A QUICK GUIDE TO THE SCIENTIFIC INTEGRITY POLICY AT THE

Environmental Protection Agency (EPA)
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INTRODUCTION

A Quick Guide to the EPA Scientific Integrity Policy

Scientific integrity principles are indispensable to the missions and the functions of scientific federal agencies in the United States. Conducting sound and unbiased scientific research is essential to maintaining public trust in these agencies. For scientists employed at these agencies, understanding these principles—both how to abide by them, and what to do if they are violated—is a core job function.

Many scientific agencies adopted scientific integrity policies following a 2009 memorandum issued by President Obama, and a subsequent memorandum issued in 2010 by the White House Office of Science and Technology Policy. These policies clarify how individual agencies interpret scientific integrity. In many cases, a policy also describes how a scientist should report a loss of scientific integrity, how the agency will investigate such claims, and the rights of both a complainant and a person alleged to have committed a violation.

This guide examines the U.S. Environmental Protection Agency (EPA) scientific integrity policy. The guide is designed to help EPA scientists understand how the policy applies to them, what rights they have under the policy, and how they can avail themselves of these.

The EPA policy could be significantly strengthened to provide clearer enforcement mechanisms, penalties, and rights of appeal. But it is still crucial for agency scientists to know their rights and responsibilities in respect to scientific integrity, as well as the strengths and weaknesses of the policy.

While this guide helps EPA scientists understand the agency's scientific integrity policy, it is not a substitute for legal advice regarding a particular situation. The Climate Science Legal Defense Fund offers free, confidential consultations to scientists with questions about scientific integrity.

Contact us at (646) 801-0853
Or send an email to lawyer@csldf.org
SUMMARY

The U.S. Environmental Protection Agency scientific integrity policy (referred to in this guide as the policy and SIP) covers plagiarism, manipulation of data, and other standard types of research misconduct. The policy also recognizes that science communication is part of scientific integrity. The policy protects researchers’ rights to discuss their work without political interference or censorship, and to participate in professional development activities. The EPA is more transparent than some other agencies about scientific integrity issues, publishing summaries of the scientific integrity complaints it receives and how it addresses them online.

However, the policy would be stronger if it specified procedures and timelines for investigating scientific integrity complaints, and ensured that the parties involved in a complaint have rights of appeal and recourse to independent bodies in the event of a negative decision.

WHAT DOES THE POLICY GOVERN?

Research Misconduct
The policy prohibits employees from engaging in research misconduct. This is defined as fabrication, falsification, or plagiarism in proposing, performing, or reviewing scientific and research activities, and in the publication or reporting of these activities. Misconduct does not include honest errors and differences of opinion (SIP § IV(A)(1)).

Conflicts of Interest
The policy has a few general references to avoiding conflicts of interest, but it does not set out any specific definitions or guidelines regarding these in the context of scientific integrity.

Political Interference
Multiple portions of the EPA policy are relevant to protecting scientists from political interference with their work. All EPA employees, including managers and other agency leadership, are prohibited from suppressing, altering, or otherwise impeding the timely release of scientific findings or conclusions (SIP § IV(A)(1)).

Public affairs staff are prohibited from attempting to alter or change scientific findings or results—an important step beyond prohibiting only the actual altering or changing of scientific findings (SIP § IV(B)(3)). These are crucial protections for scientists and scientific integrity; the failure to apply them to all EPA employees is a significant oversight in the policy.

Threats and Intimidation
Managers and others in leadership positions are prohibited from intimidating or coercing scientists into altering scientific data, findings, or professional opinions (SIP § IV(A)(3)).
Use of Science in Agency Decision-Making

The background section of the policy begins with the broad statement that "Science is the backbone of the EPA’s decision-making." While none of the provisions in the policy explicitly address how science should be used in agency decision-making, section IV(A)(3) prohibits EPA managers and other agency leadership from inappropriately influencing scientific advisory boards, which advise the agency on the science it should incorporate into its decision-making, as well as when and how. Policy-makers are also prohibited from knowingly misrepresenting, exaggerating, or downplaying areas of scientific uncertainty associated with policy decisions.

Science Communication

According to the policy, "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" (SIP § IV(B)(1).

Timeliness: Section IV(B)(1) of the policy repeatedly emphasizes that presenting and disseminating scientific results and information in a timely way is an important aspect of scientific integrity.

Press: The intent of the policy is to ensure that EPA scientists are able to communicate openly with the press about their research. EPA scientists and managers are expected to “be available to answer inquiries from the media regarding their scientific work,” although the policy does not grant any explicit right to contact the press. Scientists must notify their managers when communicating in an official EPA capacity and "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" (SIP § IV(B)(1)).

The policy requires public affairs staff to coordinate with scientists regarding media inquiries about their research or other scientific activities. According to the policy, the relevant public affairs staff "should attend interviews with members of the media, when possible." This could have a chilling effect on scientist’s communications with the media by making them feel they cannot speak freely.

Social media: The policy does not address social media use. However, the EPA has a separate social media policy.

Testifying before Congress: While the policy does not state that agency scientists have a right to testify before Congress, this right is protected in other EPA policies as well as by federal law. The policy implicitly acknowledges a scientist's right to testify before Congress, and the importance of that right in maintaining scientific integrity, when it mentions that EPA scientists should coordinate with the EPA Office of Congressional and Intergovernmental Relations (OCIR) to respond to congressional inquiries in an open and timely manner (SIP § IV(B)(4)).

The policy seems to acknowledge that EPA scientists have the right to testify before Congress in their official capacity, although it says that OCIR staff should review any prepared testimony. Congressional and program/ regional offices should provide statements that address policy-related questions (rather than scientific questions).
Right of scientists to review and/or correct agency communications: According to the policy, scientists and managers are expected to, “[r]eview, 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” (SIP § IV(B)(1)).

The same section provides guidance on the procedures for handling disputes involving content intended for public distribution. Such disputes "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."

Publishing and lecturing: The EPA considers professional development of scientists to be a key part of scientific integrity, according to the policy. EPA scientists are encouraged to publish and present their findings in peer-reviewed, professional, or scholarly journals and at scientific meetings; and to become editors or editorial board members of peer-reviewed, professional, or scholarly journals (SIP § IV(D)).

Scientific societies: EPA scientists are encouraged to actively participate in professional societies, including serving as officers or on the governing boards of such societies (SIP § IV(D)).

Opinion statements: The policy protects scientists’ right to publicly express their personal opinions. Scientists and managers are free to express personal opinions, but must clearly state that they are expressing their personal view, not that of the EPA (SIP § IV(B)(1)). The following disclaimer language must be used 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.

Hiring Practices
The policy only says that it “ensures that the selection of candidates for scientific positions is based primarily on their scientific and technical knowledge, credentials, experience, and integrity” (SIP § IV(A)(2)). The policy provides no detail about how it this is achieved.

Federal Advisory Committees
More than some other agencies, the EPA policy makes clear that Federal Advisory Committees (FAC) are “an important tool within the EPA for ensuring the credibility and quality of Agency science” (SIP § IV(C)(2)).

The policy sets out several procedures intended to ensure the quality and transparency of FACs, including publication of vacancy announcements and biographical information of committee members, and selection of members based on their expertise and contributions to the relevant subject area. Any products developed by an FAC are the findings of the committees and not of the EPA, and are therefore not subject to agency revision.
Whistleblower Protections

The policy extends whistleblower protections to “all EPA employees who uncover or report allegation of scientific and research misconduct, or who express a differing scientific opinion” (SIP § IV(A)(3)).

The EPA Order on Policy and Procedures for Addressing Research Misconduct (referred to in this guide as order on research misconduct or Order) also deals with whistleblower protections. It states that an EPA employee is protected from retaliation for making a complaint or disclosure to the Inspector General, unless the complaint or disclosure was made with the knowledge that it was false or with willful disregard for its truth or falsity (Order 3120.5 ¶ 9(A)(ii)(b)).

However, the policy does not appear to extend whistleblower protections to employees who come forward with issues other than traditional research misconduct, such as those who report being threatened or pressured, having their work altered or censored, or being prevented from speaking to the press or attending conferences.

WHO DOES THE POLICY GOVERN?

All EPA employees, including scientists, managers, and political appointees, are required to follow the policy when:

- Engaging in, supervising, managing, or influencing scientific activities
- Communicating information in an official capacity about EPA scientific activities
- Utilizing scientific information in making EPA policy or management decisions

A looser standard applies to EPA contractors, grantees, collaborators, and student volunteers who engage in scientific activities. They are expected (rather than required) to uphold the standards established by the policy and may be required to do so as part of their agreements with EPA (SIP § III).

The order on research misconduct, which is relevant to scientific integrity, applies to all research "conducted, sponsored or funded, in whole or in part, by EPA and to research proposals submitted to EPA” (Order 3120.5 ¶ 3). This presumably includes all research conducted pursuant to an EPA grant or contract.

WHAT IS THE PROCESS FOR FILING A COMPLAINT?

This guide is not a substitute for legal advice about any specific situation. If you are considering filing a scientific integrity complaint, or are the subject of a complaint, please contact the Climate Science Legal Defense Fund or another attorney for advice about your particular circumstances. Nonetheless, we will provide below general information about what the process may entail.
Who can make a claim under the policy?

The policy has no information about whether there are restrictions regarding who can file a scientific integrity violation claim. Thus, presumably anyone—whether or not they are associated with the EPA at all—may file a claim with the EPA Scientific Integrity Officer if he or she believes a violation of the policy has occurred.

It is not clear whether a member of the public who claims a violation of scientific integrity at the EPA can successfully petition a court to review the EPA's handling of such a claim. Section III of the policy states "[This policy] 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."

Where and how can a scientist make a claim?

The EPA encourages employees with a scientific integrity concern to seek early advice from the Scientific Integrity Official or a Deputy Scientific Integrity Official. Allegations of a loss of scientific integrity may be reported to the Scientific Integrity Official, any Deputy Scientific Integrity Official, or the Office of Inspector General (OIG) (see the EPA's Basic Information About Scientific Integrity>Reporting an Allegation).

What should a complaint contain?

An allegation of scientific and scholarly misconduct or loss of integrity should contain the following:

- The name, affiliation, and signature of the person(s) submitting the allegation and the name and organization of the person(s) alleged to have committed the misconduct or actions leading to the loss of integrity. If submitted electronically, it must be from an email address readily linked to the identity of the person submitting.
- A description of the alleged misconduct or loss of integrity that includes the date, circumstances, and location of the incident.
- An explanation of how the allegation relates to scientific and scholarly misconduct or loss of integrity and that demonstrates the impact of the alleged misconduct or loss of integrity.
- A statement explaining any personal or professional extenuating circumstances, non-scientific disagreements, or conflict(s) of interest the person making the allegation has with the subject(s), entity(ies), or situation(s), named in the allegation.
- A statement indicating whether the allegation is being considered or has been submitted elsewhere, such as another EPA office, or other government office, or a court of law.

Is there a deadline for filing a complaint?

The policy does not include a timeframe in which a report must be made after a person or entity becomes aware of the loss of scientific integrity. However, there is information about time limits in the order on research misconduct (Order 3120.5 ¶¶ 7, 9).
The order on research misconduct states that EPA employees must promptly report allegations of research misconduct by other EPA personnel or by assistance agreement recipients, contractors, or their employees; what constitutes promptness is not defined.

This suggests that EPA employees should generally report scientific integrity violations as soon as possible and that delays may be damaging. Moreover, there are circumstances under which the EPA OIG must be immediately notified of an allegation of research misconduct, such as when:

- Public health or safety is at risk
- EPA resources or interests are threatened
- The circumstances demand suspension of research activities
- There is reasonable indication of possible violations of civil or criminal law
- Federal action is required to protect the interests of those involved with the investigation
- The research entity believes the inquiry or investigation may be made public prematurely, requiring steps be taken to safeguard evidence and protect the rights of those involved
- The research community or public should be informed

WHAT HAPPENS AFTER A COMPLAINT IS FILED?

Who investigates?

The policy does not describe the process for investigating a scientific integrity complaint. The closest analog is the order on research misconduct, which suggests that the Scientific Integrity Office might coordinate with the OIG to investigate a scientific integrity complaint.

The order on research misconduct indicates that if research misconduct is alleged at an institution contracting with EPA, that institution will investigate and adjudicate the misconduct (note that these provisions do not apply to scientific integrity complaints more broadly). The order on research misconduct contains broad guidelines for these institutions to follow, such as maintaining fair and objective procedures and protecting informants against retribution, but it imposes few specific requirements.

A contractor who chooses not to conduct an inquiry upon receipt of an allegation of research misconduct is required to notify the OIG, the Contracting Officer, and the Contracting Officer’s Technical Representative. The OIG always has the right to intervene or conduct its own investigation, in which case the contractor must suspend its investigation. Similar provisions are made for recipients of assistance agreements.
Is the confidentiality of the parties protected?
The policy is silent on this point. The best guidance is found in the order on research misconduct, which states that the OIG will not disclose the identity of an employee who makes a claim of research misconduct without his or her consent unless disclosure is unavoidable during the investigation (Order 3120.5 ¶ 9(A)(ii)). For EPA employees who are the subject of an allegation, due process safeguards come into effect if and when the agency decides to act on an OIG report.

How long will the investigation take?
The policy does not include requirements for how long an investigation can take.

Do the parties have a right to a hearing?
The policy does not state whether the parties involved have a right to a hearing or can provide rebuttal evidence.

Do the parties have a right to respond to the findings of the investigation?
The policy does not include information about whether the parties have a right to respond to any findings.

WHAT HAPPENS AFTER THE INVESTIGATION ENDS?
The policy does not specify who should determine whether there has been a loss of scientific integrity, or who should decide the appropriate resolution or remedy if a loss of integrity is found. Nor does the policy specify whether either party has a right to appeal an adverse decision, or what mechanism would be available for doing so. It is possible that an appendix to the EPA Conduct and Discipline Manual provides some additional relevant information, but this appendix does not appear to be publicly available.

What are the penalties for misconduct?
The policy does not provide information about what penalties are appropriate when a loss of scientific integrity is found, or who makes such a decision. The order on research misconduct has some guidance; it states that the EPA should consider the seriousness of an incidence of research misconduct. However, aside from requiring the EPA to correct the research record in such a circumstance, the order on research misconduct doesn’t provide guidance on what penalties or remedies are appropriate, or how or by whom they are determined (Order 3120.5 ¶ 9(A)(iv)).

The order on research misconduct has some information about what the EPA may do in a case of research misconduct by a contractor or the recipient of an assistance agreement. It states that the actions available to the EPA include taking steps to correct the research record, imposing special certification or assurance requirements, and suspending or terminating a contract or assistance agreement (Order 3120.5 ¶¶ 9(B)(iv)(d), 9(C)(iv)(d)).
ADDITIONAL RELEVANT POLICIES AND PROCEDURES

- EPA’s Principles of Scientific Integrity
- EPA Order 3120.5: Policy and Procedures for Addressing Research Misconduct
- EPA Peer Review Handbook
- EPA Best Practices for Designating Authorship
- EPA Social Media Policy

REPRESENTATIVE CASES AND OUTCOMES

Anonymized summaries of claims of scientific integrity violations filed at the EPA and their resolutions are publicly available. The following examples demonstrate trends gleaned from the summaries.

The SIO will treat concerns about the legitimacy of scientific methods seriously as potential violations of scientific integrity. For example, an EPA employee questioned an OIG investigation into contamination at a group of sites. The employee suggested that the OIG should follow EPA quality assurance/quality control (QA/QC) requirements when generating its own sampling data. The final OIG report acknowledged the regional concerns with the OIG sampling QA protocols.

Delays in the release of scientific information are taken seriously as potential violations of scientific integrity. For example, a staff member alleged that the release of a report under development for several years was being delayed by management. The SIO talked with the manager and the report was promptly released.

The SIO will not find a violation where it discerns a simple difference in legitimate scientific opinions. For example, an EPA employee questioned the validation of data for a monitoring program. This was determined to be a difference of opinion. The employee was given an opportunity to discuss his/her concerns with a cross-regional workgroup. While the consensus disagreed with the employee, he/she was not prevented from discussing his/her opinion, so this was not a violation of Policy.

Expressing a personal opinion that contradicts agency science will not be considered to be a violation. For example, an allegation was submitted to the OIG claiming that the EPA Administrator violated the policy when he said in a television interview that he does not believe that anthropogenic CO2 emissions are the primary contributor to climate change. The OIG referred this allegation to the Scientific Integrity Official. A Scientific Integrity Review Panel found that expressing a personal opinion about science is not a violation of the EPA policy.
The Climate Science Legal Defense Fund (CSLDF) works to protect the scientific endeavor by helping defend climate scientists against politically and ideologically motivated attacks. CSLDF is a non-profit organization under section 501(c)(3) of the Internal Revenue Code.

CSLDF provides free counsel to scientists with legal questions pertaining to their work. Contact us at (646) 801-0853 or email lawyer@csldf.org to arrange a free and confidential consultation with an attorney.

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