility of every EPA employee to conduct, utilize, and communicate science with honesty, integrity, and transparency, both within and outside the Agency. To operate an effective science and regulatory agency like the EPA, it is also essential that political or other officials not suppress or alter scientific findings.

At the EPA, promoting a culture of scientific integrity is closely linked to transparency. The Agency remains committed to transparency in its interactions with all members of the public. These values were first expressed in then Administrator William Ruckelshaus' "Fishbowl Memo" (19 May 1983) [1]. This memorandum established a culture of integrity and openness for all employees by promising the EPA would operate "in a fishbowl" and "will attempt to communicate with everyone from the environmentalists to those we regulate, and we will do so as openly as possible."

This Scientific Integrity Policy builds upon existing Agency and government-wide policies and guidance documents, enhancing the EPA's overall commitment to scientific integrity. This commitment is evidenced by the Agency's adherence to the 2002 Office of Management and Budget (OMB) Information Quality Guidelines [2], the 2005 OMB Information Quality Bulletin for Peer Review [3], the EPA's Quality Policy [4] for assuring the collection and use of sound scientific data and information, the EPA's Peer Review Handbook [5] for internal and external review of scientific products, and the EPA's Information Quality Guidelines [6] for establishing the transparency, integrity, and utility of information published on the Agency's websites.

The Agency has appointed a Scientific Integrity Official to champion scientific integrity throughout the Agency. The Scientific Integrity Official chairs a standing committee of Deputy

[1] In this document, "science" and "scientific" are expansive terms that refer to the full spectrum of scientific endeavors, e.g., basic science, applied science, engineering, technology, economics, social sciences, and statistics. The term "scientist" refers to anyone who collects, generates, uses, or evaluates scientific data, analyses, or products.

Scientific Integrity Officials representing each EPA Program Office and Region. These senior-level employees provide oversight for the implementation of the Scientific Integrity Policy at the EPA, act as liaisons for their respective Programs and Regions, and are available to address any questions or concerns regarding this policy.

## III. Policy Applicability

As of the effective date, all Agency employees, including scientists, managers, and political appointees, are required to follow this policy when engaging in, supervising, managing, or influencing scientific activities; communicating information in an official capacity about Agency scientific activities; and utilizing scientific information in making Agency policy or management decisions. In addition, all contractors, grantees, collaborators and student volunteers of the Agency who engage in scientific activities are expected to uphold the standards established by this policy and may be required to do so as part of their respective agreements with the EPA.[2]

This policy is created against a complicated regulatory backdrop; it is intended to guide Agency activities in an area that is already subject to a number of rules and policies for various purposes. When there is overlap with other applicable rules and guidance, this policy is not intended to preempt other authorities, but instead to work in conjunction with and supplement them. This policy is intended to improve the internal management and operation of the Agency. It does not create any obligation, right or benefit for any member of the public, substantive or procedural, enforceable by law or in equity by any party against the United States, its departments, agencies, or entities, its officers, employees or agents, or any other person.

Actions taken in accordance with this policy are subject to the availability of appropriated funds, and must be authorized under and consistent with existing authorities, including applicable law and regulations, Executive Orders, and Federal and EPA ethics, information, and personnel rules and policies. This policy does not limit the legal requirements contained in the Standards of Ethical Conduct for Employees of the Executive Branch (5 C.F.R. 2635), EPA Supplemental Standards of Ethical Conduct (5 C.F.R. 6401), any of the criminal conflict of interest statutes (18 U.S.C. 201-209), the Hatch Act (5 U.S.C. 7321 – 7326) or its implementing regulations (5 C.F.R. 734), or law enforcement actions and/or investigations and inspections for regulatory compliance. Special attention should also be given to the EPA clearance procedures[3] and compliance with the Privacy Act (5 U.S.C. 552a) and the Freedom of Information Act (FOIA), 5 U.S.C. 552.

## IV. Scientific Integrity Policy

---

[2] In addition, the EPA often uses existing data and information generated by third parties to inform its decisions. The EPA's Information Quality Guidelines requires the quality and scientific soundness of this type of data to be reviewed and documented prior to use.

[3] 5 CFR 2635.702(b) provides "an employee shall not use or permit the use of his Government position or title or any authority associated with his public office in a manner that could reasonably be construed to imply that his agency or the government sanctions or endorses his personal activities or those of another." See also 5 CFR 2635.807(b) for more specific requirements related to uncompensated teaching, speaking, and writing. Section 807(b)(1) provides that an employee "may include or permit the inclusion of his title or position as one of several biographical details when such information is given to identify him . . . provided his title is given no more prominence than other significant biographical details." It should be clearly understood that, except as permitted by 5 C.F.R. 2635.807(a)(3), an employee may not receive compensation from any source other than the Government for teaching, speaking, or writing that relates to the employee's official duties [7].

The Agency has long fostered a culture of scientific integrity through its *Principles of Scientific Integrity* [8]. These principles were developed in 1999 in conjunction with the EPA's National Partnership Council (NPC), a partnership of Agency labor unions and management. The *Principles of Scientific Integrity* sets forth the Agency's commitment to conducting science objectively, presenting results fairly and accurately, and avoiding conflicts of interest.

Consistent with the EPA's *Principles of Scientific Integrity*, the Agency's Scientific Integrity Policy reaffirms the expectation that all Agency employees, including scientists, managers, and political appointees, regardless of grade level, position, or duties:

- Ensure that the Agency's scientific work is of the highest quality, free from political interference or personal motivations.
- Represent his/her own work fairly and accurately.
- Appropriately characterize, convey, and acknowledge the intellectual contributions of others.
- Avoid conflicts of interest and ensure impartiality.
- Be cognizant of and understand the specific programmatic statutes that guide their work.
- Welcome differing views and opinions on scientific and technical matters as a legitimate and necessary part of the scientific process.
- Accept the affirmative responsibility to report any breach of this Scientific Integrity Policy.

To promote scientific integrity throughout the Agency, this policy outlines four specific areas: a) the culture of scientific integrity at the EPA, b) public communications, c) the use of peer review and Federal Advisory Committees, and d) professional development of government scientists. In addition, the policy establishes the Scientific Integrity Committee, chaired by the Agency's Scientific Integrity Official, to implement this policy.

A. Promoting a Culture of Scientific Integrity at the EPA

Successful application of science in Agency policy decisions relies on the integrity of the scientific process both to ensure the validity of scientific information and to engender public trust in the Agency. Thus, it is essential that the EPA's policymakers involve science experts on scientific issues and that the scientific information and processes relied upon in policymaking manifest scientific integrity, quality, rigor, and objectivity. The Agency reaffirms and promotes scientific integrity across the EPA by supporting the culture of scientific integrity, enhancing transparency within scientific processes, and protecting Agency scientists.

1. <u>To support a culture of scientific integrity within the Agency, this policy:</u>

    - Promotes a culture of scientific integrity, fostering honest investigation, open discussion, refined understanding, and a firm commitment to evidence.
    - Requires adherence to applicable Agency information quality, quality assurance, and peer review policies and procedures, ensuring that the Agency produces scientific products of the highest quality, rigor, and objectivity for use in policy decisions.
    - Recognizes the distinction between scientific information, analyses, and results from the policy decisions made based on that scientific information; policy makers within

the Agency weigh the best available science, along with additional factors such as practicality, economics, and societal impact, when making policy decisions.

- Prohibits all EPA employees, including scientists, managers, and other Agency leadership, from suppressing, altering, or otherwise impeding the timely release of scientific findings or conclusions.
- Requires all Agency employees to act honestly and refrain from acts of scientific misconduct. Scientific misconduct includes fabrication, falsification, or plagiarism in proposing, performing, or reviewing scientific and research activities, or in the publication or reporting of these activities; scientific misconduct does not include honest error or differences of opinion.
- Requires adherence to Agency documents that address the use and characterization of scientific information in Agency policy development, such as EPA's Action Development Process [9], the EPA's *Guidance for Risk Characterization* [10] and *Risk Characterization Handbook* [11].
- Recognizes that while Agency risk assessments are intended to address the needs of risk management, quantitative conclusions should not be influenced by possible risk management implications of the results.

2. <u>To enhance transparency within Agency scientific processes, this policy:</u>

- Requires reviews by Agency managers and other Agency leadership regarding the content of a scientific product to be based only on scientific quality considerations, e.g., the methods used are clear and appropriate, the presentation of results and conclusions is impartial.
- Ensures scientific findings are generated and disseminated in a timely and transparent manner, including scientific research performed by contractors, grantees, or other Agency partners who assist with developing or applying the results of scientific activities.
- Establishes the expectation that when communicating scientific findings, Agency employees include a clear explication of underlying assumptions, accurate contextualization of uncertainties, and a description of the probabilities associated with both optimistic and pessimistic projections, if applicable.
- Strengthens the actual and perceived credibility of Agency science by, e.g., ensuring that the selection of candidates for scientific positions is based primarily on their scientific and technological knowledge, credentials, experience, and integrity; ensuring that scientific studies used to support regulatory and other policy decisions undergo appropriate levels of independent peer review; setting clear standards governing conflicts of interest; and adopting appropriate whistleblower protections.
- Recognizes the value of independent validation of scientific methods.
- Recognizes the value of independent review of the Agency scientific facilities and testing activities, as occurs with accreditation by a nationally or internationally recognized sanctioning body and as required by Agency policy directives [12].
- Facilitates the free flow of scientific information. The Agency will continue to expand and promote access to scientific information by making it available online in open formats in a timely manner, including access to data and non-proprietary models underlying Agency policy decisions. Further, the use of non-proprietary data and models are encouraged, when feasible, to increase transparency.

3. To assure the protection of Agency scientists, this policy:

- Prohibits managers and other Agency leadership from intimidating or coercing scientists to alter scientific data, findings, or professional opinions or inappropriately influencing scientific advisory boards. In addition, policy makers shall not knowingly misrepresent, exaggerate, or downplay areas of scientific uncertainty associated with policy decisions.
- Mandates the Scientific Integrity Official, with input from the Deputy Scientific Integrity Officials, to develop a transparent mechanism for Agency employees to express differing scientific opinions. When an Agency employee substantively engaged in the science informing an Agency policy decision disagrees with the scientific data, scientific interpretations, or scientific conclusions that will be relied upon for said Agency decision, the employee is encouraged to express that opinion, complete with rationale, preferably in writing. It is expected that any differing scientific opinions will be resolved during internal deliberations and if not, will be addressed during scientific peer review. The report from the peer review panel will be made available for the policy makers' consideration. When no peer review occurs, differing scientific opinions will be reflected in the Agency's deliberative documents for the policy makers' consideration.
- Extends whistleblower protections [13] to all EPA employees who uncover or report allegations of scientific and research misconduct, or who express a differing scientific opinion, from retaliation or other punitive actions. Employees who have allegedly engaged in scientific or research misconduct will be afforded the due process protections provided by law, regulation, and applicable collective bargaining agreements, prior to any Agency action. All Agency employees should be familiar with these protections and avoid the appearance of retaliatory actions.

B. Release of Scientific Information to the Public

Scientific research and analysis comprise the foundation of all major EPA policy decisions. Therefore, the Agency should maintain vigilance toward ensuring that scientific research and results are presented openly and with integrity, accuracy, timeliness, and the full public scrutiny demanded when developing sound, high-quality environmental science. This policy is intended to outline the Agency's expectations for developing and communicating scientific information to the public, to the scientific community, to Congress, and to the news media by further providing for and protecting the EPA's longstanding commitment to the timely and unfiltered dissemination of its scientific information – uncompromised by political or other interference. This policy recognizes the importance of, and the need to foster a culture of, openness regarding the results of research, scientific activities, and technical findings. To that end, the EPA strongly encourages and supports transparency and active, open communications through various forms including, but not limited to, publication in peer-reviewed or refereed journals, conference papers and presentations, media interviews, responses to Congressional inquiries, web postings, and news releases.

Full and open communication is a shared responsibility throughout the Agency. To fulfill this shared responsibility, the following describes both what is expected of the EPA's employees and what they, in turn, can expect from others in the Agency.

1. EPA Scientists and Managers

The Agency's scientists and managers are expected to:

- Represent Agency scientific activities clearly, accurately, honestly, objectively, thoroughly, without political or other interference, and in a timely manner, consistent with their official responsibilities. While a scientist's primary responsibility is to pursue their scientific activities, it is also a scientist and his/her manager's responsibility to provide timely responses to requests for information by the media, the public, and the scientific community.
- Freely exercise their right to express their personal views provided they specify that they are not speaking on behalf of, or as a representative of, the Agency but rather in their private capacity. Scientists and managers must clearly identify that the information represents their views and not necessarily those of the EPA and use the following disclaimer language when presenting scientific information on matters that do not reflect their official Agency scientific activities and direct responsibilities:

  *The views expressed in this [article/chapter/paper/speech] are those of the author(s) and do not necessarily reflect the views or policies of the U.S. Environmental Protection Agency.*

- Notify their managers when communicating in an official Agency capacity. Outreach activities and media interactions are expected to adhere to Agency ethics regulations [14] and clearance procedures[4] associated with ensuring accuracy and disseminating scientific information and scientific assessments. Scientists and managers are also expected to notify and coordinate with appropriate Agency offices that might receive public inquiries to ensure that scientific information for the general public and media is clearly, comprehensively, consistently, and accurately presented and explained.
- Be available to answer inquiries from the news media regarding their scientific work. If the scientist or manager is unwilling or unable to communicate directly with the news media, he/she should still provide timely assistance to the public affairs office to help prepare and approve full and accurate responses to media inquiries.
- Review, correct, and approve the scientific content of any proposed Agency document intended for public dissemination that significantly relies on their research, identifies them as an author, or represents their scientific opinion. Disputes associated with the dissemination plan for a scientific product will be resolved first by the employees' direct supervisors, and if necessary, the Office of External Affairs and Environmental Education (OEAEE) and the Deputy Scientific Integrity Official or his/her designee.

2. Policy Officials

- Public and media questions about any policy implications raised by scientific studies should be addressed by designated Agency officials responsible for conveying

[4] The EPA Scientific Integrity Committee will develop an Agency-wide framework for the approval of scientific communications. Each Program Office and Regional Office will develop and document procedures for review and approval, consistent with the Scientific Integrity Committee's framework. The procedures will include guidance for review elements, time frames for review and approval, and a process for redress if review procedures are not met.

information about EPA policy matters, such as program policy experts or designated spokespersons.

3. Public Affairs Staff

- Agency public affairs staff, with input from program managers, will designate knowledgeable and articulate spokespersons from Regional, Program, or HQ offices to coordinate with EPA scientists and managers for the purpose of ensuring that Agency research is clearly, accurately, and accessibly presented, in a timely manner, thereby best serving the needs of the media and the public.
- Under no circumstances should the public affairs staff attempt to alter or change scientific findings or results. The role of the public affairs officer is to ensure that the science is plainly and clearly communicated for the intended audience in a timely fashion.
- The public affairs staff from Regional, Program or HQ offices should attend interviews with members of the media, when possible, to ensure that the Agency is being fully responsive to media questions in a timely manner and to ensure responsiveness, consistency, and accuracy both on the part of the interviewer and when responding to future information requests.
- Members of the public affairs staff from Regional, Program, or HQ offices must alert and coordinate with involved scientists and managers when the public affairs staff receives media inquiries about their research or other scientific activities.
- During a nationally significant incident or environmental crisis, OEAEE may officially activate or follow the EPA National Approach to Response Crisis Communications Plan [15]. During such episodes, this plan establishes the EPA's process for communicating critical environmental information to the public and for coordinating public information among EPA field operations, Regional Offices, and Headquarters. Under the plan, OEAEE has the communication lead for coordinating and publicly disseminating pertinent information. OEAEE will closely coordinate with involved Agency scientists to ensure the accuracy of any Agency scientific information to be issued by the EPA.

4. Congressional Relations Staff

- Office of Congressional and Intergovernmental Relations (OCIR) staff members are expected to coordinate with Agency scientists and managers to ensure that Congressional inquiries regarding EPA science receive prompt, accurate, and responsive answers.
- If testifying before Congress in their official capacity (i.e., on behalf of the EPA), scientists and managers should review prepared testimony with OCIR staff and communicate on matters associated with their work or area(s) of expertise in an accurate and clearly understandable manner.
- Senior management in the Congressional and Program/Regional Offices will provide any statements needed to address policy-related questions.

C. Peer Review and the Use of Federal Advisory Committees

1. Peer Review

Independent peer review of Agency science is a crucial aspect of scientific integrity. To ensure that scientific products undergo appropriate peer review by qualified experts, the EPA relies on its Peer Review Policy [16] and *Peer Review Handbook* [5]. The *Peer Review Handbook* is a how-to manual used by Agency staff. Agency-wide peer review policies have been in place since 1993 [17] and establish the EPA's policy for peer review of scientific work products, including economic and social science products, that are intended to inform Agency decisions. The handbook includes specific expectations for categories of scientific products, including influential scientific information (ISI) and highly influential scientific assessments (HISA). In compliance with OMB's 2004 Final Information Quality Bulletin for Peer Review, the EPA posts a Peer Review Agenda [18] for its ISIs and HISAs. In addition, the 2009 Addendum to the EPA's *Peer Review Handbook* entitled: "Appearance of a Lack of Impartiality in External Peer Reviews" [19] provides additional clarity for the regulatory definition of "appearance of a lack of impartiality" for individuals who serve on peer review panels, criteria for applying this definition, and illustrative examples.

The Agency's quality and peer review programs are further supported by its *Summary of General Assessment Factors for Evaluating the Quality of Scientific and Technical Information* [20]. This document describes the assessment factors and considerations used by the Agency to evaluate the quality and relevance of scientific and technical information. These assessment factors are founded in guidelines, practices, and procedures that constitute the EPA's information and quality systems, including existing program-specific quality assurance policies.

2. Federal Advisory Committees

The Peer Review Handbook describes the range of peer review options, from individual letter reviews from outside experts to large, formal reviews by Federal Advisory Committees (FACs) or the National Academy of Sciences. Federal Advisory Committees are an important tool within the EPA for ensuring the credibility and quality of Agency science, enhancing the transparency of the peer review process, and providing for input from the EPA's diverse customers, partners, and stakeholders. In almost all cases, FACs meet and deliberate in public and materials prepared by or for the FAC are available to the public. Consistent with the requirements of the Federal Advisory Committee Act (5 USC Appendix 2) [21], implementing regulations from the General Services Administration (41 CFR Part 102-3) [22], and guidance that lobbyists not serve on FACs [23], the EPA's scientific or technical FACs are expected to adhere to the following procedures[5]:

- Transparent recruitment of new FAC members should be conducted through broad-based vacancy announcements, including publication in the Federal Register, with an invitation for the public to recommend individuals for consideration and submit self-nominations.

[5] Peer-reviewed committees convened solely for the purpose of reviewing research proposals to provide individual input on intra- or extramural funding decisions are *not* covered by this policy. GSA has provided additional guidances [24-27].

- Professional biographical information (including current and past professional affiliations) for appointed committee members should be made widely available to the public (e.g., via a website). Such information should clearly illustrate an individual's qualifications for serving on the committee.
- The selection of members to serve on a scientific or technical FAC should be based on expertise, knowledge, contribution to the relevant subject area, balance of the scientific or technical points of view represented by the members, and the consideration of conflicts of interest. Members of scientific and technical FACs should be appointed as special government employees. The Agency is to make all Conflict of Interest Waivers granted to committee members publicly available (e.g., via a website).
- All reports, recommendations, and products developed by FACs are to be treated as solely the findings of such committees rather than of the EPA, and thus are not subject to Agency revision.

At the EPA, FACs are overseen by the Office of Federal Advisory Committee Management and Outreach (OFACMO) with legal support from the Office of General Counsel (OGC). All EPA FACs are expected to comply with the requirements of the Federal Advisory Committee Act (5 USC Appendix 2) [21] and the regulations issued by the General Services Administration (41 CFR Part 102-3) [22].

The Agency adheres to the current standards governing conflict of interest as defined in statutes and implementing regulations. The Office of General Counsel's Ethics Office develops standard procedures and ethics training for Special Government Employees (SGEs) who serve on scientific FACs. These procedures include the submission and review of Confidential Financial Disclosure Forms for SGEs serving on advisory committees, EPA Ethics Advisory 08-02: "Ethics Obligations for Special Government Employees" [28], and completion of an online and/or in-person Office of Government Ethics course. Some FACs at the EPA are staffed with representative members. These committee members represent the point of view of a group or organization and are not subject to the conflict of interest requirements referenced above.

D. Professional Development of Government Scientists

Scientific leadership is a key component of advancing the mission of the EPA. Agency scientists are therefore encouraged to engage with their peers in academia, industry, government, and non-governmental organizations, consistent with their work responsibilities. Examples of encouraged professional activities include presenting their work at scientific meetings, serving on editorial boards and on scientific expert review panels, and actively participating in professional societies and national/international scientific advisory and science assessment bodies. It is Agency policy to:

- Encourage publication and presentation of research findings in peer-reviewed, professional, or scholarly journals and at professional meetings.
- Allow Agency scientists to become editors or editorial board members of peer-reviewed, professional, or scholarly journals.
- Allow participation in professional societies, committees, task forces and other specialized bodies of professional societies, including serving as officers or on the governing boards of such societies.

- Encourage Agency scientists to obtain training to keep current their scientific qualifications and professional certifications.
- Allow Agency scientists to accrue professional awards, honors and patents for their research and discoveries.

## V. The EPA's Scientific Integrity Committee

The Agency's Scientific Integrity Committee is charged with implementing, reviewing, and revising as needed policy governing the four specific areas of scientific integrity described in the previous section. The committee is chaired by the Scientific Integrity Official and consists of Deputy Scientific Integrity Officials that represent each of the Agency's Program Offices and Regions, in accordance with its charter [29].

### A. Roles and Responsibilities of the Scientific Integrity Committee

- Provide leadership for the Agency on scientific integrity.
- Implement this policy across the Agency in a consistent manner.
- Promote Agency compliance with this policy, including safeguarding against and mechanisms to ensure accountability for any alteration or manipulation of scientific data by managers and other Agency leadership.
- Address Scientific Integrity Policy concerns, updates, and amendments.
- Provide an annual meeting and report on scientific integrity implementation and scientific misconduct issues within the Agency.
- Keep the Agency's Senior Leadership informed on and involved with the Agency-wide status of scientific integrity, as necessary and appropriate.
- Develop a framework for Agency clearance procedures for scientific products as a guidance for Program Offices and Regional Offices.
- Evaluate Program Offices' and Regional Offices' clearance procedures for scientific products and make recommendations as appropriate to promote standardization across the Agency.

### B. Scientific Misconduct

The Scientific Integrity Official or his/her designee shall coordinate with the Office of the Inspector General (OIG) on issues of scientific misconduct. The Agency already has in place clearly articulated policies protecting against scientific misconduct by all Agency employees, including managers and other Agency leadership, in the following two important documents:

- Scientific Misconduct in the EPA *Conduct and Discipline Manual* (Appendix - Guidance on Corrective Discipline, Tables of Offenses and Penalties #45 - Scientific Misconduct) includes discipline guidelines for fabrication, plagiarism, misrepresentation, and causing a subordinate to engage in scientific misconduct [30].
- *Policy and Procedures for Addressing Research Misconduct* provides policy on reporting, procedures, investigations, and adjudication of research misconduct by the EPA's employees, contractors, and recipients of assistance agreements [31].

### C. Training

As part of its mandate, the Scientific Integrity Committee oversees the development and implementation of training related to scientific integrity for all Agency employees. Contractors, cooperators, grantees, and volunteers are also encouraged to take this training and may be required to do so if such training is part of their respective agreements with the EPA.

In addition, accredited EPA laboratories provide annual Laboratory Ethics and Data Integrity Training for scientists engaged in generating scientific data to support cleanups, enforcement, and environmental assessments. This annual scientific ethics training fulfills accreditation standards and reinforces an understanding of the laboratory ethics policy.

D. Annual Reporting

The Scientific Integrity Official, with input from the Deputy Scientific Integrity Officials, is responsible for generating and making publicly available an annual report to the EPA Science Advisor on the status of scientific integrity within the Agency. The report is expected to highlight scientific integrity successes throughout the Program Offices and Regions, as well as identify areas for improvement and develop a plan for addressing critical weaknesses, if any. As part of this annual review, Deputy Scientific Integrity Officials are responsible for certifying compliance with the Agency Scientific Integrity Policy and report on scientific integrity implementation and scientific misconduct issues within their respective Offices or Regions. In advance of completing the annual report, the Scientific Integrity Committee will conduct an Agency-wide annual meeting on scientific integrity that will include the involvement of senior EPA leadership, reports from offices and programs, and an opportunity for input from the EPA scientific community.

The report should include, but is not limited to, the findings of scientific integrity violations. The report should also include lessons learned during the previous year, input from the annual meeting, and recommendations for action/deliberation by the Scientific Integrity Committee during the upcoming fiscal year, to ensure continuous improvement in implementation of the Scientific Integrity Policy.

E. Amending the Scientific Integrity Policy

This policy will become effective upon approval.

At a minimum, this policy is to be reviewed every two years by the Scientific Integrity Committee to ensure its effectiveness and adherence with applicable rules and regulations.

This policy shall be revised as recommended by the Scientific Integrity Committee and approved by the EPA Science Advisor.

## Bibliography


[1] Ruckelshaus, William (1983) *Fishbowl Memo.* http://www.epa.gov/aboutepa/history/topics/policy/fishbowl.html

[2] Executive Office of the President, Office of Management and Budget (2002) *Information Quality Guidelines.* http://www.whitehouse.gov/sites/default/files/omb/inforeg/iqg_oct2002.pdf

[3] Executive Office of the President, Office of Management and Budget (2005) *OMB Information Quality Bulletin for Peer Review.* http://www.whitehouse.gov/sites/default/files/omb/assets/omb/memoranda/fy2005/m05-03.pdf

[4] U.S. Environmental Protection Agency (2008) *EPA Quality Policy.* http://www.epa.gov/irmpoli8/policies/21060.pdf

[5] U.S. Environmental Protection Agency (2006) *Peer Review Handbook, Third Edition.* http://www.epa.gov/peerreview/pdfs/peer_review_handbook_2006.pdf

[6] U.S. Environmental Protection Agency (2002) *Guidelines for Ensuring and Maximizing the Quality, Objectivity, Utility, and Integrity, of Information Disseminated by the Environmental Protection Agency.* http://www.epa.gov/QUALITY/informationguidelines/documents/EPA_InfoQualityGuidelines.pdf

[7] U.S. Government Printing Office (1997) 5 CFR 2635.702 http://www.gpo.gov/fdsys/pkg/CFR-1997-title5-vol3/pdf/CFR-1997-title5-vol3-sec2635-702.pdf

[8] U.S. Environmental Protection Agency (1999) *Principles of Scientific Integrity.* http://www.epa.gov/osa/pdfs/scientific-integrity-principles.pdf

[9] U.S. Environmental Protection Agency (2011) *Action Development Process Library.* http://intranet.epa.gov/actiondp/

[10] U.S. Environmental Protection Agency, Science Policy Council (1995) *Guidance for Risk Characterization.* http://www.epa.gov/spc/pdfs/rcguide.pdf

[11] U.S. Environmental Protection Agency Science Policy Council (2000) *Risk Characterization Handbook.* http://www.epa.gov/spc/pdfs/rchandbk.pdf

[12] U.S. Environmental Protection Agency (2011) *Policy to Assure Competency of Laboratories, Field Sampling, and Other Organizations Generating Environmental Measurement Data under Agency-Funded Acquisitions,* and (2004) *Assuring the Competency of Environmental Protection Agency Laboratories.* http://www.epa.gov/fem/pdfs/fem-lab-competency-policy.pdf

[13] U.S. Environmental Protection Agency (2000) *Employee Rights under the Whistleblower Protection Act.* http://intranet.epa.gov/ohr/rmpolicy/ads/orders/1000.pdf

[14] U.S. Environmental Protection Agency (2002) *The Ethics Program.* http://intranet.epa.gov/ogc/ethics.htm

[15] U.S. Environmental Protection Agency (2009) *National Approach to Response Crisis Communications Plan.* http://intranet.epa.gov/ohr/rmpolicy/ads/orders/2010.pdf

[16] U.S. Environmental Protection Agency (2006) *Peer Review and Peer Involvement at the U.S. Environmental Protection Agency.* http://www.epa.gov/peerreview/pdfs/peer_review_policy_and_memo.pdf

[17] U.S. Environmental Protection Agency, Office of the Science Advisor (1993) *Peer Review Program.* http://www.epa.gov/peerreview/

[18] U.S. Environmental Protection Agency (2004) *Peer Review Agenda.* http://cfpub.epa.gov/si/si_public_pr_agenda.cfm

[19] U.S. Environmental Protection Agency (2009) *Addendum to the Peer Review Handbook, Third Edition: Appearance of a Lack of Impartiality in External Peer Reviews.* http://www.epa.gov/peerreview/pdfs/spc_peer_rvw_handbook_addendum.pdf

[20] U.S. Environmental Protection Agency (2003) *A Summary of General Assessment Factors for Evaluating the Quality of Scientific and Technical Information.* http://www.epa.gov/spc/pdfs/assess2.pdf

[21] Title 5 United States Code, Appendix 2 (1972) http://www.archives.gov/federal-register/laws/fed-advisory-committee/09.html

[22] 41 Code of Federal Regulations, Part 102-3 (2006) Federal Advisory Committee Management http://www.gpo.gov/fdsys/pkg/CFR-2006-title41-vol3/pdf/CFR-2006-title41-vol3-part102-id46.pdf

[23] The White House, Office of the Press Secretary (2010) *Presidential Memorandum – Lobbyists on Agency Boards and Commissions.* http://www.whitehouse.gov/the-press-office/presidential-memorandum-lobbyists-agency-boards-and-commissions

[24] GSA Guidance (1998) *Appointment of Consultants to FACA.* http://www.gsa.gov/portal/content/100786

[25] GSA Guidance (2011) *Appointment of Special Government Employees.* http://www.gsa.gov/portal/content/100796

[26] GSA Guidance (2000) *Public Access to Records (FACA).* http://www.gsa.gov/portal/content/100785

[27] GSA Guidance (2011) *When FACA is and is Not Applicable to Interactions with the Private Sector.* http://www.gsa.gov/portal/content/100794

[28] U.S. Environmental Protection Agency (2008) *Ethics Obligations for Special Government Employees.* http://intranet.epa.gov/ogc/ethics/08-02.pdf

[29] U.S. Environmental Protection Agency (2011) *Scientific Integrity Committee Charter (Draft).* http://www.epa.gov/osa/pdfs/draft-charter-scientific-integrity-committee-%20aug-2011.pdf

[30] U.S. Environmental Protection Agency, Office of Human Resources (1985) *Appendix - Guide on Corrective Discipline.* http://intranet.epa.gov/ohr/rmpolicy/ads/cadm/html/app.htm

[31] U.S. Environmental Protection Agency (2003) *Policy and Procedures for Addressing Research Misconduct.* http://intranet.epa.gov/ohr/rmpolicy/ads/orders/3120-5.pdf