February 23, 2024

U.S. Environmental Protection Agency EPA Docket Center Office of Research and Development Docket Mail Code 28221T, 1200 Pennsylvania Avenue NW Washington, DC 20460

Re: Scientific Integrity Policy Draft for Public Comment (89 FR 4606; Docket EPA–HQ–ORD–2023–0240)

As organizations whose work involves federal scientific integrity issues, we appreciate the opportunity to comment on the draft scientific integrity policy from the Environmental Protection Agency (EPA). We commend several aspects of the policy and recommend several ways to strengthen it:

1) Provisions to guard against arbitrary and excessive requirements that have the effect of restricting EPA from using valid science to support regulatory actions

2) Responsibilities to support effective scientific integrity work

3) More explicit procedures for investigating allegations

4) Penalties sufficient to deter wrongdoing and hold accountable all scientific integrity violators, including political appointees

- 5) More explicit commitments to diversity, equity, inclusion, and accessibility
- 6) Additional modifications to provisions on scientists' speaking and writing

7) More explicit statements regarding timely clearance

8) Specific protections from retaliation for those engaged in scientific activities that may put them at risk for reprisal

9) Mechanisms for addressing allegations that involve multiple agencies and/or high-level officials

- 10) Model policy text regarding different modes of science
- 11) Additional information in annual reports
- 12) Ensure that career staff are meaningfully involved in key scientific decisions
- 13) Clarification of what constitutes a conflict of interest

14) Explicit statement that the "political interference" definition applies to everyone covered by the policy

In reviewing the draft EPA scientific integrity policy, we also examined the model policy released by the White House Office of Science and Technology Policy as part of *A Framework for Federal Scientific Integrity Policy and Practice*¹ and the draft scientific integrity policies from the Department of Health

¹ Scientific Integrity Framework Interagency Working Group of the National Science and Technology Council. (2023). *A Framework for Federal Scientific Integrity Policy and Practice*. https://www.whitehouse.gov/wp-

content/uploads/2023/01/01-2023-Framework-for-Federal-Scientific-Integrity-Policy-and-Practice.pdf

and Human Services (HHS)² and National Institutes of Health.³ We note areas where the EPA draft policy improves upon the model policy as well as areas where using more of the other policies' language would enhance the EPA policy.

We appreciate the draft policy's emphasis on the importance of allowing the expression and documentation of differing scientific opinions, restrictions on political interference in cost-benefit analysis, provisions for federal advisory committee transparency, and responsibilities for public affairs officials, as well as other aspects noted below.

Scientific integrity is essential to allow EPA to be able to fulfill its Congressional mandates to ensure everyone can live in healthy environments. When individuals with political motivations undermine the processes necessary to generate decisions informed by high-quality, science-based evidence, the health of communities across the nation, particularly BIPOC (Black, Indigenous, and people of color) communities, can suffer. We offer the suggestions below because we want this policy to effectively safeguard the scientific integrity that is central to EPA's work.

1. Provisions to guard against arbitrary and excessive requirements that have the effect of restricting EPA from using valid science to support regulatory actions

EPA's draft scientific integrity policy aims to prevent politically motivated interference with science, and one of the most appalling instances of attempted interference in recent years was the attempt to prevent EPA from considering large swaths of high-quality evidence under the guise of increasing transparency.⁴ We urge EPA to include provisions in this policy to prevent future proposals that would weaken the agency's ability to use the best available science to fulfill its Congressionally mandated responsibilities.

First, the policy should recognize that the implementation of bright-line rules that exclude certain scientific evidence or tools from consideration are likely to be improper attempts to manipulate the agency's sound use of science. Any decision to stray from established agency tools and methods must be shown to further the protection of human health and the environment and/or assist the agency in evaluating risks of dangerous pollutants and toxicants. For example, historically the agency has relied on studies where the underlying data cannot be made public, used linear dose-response relationships and defaults, and incorporated the social cost of carbon into its analyses. These are scientific decisions, grounded in scientific norms and evidence, that have furthered the agency's mandate to use the best

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https://osp.od.nih.gov/wp-content/uploads/2023/09/Draft_SI_Policy.pdf
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² U.S. Department of Health and Human Services. (2023). The Scientific Integrity Policy of the U.S. Department of Health and Human Services: Draft for Public Comment. https://www.hhs.gov/sites/default/files/draft-hhs-scientific-integrity-policy.pdf ³ National Institutes of Health. (2023). Draft: Scientific Integrity Policy of the National Institutes of Health.

⁴ Environmental Protection Agency. (2021). Strengthening Transparency in Pivotal Science Underlying Significant Regulatory Actions and Influential Scientific Information. 86 Fed. Reg. 469. https://www.federalregister.gov/documents/2021/01/06/2020-29179/strengthening-transparency-in-pivotal-science-underlying-significant-regulatory-actions-and

available science.⁵ Decisions about whether and how to continue reliance on these practices and tools, or to modify them, must remain in the hands of agency scientists and be based on the best available science.

Second, the policy should clarify that the requirement that EPA use "best available" science or information often means that the agency must act even if the available science or information is imperfect or incomplete.⁶ EPA has explained in its Information Quality Guidelines that "most environmental statutes obligate EPA to act to prevent adverse environmental and human health impacts" and that "[f]or many of the risks that we must address, data are sparse and consensus about assumptions is rare." Thus, rather than set rigid rules regarding what science and information EPA can rely upon in its rulemakings, EPA "seek[s] to strike a balance among fairness, accuracy, and efficient implementation." EPA states: "Refusing to act until data quality improves can result in substantial harm to human health, safety, and the environment."⁷ The draft policy could reference or incorporate these statements.

Third, the policy should clarify that the goal of ensuring the free flow of scientific information and making scientific studies, underlying data, models, and other scientific information publicly available must be balanced against the need for the agency to use the "best available" science to inform its decisions. Thus, in some cases the agency may need to rely on information and tools that cannot be made public. In these instances, the agency should provide for alternative methods of ensuring the public's confidence in these tools (such as confidential access for researchers).⁸

In areas where the science is less developed, such as emerging threats; if there is a relatively small number of studies; or if data come from sources such as citizen scientists in a community where a disaster has occurred, the inability to consider some or all of the data or findings could severely hamper EPA's ability to act. This is precisely the type of situation where a proactive early response could avoid extensive contamination (which is expensive to address) and multiple exposures (which are impossible to reverse), and the resulting adverse outcomes.⁹

⁵ See, e.g., Environmental Defense Fund Comment on EPA Proposed Rule: Strengthening Transparency in Regulatory Science, 83 Fed. Reg. 18768, Docket ID No.EPA-HQ-OA-2018-0259-9227 at 97-101. https://www.regulations.gov/comment/EPA-HQ-OA-2018-0259-9227

⁶ See, e.g., Environmental Defense Fund Comment on EPA Proposed Rule: Strengthening Transparency in Regulatory Science, 83 Fed. Reg. 18768, Docket ID No.EPA-HQ-OA-2018-0259-9227 at 15-16, 68-70. https://www.regulations.gov/comment/EPA-HQ-OA-2018-0259-9227

⁷ Environmental Protection Agency. (2002). Guidelines for Ensuring and Maximizing the Quality, Objectivity, Utility, and Integrity of Information Disseminated by the EPA.

⁸ See, e.g., Environmental Defense Fund Comment on EPA Proposed Rule: Strengthening Transparency in Regulatory Science, 83 Fed. Reg. 18768, Docket ID No.EPA-HQ-OA-2018-0259-9227 at 36-48. https://www.regulations.gov/comment/EPA-HQ-OA-2018-0259-9227

⁹ See, e.g., Environmental Defense Fund Comment on EPA Proposed Rule: Strengthening Transparency in Regulatory Science, 83 Fed. Reg. 18768, Docket ID No.EPA-HQ-OA-2018-0259-9227 at 53-54. https://www.regulations.gov/comment/EPA-HQ-OA-2018-0259-9227

Here are three ways to revise the policy to address these concerns. We also encourage EPA to consider additional changes to strengthen the policy's ability to ensure the agency can use the best available science.

A. Reference an existing definition of "best available science": We recommend adding to Section VII., Definitions for the Purposes of this Policy, a definition of "best available science." One option would be to state that the policy defines "best available science" as it is defined in the Toxic Substances Control Act; that definition includes "science that is reliable and unbiased" and lists several considerations (e.g., the extent of independent verification or peer review). In adopting this definition, EPA explained: "The first part of the definition originates from the Safe Drinking Water Act (SDWA) (42 U.S.C. 300f et seq.) and is also included in the EPA's Information Quality Guidance (Ref. 5). . . . EPA agrees this definition, already in use at the Agency, is appropriate. The second part of the definition is taken directly from TSCA section 26(h) . . . By basing its definition of `best available science' on these two sources, EPA believes that the Agency is remaining consistent with the current approach already used Agency-wide, while also acknowledging the specific standards under TSCA."¹⁰

Thus, the definition of "best available" science should recognize that EPA has historically evaluated science based on review of multiple factors and determined the weight information should be given based on its relative scientific reliability, as opposed to excluding completely from consideration information failing to meet any minimum thresholds of reliability.¹¹

We also recommend that EPA's Chief Scientist be the one to resolve questions of whether a proposed approach constitutes using the "best available" science, based on the recommendations of the EPA Science Advisory Board. A problematic previous proposal claimed to advance transparency by giving the EPA administrator the power to determine whether certain studies should be relied on in EPA decision making.¹² However, that power should be held by a career scientist rather than a political appointee.

B. List procedures already used to ensure the quality and accuracy of scientific information: Proposals that weaken EPA science under the guise of improving it will claim that current procedures for ensuring quality, accuracy, and transparency are insufficient. Determining the validity of such claims will be easier if the policy specifies the ways in which EPA already ensures the quality, accuracy, and transparency of scientific information used in decision making.

¹⁰ Environmental Protection Agency. (2017). Procedures for Chemical Risk Evaluation Under the Amended Toxic Substances Control Act. 82 Fed. Reg. 33726. https://www.federalregister.gov/documents/2017/07/20/2017-14337/procedures-for-chemical-risk-evaluation-under-the-amended-toxic-substances-control-act

¹¹ See, e.g., Environmental Defense Fund Comment on EPA Proposed Rule: Strengthening Transparency in Regulatory Science, 83 Fed. Reg. 18768, Docket ID No.EPA-HQ-OA-2018-0259-9227 at 28-30

https://www.regulations.gov/comment/EPA-HQ-OA-2018-0259-9227

¹² Environmental Protection Agency. (2021). Strengthening Transparency in Pivotal Science Underlying Significant Regulatory Actions and Influential Scientific Information. 86 Fed. Reg. 469. https://www.federalregister.gov/documents/2021/01/06/2020-29179/strengthening-transparency-in-pivotal-science-underlying-significant-regulatory-actions-and

Another benefit of the policy containing a description of these procedures is to make it easier for the public to take note of any attempt to limit or reduce the use of these procedures and clearly determine when the agency is veering away from established scientific safeguards and norms.¹³

C. Oppose moves that unreasonably delay science-based decision making:

EPA sets out a policy to prohibit inappropriate influence or unreasonable delay "in the design, proposal, conduct, review, management, evaluation or reporting of scientific activities and the use of scientific information." This policy could be strengthened by providing markers of "inappropriate influence" or "unreasonable delay." For example, EPA previously proposed a policy that would require EPA to provide additional peer review on scientific information that had already gone through a peer review process. As commenters pointed out at the time, "If EPA were required to re-peer review all influential scientific information, this rulemaking would burden EPA with needless and significant costs that likely would bring many EPA rulemakings to a standstill, preventing EPA from fulfilling its statutory mission of protecting public health and the environment."¹⁴ In addition, EPA previously made changes to the National Ambient Air Quality Standards review process that involved extreme shortening of drafting and review periods that failed to allow agency staff sufficient time to fulfill the Clean Air Act's statutory mandate of thoroughly reviewing the latest relevant scientific evidence.¹⁵

The policy should clarify that "inappropriate influence" and "unreasonable delay" include: (1) imposing timelines that fail to allow for sufficient review of the best available science and (2) procedures that facially have "scientific justification" but that fail to meaningfully improve EPA's ability to base decisions on the best available science, particularly when weighed against the impact of any time and resource costs that in turn would limit EPA's review of best available science.

2. Responsibilities to support effective scientific integrity work

In order to implement the scientific integrity policy effectively, EPA must ensure sufficient support and autonomy for staff with scientific integrity responsibilities. The draft policy does not, but should, establish with clarity the shared and unique responsibilities of the Scientific Integrity Official (SIO) and the Office of Inspector General (OIG) when investigating research misconduct or allegations of a loss of

¹³ See, e.g., Environmental Defense Fund Comment on EPA Proposed Rule: Strengthening Transparency in Regulatory Science, 83 Fed. Reg. 18768, Docket ID No.EPA-HQ-OA-2018-0259-9227 at 64-66.

https://www.regulations.gov/comment/EPA-HQ-OA-2018-0259-9227

¹⁴ See, e.g., Environmental Defense Fund Comment on EPA Proposed Rule: Strengthening Transparency in Regulatory Science, 83 Fed. Reg. 18768, Docket ID No.EPA-HQ-OA-2018-0259-9227 at 95. https://www.regulations.gov/comment/EPA-HQ-OA-2018-0259-9227

¹⁵ See, e.g., Environmental Defense Fund, Natural Resources Defense Council, and Clean Air Task Force Comment on EPA Policy Assessment for the Ozone National Ambient Air Quality Standards, External Review Draft, 84 Fed. Reg. 58,711 (Nov. 1, 2019), Docket ID No. EPA-HQ-OAR-2018-0279-0039 at 9-11. https://www.regulations.gov/comment/EPA-HQ-OAR-2018-0279-0039

scientific integrity. These responsibilities should support the mandated authorities of the OIG and establish an environment in which employees are more likely to feel comfortable approaching the SIO for advice, knowing it will not be reported to the OIG unless they make a formal report. We recommend changes to the Roles and Responsibilities section (XI) to address these items.

A. Responsibility for adequate resources: Add to the responsibilities of the EPA Administrator and Deputy Administrator (XI.1.) an item similar to one included in the HHS policy: "Provide adequate resources and funding to implement this policy, including staffing, monitoring, evaluation, reporting, and training."¹⁶

B. Clarification regarding SIO's provision of advice: The list of SIO responsibilities appropriately includes reporting to the OIG criminal behavior and other serious abuses. This item (XI.4.h.) should also include a statement clarifying what the SIO is not required to report to or coordinate with the OIG regarding — e.g., "Is not required to report to or coordinate with the OIG when providing advice to employees who have scientific integrity questions."

C. Responsibilities for the inspector general: We recommend the addition of a list of roles and responsibilities for EPA's inspector general. The list should include developing a set of SIO-OIG coordination procedures that takes into account the unique expertise and capabilities of each party and specifies what kinds of issues can be handled by each either independently or in coordination with one another.

3. More explicit procedures for investigating allegations

We appreciate that the draft policy requires that procedures for responding to allegations of compromised scientific integrity include "an initial assessment and review, a fact-finding process, an Agency adjudication or determination including description of remedies and preventative measures to safeguard the science, an appeals process, follow-up to track implementation of remedies, and reporting" (VIII.5.c.). We recommend that the revised policy contain the following as well, and that procedures be published in the Federal Register.

A. Independent appeal mechanisms on findings and decisions: Agency personnel will be reassured that investigations and findings are handled appropriately if an independent appeal process exists. The revised policy should give more specifics about the appeals process(es) that will be available to all affected personnel, including those found to have violated scientific integrity policies and those whose allegations were not investigated or remedied. The policy should establish an independent mechanism for appeals, such as the ability to appeal to the National Science and Technology Council (NSTC) Subcommittee on Scientific Integrity, and affirm that procedures will protect employees' due process rights.

¹⁶ U.S. Department of Health and Human Services. (2023). The Scientific Integrity Policy of the U.S. Department of Health and Human Services: Draft for Public Comment. https://www.hhs.gov/sites/default/files/draft-hhs-scientific-integrity-policy.pdf

B. Additional mechanisms to safeguard the independence of investigators: We recommend that EPA's policy incorporate the following language used in the HHS policy: "Consistent with applicable law, an SIO or other scientific integrity staff may not be terminated or reassigned without good cause or legitimate organizational reason."¹⁷ This kind of protection is essential for allowing the SIO and deputy scientific integrity officials (DSIOs) to avoid undue pressure from their supervisors or political appointees.

C. Timeliness provisions: Scientific integrity policies should include provisions to assure the timely resolution of an allegation of a loss of scientific integrity. For instance, a decision to investigate an allegation could be required within 10 working days and a determination within another 45 working days, and the appeal process could be limited to 30 working days. Exceptions to the timeline should be allowed at the request of employees for reasons such as needing more time to hire counsel or build their case, while ensuring that the process towards a resolution is not halted.

D. Timeline for establishing procedures: We recommend that the policy state "Within XX days of finalization of this policy, the SIO will place on the Agency website a final version of procedures for responding to allegations of compromised scientific integrity that conform with this policy and have been approved by the Scientific Integrity Committee and Agency leadership. Revisions to the procedures will also be approved by the Committee and Agency leadership and posted on the Agency website." EPA can determine the number of days needed to finalize the procedures; the important thing is that the policy commit to their completion.

4. Penalties sufficient to deter wrongdoing and hold accountable all scientific integrity violators, including political appointees

We appreciate that the draft policy specifies that attempts to interfere with scientific processes constitute violations regardless of the outcomes (i.e., that unsuccessful attempts to interfere are still violations; VIII.1.a.) and states "Violations of scientific integrity policies should be taken as seriously as violations of government ethics rules and should lead to appropriate consequences." In addition, we recommend:

A. Specific penalties for violations: Penalties for violating scientific integrity policies should appear in EPA's official table of penalties, and the scientific integrity policy should reference them and task the SIO and Secretary with ensuring they are enforced. Penalties should be sufficiently meaningful to discourage violations — e.g., warnings, suspension, demotion, or removal.

¹⁷ U.S. Department of Health and Human Services. (2023). The Scientific Integrity Policy of the U.S. Department of Health and Human Services: Draft for Public Comment. https://www.hhs.gov/sites/default/files/draft-hhs-scientific-integrity-policy.pdf

B. Publicly identify appointees found to have violated policies: When an investigation determines that a political appointee has caused the loss of scientific integrity, the identity of that official should be made public and reported through their chain of command and to the NSTC Subcommittee on Scientific Integrity, the EPA Office of the Inspector General, and the relevant Cabinet Officer.

5. More explicit commitments to diversity, equity, inclusion, and accessibility

We appreciate the places where EPA's draft policy recognizes the importance of diversity, equity, inclusion, and accessibility (DEIA), and we recommend additional ways to emphasize the importance of DEIA for scientific integrity and integrate it throughout the policy.

A. Assure inclusion of environmental justice perspective: We recommend that the policy specify that the Scientific Integrity Committee will include at least one representative from the Office of Environmental Justice and External Civil Rights.

B. Cite guidance on Indigenous knowledge: We applaud EPA for stating that it is EPA's policy to consult and collaborate with Tribal Nations and Indigenous peoples to include Indigenous knowledge in decision making, with proper consent (Section VIII.1.o). In addition, we recommend that the policy reference the Council of Environmental Quality and OSTP's guidance document on Indigenous knowledge.¹⁸

C. Align scientific integrity committee criteria with executive order on DEIA in the federal workforce: The draft policy references a Scientific Integrity Committee Charter that outlines criteria for selection as a committee member. We recommend stating explicitly that these criteria align with President Biden's executive order on DEIA in the federal workforce.¹⁹

D. Incorporate definitions from DEIA executive order: We recommend that instead of defining "diversity, equity, inclusion, and accessibility" as a single item that the Definitions section (VII) give separate definitions for each term in recognition of the fact that each concept is important. The policy could incorporate the definitions given in the executive order on DEIA in the federal workforce.²⁰

E. Emphasize the benefits of DEIA: In the introductory portion of section VIII, we recommend the sentence "A strong culture of scientific integrity begins with ensuring a professional environment that is safe, equitable, inclusive, and free from harassment" be followed by the text that follows it in the model policy: "Addressing long-standing and emerging issues of diversity, equity, inclusion and accessibility is integral to the entire scientific process and

¹⁸ Prabhakar, A & Mallory, B. (2022). Guidance for Federal Departments and Agencies on Indigenous Knowledge. https://www.whitehouse.gov/wp-content/uploads/2022/12/OSTP-CEQ-IK-Guidance.pdf

¹⁹ Biden, JR. (2021). Executive Order on Diversity, Equity, Inclusion, and Accessibility in the Federal Workforce. Executive Order 14035.

²⁰ Ibid.

attention to these issues can improve the representativeness and eminence of the scientific workforce, foster innovation in the conduct and use of science, and provide for more equitable participation in science by diverse communities. The responsible and ethical conduct of research and other scientific activities requires an environment that is equitable, inclusive, safe, and free from harassment (SI-FTAC Report)." One possible modification to that text would be to change "representativeness and eminence" to "diversity and autonomy."

F. Create a level playing field: In VIII.6.h., we recommend that the sentence "Promote diversity, equity, inclusion, and accessibility in the scientific workforce and to create safe workspaces that are free from harassment and discrimination" be followed by a slightly modified version of the sentence that follows it in the model policy (the modification is the insertion of "all" before "scientists and researchers"): "Support all scientists and researchers including, but not limited to, Black, Latino, Indigenous and Native American persons, Asian Americans and Pacific Islanders and other persons of color; members of religious minorities; lesbian, gay, bisexual, transgender, and queer (LGBTQI+) persons; persons with disabilities; persons who live in rural areas; and persons otherwise adversely affected by persistent poverty or inequality; and advance the equitable delivery of Federal programs."

6. Additional modifications to provisions on scientists' speaking and writing

Ensuring that scientists are able to communicate efficiently with members of the media and publish findings promptly can help improve public awareness of and trust in agency activities. We applaud EPA for describing EPA scientists' ability to communicate with the media or the public in their personal capacities (VIII.3.1.), supporting employees to "participate in communications with the media regarding their scientific activities and areas of scientific expertise in their official capacities at EPA" (VIII.3.e), and clarifying that a prohibition on policy statements in the model policy (II.8) applies only to scientists speaking in their official capacities (VIII.3.e). Two additional changes would further enhance Section VIII.3, Ensuring the Free Flow of Scientific Information:

A. Modify language to limit weaponization by bad-faith actors. Although Section VIII.3.e. is substantially better than the model policy provision because it limits the scope of the prohibition to occasions when a scientist is "speaking or writing on behalf of EPA," the prohibition against "statements that could be construed as being judgments of, or recommendations on, EPA or any other Federal Government policy" remains open to weaponization by bad-faith actors. It also would violate the Whistleblower Protection Act and constitute a prohibited personnel practice if the broad prohibition were enforced. The whole point of the Whistleblower Protection Act is to protect negative judgments when a government agency fails to meet or undermines its mission. For instance, a scientist who makes a factual statement about the effect of a policy — for instance, explaining how different proposed allowable levels of pollution would result in different estimated amounts of excess mortality — could be accused of violating the policy if a bad-faith actor claims to have construed their statement as a policy judgment. EPA could limit opportunities for such outcomes by substituting a more precise description of the kinds of statements this prohibition seeks to avoid when

scientists are speaking or writing on behalf of EPA— e.g., "statements that advocate for or against, or recommend modifications of, EPA or any other Federal Government policy."

B. Explicit language reinforcing federal anti-gag rules: To comply with the Whistleblower Protection Enhancement Act and guard against any potential chilling effect on employees concerned about communicating with the media or the public, by law EPA must ensure that any communication policy, and any directives or instructions distributed to employees explaining such policies, contains the explicit language the Whistleblower Protection Enhancement Act mandates must be included under the "anti-gag" provisions of § 115 and 5 U.S.C. § 2302(b)(13) in any nondisclosure policy, form, or agreement:

"These provisions are consistent with and do not supersede, conflict with, or otherwise alter the employee obligations, rights, or liabilities created by existing statute or Executive order relating to (1) classified information, (2) communications to Congress, (3) the reporting to an Inspector General of a violation of any law, rule, or regulation, or mismanagement, a gross waste of funds, an abuse of authority, or a substantial and specific danger to public health or safety, or (4) any other whistleblower protection. The definitions, requirements, obligations, rights, sanctions, and liabilities created by controlling Executive orders and statutory provisions are incorporated into this agreement and are controlling."

We recommend the addition of this language at the end of Section VIII.3., Ensuring the Free Flow of Scientific Information.

7. More explicit statements regarding timely clearance

We applaud the EPA draft policy for requiring that "technical review and clearance processes include provisions for timely clearance and expressly forbid unreasonable delay and suppression of scientific products without scientific justification" (VIII.3.u.). We note that the Scientific Integrity Committee is tasked with developing "consistent, transparent, and predictable procedures for clearance with the goal of standard practices across the Agency" (XI.6.g.). To augment the policy's ability to encourage timely and appropriate clearance, we recommend the following additions:

A. Explicit statement about reporting clearance policy violations: Although the draft policy indicates that clearance procedures should not introduce unreasonable delays, scientists would likely feel more empowered to consult with the SIO or a DSIO about clearance delays if the policy explicitly stated that unreasonable clearance delays constitute a scientific integrity violation. We recommend EPA incorporate language similar to the statement included in HHS's draft policy:²¹ "Violations of clearance policies that result in suppression, delay, or alteration of scientific and technological information without scientific, legal, or security justification

²¹ U.S. Department of Health and Human Services. (2023). The Scientific Integrity Policy of the U.S. Department of Health and Human Services: Draft for Public Comment. https://www.hhs.gov/sites/default/files/draft-hhs-scientific-integrity-policy.pdf

constitute violations of the EPA Scientific Integrity Policy and may be reported under the procedures for addressing scientific integrity concerns."

B. Specifics regarding timely clearance: We recommend the addition of the following provision regarding clearance procedures:

"Each office and region must have a written clearance policy that specifies who must review work products and gives deadlines by which comments must be given or the product can move to the next stage (e.g., if a supervisor does not clear or provide comments on a product five days after receiving it, it moves to the next-level approver; if there is no next-level approver, the author may submit the paper to a journal, deliver the presentation, etc.). The policy must also provide an appeal mechanism for those who are denied clearance and a method for obtaining a second opinion if an author disagrees with a requested revision."

8. Specific protections from retaliation for those engaged in scientific activities that may put them at risk for reprisal

We applaud the EPA draft policy for going beyond the model policy with language intended to discourage retaliation and reprisal, with statements such as "Agency employees should be familiar with these protections and avoid the taking or the appearance of taking retaliatory actions" (VIII.6.) and a prohibition on including good faith expressions of differing scientific opinions as negative behavior in performance appraisal.

Although the current laws and policies to protect whistleblowers that are cited in the draft policy are important and beneficial, their protections are not sufficient. We recommend that EPA add to its policy additional protections for either government or independent sources on agency issues who could face reprisal when scientific integrity is compromised or when a bad-faith actor tries to misuse the scientific integrity policy to target an individual or area of research for inappropriate reasons. We recommend the following:

A. Offer additional protections against specific forms of retaliation. We urge that EPA's policy specifically provide protections against blocklisting/blacklisting and retaliatory investigations and offer an affirmative defense to whistleblowers who are subjected to civil or criminal lawsuits. The boundaries and burdens of proof should be consistent with the Whistleblower Protection Act. Specific protections should cover those who raise differing scientific opinions, not just communications in the Whistleblower Protection Act.

B. Acknowledge the possibility of reprisal and retaliation for scientific activities that do not **meet the definition of whistleblowing.** We recommend adding a statement that reprisal or retaliation based on the topic or implications of an area of research is considered a violation of this scientific integrity policy.

9. Mechanisms for addressing allegations that involve multiple agencies and/or high-level officials

We appreciate that the draft policy encourages seeking assistance from and/or reporting to other offices or groups — such as the Office of the Inspector General, Office of General Counsel, Government Accountability Office, Office of Human Resources, EPA Labor and Employee Relations, ethics officials, and unions — when appropriate. We recommend that the policy also specify alternate officials and mechanisms for instances when allegations involve the SIO, multiple agencies, and/or high-level officials:

A. Designate alternate officials when the SIO is involved in or recused from an allegation: We recommend that EPA designate other officials who can address allegations when the SIO is either implicated in an allegation or needs to recuse themself. For instance, NIH's draft policy gives the Chief Scientist the responsibility to "Serve as an alternate in scientific integrity adjudication processes if the NIH SIO is alleged to have violated NIH or HHS Scientific Integrity Policies" and the SI Council has the responsibility to "Determine handling of investigation and adjudication proceedings from which the HHS SIO is recused."²²

B. Create one or more mechanisms for addressing allegations that involve multiple agencies and/or high-level officials. We encourage EPA to establish one or more mechanisms for addressing situations when SIOs from multiple agencies are involved or when the person accused of violating the scientific integrity policy is a high-level official. One possible mechanism is that those with concerns involving multiple agencies or a high-level official be instructed to contact the NSTC Subcommittee on Scientific Integrity. The framework explains that this Subcommittee's roles include "provid[ing] advisory responses to agency requests for another agency to review their internal scientific integrity policies and processes, such as inquiries related to senior-level officials, political appointees, or scientific integrity violations that cannot be suitably handled at an individual agency-, department-, or Executive Office of the President component-level, such as allegations involving senior-level officials, political appointees, or SIOs or allegations involving multiple agencies."²³

10. Model policy text regarding different modes of science

Although we appreciate that the draft policy recognizes the importance of ensuring transparency in emerging modes of science (VIII.1.s.), transparency is not the only aspect of such emerging modes that the policy should address. As demonstrated by the toxic releases from the Norfolk Southern train

²² National Institutes of Health. (2023). Draft: Scientific Integrity Policy of the National Institutes of Health. https://osp.od.nih.gov/wp-content/uploads/2023/09/Draft_SI_Policy.pdf

²³ Scientific Integrity Framework Interagency Working Group of the National Science and Technology Council. (2023). A Framework for Federal Scientific Integrity Policy and Practice. https://www.whitehouse.gov/wp-

 $content/uploads/2023/01/01-2023 \mbox{-} Framework-for-Federal-Scientific-Integrity-Policy-and-Practice.pdf$

accident in East Palestine,²⁴ and as disasters become more common in an era of climate disruption, EPA must be able to respond quickly to disaster-related contamination, and that will often require relying on data gathered by members of affected communities. We recommend that EPA incorporate the model policy provision on emerging science as part of the "Promoting a Culture of Scientific Integrity" introductory text (Section VIII):²⁵

"EPA shall ensure that different modes of science, such as citizen science, community-engaged research, participatory science, and crowdsourcing, have the recognition, support, and resources to meet the same high standards of scientific integrity that traditional modes are expected to uphold. Further, scientific integrity practices must be applied in ways that are inclusive of these modes of science. This may require expanded scientific integrity practices and expectations, such as granting communities more autonomy over research questions and research design, recognition of data and knowledge sovereignty, and inclusion of multiple forms of evidence, such as Indigenous Knowledge."

11. Additional information in annual reports

Section XII of the draft policy explains that "Annual reporting will also include anonymized individual closed scientific integrity allegation summaries." To improve utility to those interested in determining whether the scientific integrity policy is working as intended, we recommend adding two additional pieces of information to this sentence and to the reports: indicating whether a violation was determined to have occurred and what kinds of remedies and/or penalties were deemed necessary.

12. Ensure that career staff are meaningfully involved in key scientific decisions

To ensure the integrity of the science informing the agency's policy decisions, it is essential that career staff with subject matter expertise not be shut out of important scientific analyses and decisions. For example, career staff should be involved in determining critical model assumptions and key science and risk assessment decisions. Any differing scientific opinion should be appropriately recorded in the record.

13. Clarification of what constitutes a conflict of interest

We appreciate that the policy making public conflict of interest waivers granted to members of federal advisory committees (VIII.2.b.v.). The policy should also clarify that an EPA grant recipient does not automatically have a conflict of interest that would prevent them from serving on a federal advisory

²⁴ Saberi, R. (2024). East Palestine, Ohio, residents still suffering health issues a year after derailment: "We are all going to be statistics." *CBS News*. https://www.cbsnews.com/news/east-palestine-ohio-train-derailment-residents-health-issues-norfolk-southern/

²⁵ Scientific Integrity Framework Interagency Working Group of the National Science and Technology Council. (2023). A *Framework for Federal Scientific Integrity Policy and Practice.* https://www.whitehouse.gov/wp-

content/uploads/2023/01/01-2023-Framework-for-Federal-Scientific-Integrity-Policy-and-Practice.pdf

committee. As the Court stated in *Physicians for Social Responsibility v. Wheeler*, the notion that being awarded an EPA research grant would render a scientist conflicted from offering the agency independent scientific advice on other projects would be "a major break from the agency's prior policy, under which grantees regularly serv[e] on advisory committees."²⁶ We recommend EPA consider adding a definition for "Conflict of Interest" (which could reference an existing definition) in addition to defining "Appearance of Conflict of Interest." One of the definitions should include the following sentence: "Receipt of an EPA research grant does not automatically by itself constitute a conflict of interest or the appearance of such a conflict."

14. Explicit statement that the "political interference" definition applies to everyone covered by the policy

We applaud Section I. (Purpose) for specifying that EPA's scientific integrity policy applies to contractors and grantees as well as employees. We recommend that the definition of "political interference," which is central to the policy, make clear that any individual working for EPA is capable of, and should avoid, such interference. The sentence "It also includes interference by career employees acting under the direction of a political appointee or for their own political purposes" could be modified to "It also includes interference by career employees acting under the direction of a political appointee or for their own political purposes, as well as interference by any others covered by this policy."

The changes described above will make the EPA's scientific integrity policy an even stronger tool for protecting science and science-based decision making from political interference.

Thank you for the opportunity to comment on EPA's draft scientific integrity policy. If you have any questions, please contact Liz Borkowski of the Jacobs Institute of Women's Health at borkowsk@gwu.edu.

Climate Science Legal Defense Fund (CSLDF) Earthjustice Environmental Defense Fund Government Accountability Project Government Information Watch Jacobs Institute of Women's Health National Center for Health Research Union of Concerned Scientists

²⁶ Physicians for Soc. Responsibility v. Wheeler, 956 F.3d 634, 645 (D.C. Cir. 2020).