~~CUI//PRVCY~~

Management Implication Report: Office of Research and Development Scientific Integrity and Ethics Concerns

April 8, 2025 | Report No. 25-N-0021

OFFICE OF INSPECTOR GENERAL
U.S. ENVIRONMENTAL PROTECTION AGENCY

April 8, 2025

MEMORANDUM

SUBJECT: Management Implication Report: Office of Research and Development Scientific Integrity and Ethics Concerns

FROM: Nic Evans, Acting Assistant Inspector General
Office of Investigations

TO: Maureen Gwinn, Acting Assistant Administrator and EPA Science Advisor
Office of Research and Development

PURPOSE: The U.S. Environmental Protection Agency Office of Inspector General has identified concerns regarding the EPA Office of Research and Development's, or ORD's, review and clearance process for manuscripts; its lack of oversight of published manuscripts, authorship designation, and lab visitors; and its failure to ensure that ORD staff uphold federal ethical standards and Agency policies regarding impartiality and scientific integrity in the workplace. These issues enabled an ORD researcher to collaborate with family members on EPA work products without obtaining the proper waivers to guard against conflicts of interest, to add the researcher's underaged child as a coauthor to a manuscript that had already been cleared by EPA management, and to bring the researcher's underaged children into an EPA lab despite established safety prohibitions. In addition, we are concerned that the OIG was not notified in a timely manner that the EPA had initiated its own internal investigation into these issues, which adversely affected the efficiency and effectiveness of our investigation.

We conducted this investigation in accordance with the *Quality Standards for Investigation* published in November 2011 by the Council of the Inspectors General on Integrity and Efficiency. Those standards require that we conduct investigations in a timely, efficient, thorough, and objective manner.

BACKGROUND: According to the Inspector General Act of 1978, as amended, 5 U.S.C. §§ 401–424, OIGs are charged with preventing and detecting fraud, waste, and abuse related to the programs and operations of their agencies. To this end, our Office of Investigations "conduct[s], supervise[s], and coordinate[s] … investigations relating to the programs and operations" of the EPA and the U.S. Chemical Safety and Hazard Investigation Board.[1] Among our investigative portfolio as an independent office of the EPA is mismanagement, misconduct, abuse of authority, or censorship, including that related to

[1] Per 5 U.S.C. § 404(a)(1).

scientific misconduct or research misconduct. EPA Order 3120.5, *Policy and Procedures for Addressing Research Misconduct*, requires Agency employees to immediately report to the OIG allegations of research misconduct, while EPA Manual 6500, *Functions and Activities of the Office of Inspector General*, requires employees to promptly report "indications of wrongdoing or irregularity to the OIG."

On September 19, 2023, the EPA became aware of allegations that an ORD researcher listed the researcher's underaged child as a coauthor on an EPA manuscript that was published earlier that year.[2] The EPA Labor and Employee Relations Division was notified of the allegations the next day, and the Scientific Integrity Office was notified on September 21, 2023. On September 26, 2023, the ORD assigned an internal fact finder to investigate the allegations without notifying the OIG. On September 27, 2023, eight days after first learning about the allegations, the Agency issued a referral memorandum to the OIG Hotline.

For our investigation, we conducted interviews with EPA employees, including the ORD researcher, and with staff of the journal that published the ORD manuscript. We reviewed relevant records and materials, as well as relevant regulations, EPA policies, and EPA guidance concerning ethical conduct, scientific integrity, clearance of manuscripts, and designation of authorship, including:

- The *Standards of Ethical Conduct for Employees of the Executive Branch*, 5 C.F.R. part 2635, and specifically subpart E, "Impartiality in Performing Official Duties," which requires federal employees not only to be impartial in the performance of their official duties but also to "avoid an appearance of a loss of impartiality." Of note, 5 C.F.R. § 2635.502 states that federal employees should not participate in any matter with someone with whom they have a "covered relationship" if "circumstances would cause a reasonable person with knowledge of the relevant facts to question their impartiality in the matter." As defined in 5 C.F.R. § 2635.502(b)(1)(ii), an employee has a ***covered relationship*** with a "person who is a member of the employee's household, or who is a relative with whom the employee has a close personal relationship." The regulation places the responsibility of determining whether there are impartiality concerns and recusing from any such matters on the individual employee. However, if the employee reports the impartiality concerns to the appropriate agency designee,[3] that designee can determine whether "the interest of the Government outweighs the concern that a reasonable person may question the integrity of the agency's programs and operations," as stated in 5 C.F.R. § 2635.502(d). For any positive determination, the agency designee can grant an authorization or waiver allowing the employee to participate in that matter. For the EPA, the deputy ethics official in each program office and region serves as the Agency designee for the employees in that office or region.

[2] [redacted].

[3] Per 5 C.F.R. § 2635.502(c)(1), "the agency designee's determination will be initiated based on information provided by the employee" or, if the employee has already recused from participating in a matter, "on their own initiative or when requested by the employee's supervisor or any other person responsible for the employee's assignment."

- The EPA's *Scientific Integrity Policy for Transparent and Objective Science*, issued in 2012,[4] which specifies that all Agency employees must, among other things, "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"; and "avoid conflicts of interest and ensure impartiality."

- The EPA's *Science and Technology Policy Council Peer Review Handbook 4th Edition*, dated October 2015, which provides guidance on planning and conducting peer reviews and which states that EPA researchers are responsible for complying with review and clearance processes, addressing peer review comments, and maintaining a record of the peer review process.

- The *ORD Clearance Policy and Procedures*,[5] dated June 13, 2023, which requires that all scientific work products, such as manuscripts, be cleared through ORD management before being distributed outside the EPA. This document also outlines the advanced notification requirements and procedures for manuscripts that, for example, address potential sensitive or policy issues; are novel or controversial; or may be of interest to Congress or the public.

- The *Best Practices for Clearance of Scientific Products at EPA* guidance, which states that "[m]ajor changes based on external review comments may necessitate going through the clearance process again, with a response-to-comments document."

- The EPA's *Scientific Integrity: Best Practices for Designating Authorship*, which specifies that a contributor should fulfill three criteria to be named as an author: (1) made a substantial intellectual contribution to the work, (2) wrote or provided editorial revisions containing critical intellectual content, and (3) approved the final version and agreed to be accountable for all aspects of the work. Also, according to this guidance, "authorship also conveys responsibility," and all authors are responsible for the overall accuracy and quality of the work product.

Before an ORD manuscript is distributed outside of the EPA, including to a scientific journal for publication, it must undergo three review processes: an internal Agency peer review, a quality assurance manager review, and an ORD management clearance review. Per the *Peer Review Handbook*, the peer review process enables independent subject-matter experts to objectively evaluate a manuscript. The primary author coordinates the peer review,[6] submitting the manuscript to staff within the Agency who have the proper expertise but who do not work in the same office or division that the manuscript originated in and who did not help develop the manuscript. These internal peer reviewers use a Technical

[4] The EPA Scientific Integrity Policy was updated on January 16, 2025. The 2012 version of the policy was in effect at the time this report was drafted.
[5] The EPA, Policies and Procedures Manual, Chapter 14, Section 14.3.
[6] The *Peer Review Handbook* and the *ORD Clearance Policy and Procedures* list a number of individuals that can shepherd a manuscript through the review and clearance process. For simplicity, our report assigns this responsibility to one person: the primary author.

Manuscript Review Form to document their comments and indicate their recommendation as to whether the manuscript is "Acceptable as is," "Acceptable after minor revisions," "Acceptable after major revisions," or "Not acceptable." The manuscript is then returned to the primary author, who considers and incorporates the peer review comments into the manuscript, as appropriate. As established by the *ORD Clearance Policy and Procedures*, the primary author's first-line supervisor is responsible for ensuring that the author has "adequately addressed" reviewer comments.

After the internal peer review process is the quality assurance manager review process. As part of this process, quality assurance staff are assigned to conduct a "technical review of data quality and review of scientific and technical products for consistency, correctness, coherence, clarity, and conformance," as provided by section 2.4.2 of the *Peer Review Handbook*.

Finally, in the ORD management clearance process, the manuscript is reviewed and approved by progressive levels of management. As specified in the *ORD Clearance Policy and Procedures,* the first-line supervisor of the primary author is typically the first reviewer, while the topic of the manuscript determines who the final reviewer is; for example, a manuscript determined to require advanced notification will be reviewed by higher level officials. After reviewing and approving the manuscript, each reviewer documents the approval in the ORD's clearance system.[7] The clearance system also retains other aspects of the clearance process, including advanced-notification determinations, comments and revisions made to the manuscript, and information about the manuscript's authors. Once the highest-ranking reviewer approves the manuscript, it is considered ***cleared***, meaning it can be released for distribution outside the Agency.

If submitted to a scientific journal for publication, the cleared manuscript then typically undergoes an external peer review process that is coordinated by the journal. Section 4.3 of the *Peer Review Handbook* states that a peer review conducted by a credible scientific journal is generally considered an adequate review of the scientific credibility and validity of the findings or data. After the journal accepts the manuscript for publication, the primary author enters the publication data, such as the publication date and number, into the ORD's clearance system.

CONCERNS IDENTIFIED: The subject of our investigation, an ORD researcher employed at the EPA since [redacted], has participated in [redacted] published EPA manuscripts since [redacted]. The initial allegations centered on a manuscript about [redacted] that was published in early 2023. The published manuscript listed the ORD researcher as the primary author, along with [redacted] coauthors. From September 11 to 14, 2023, after an external attendee at an EPA conference asked an Agency [redacted] about the published ORD manuscript, [redacted] reviewed the manuscript and, being concerned about its methodology and conclusions, researched its clearance history. [redacted], who alleged that

[7] The ORD uses two systems to document its clearance process, with different data points being recorded in each: the Scientific and Technical Information Clearance System and the Research Approval Planning Implementation Dashboard. For the purposes of this report, we refer to these two systems collectively as the ***ORD's clearance system***.

the ORD researcher did not follow preestablished scientific protocols to conduct the research, reported being "appalled" that the ORD manuscript had been published. [redacted] also discovered that a coauthor listed in the cleared manuscript was not included in the published version,[8] while the ORD researcher's minor child, who was not listed as a coauthor of the cleared manuscript, had been added as a coauthor of the published version. After forwarding the published manuscript to other EPA employees and confirming that they had the same concerns, [redacted] elevated the issue, which ultimately culminated in the EPA's September 2023 referral of the research misconduct allegations to the OIG Hotline.

The allegations raised three primary concerns: the ORD researcher may have participated in a matter with someone who represented a covered relationship, in violation of the ethical standards on impartiality laid out in 5 C.F.R. part 2635, which in turn would violate the EPA's *Scientific Integrity Policy*; the ORD researcher may have made major changes to the cleared ORD manuscript without sending it back through the clearance process, as provided in *Best Practices for Clearance of Scientific Products at EPA*; and the ORD researcher may not have followed the EPA's *Best Practices for Designating Authorship* guidelines when naming the manuscript's authors.

During our investigation, we also identified other concerns. The ORD researcher had developed previous manuscripts in collaboration with another immediate family member, another possible violation of 5 C.F.R. part 2635. The internal peer reviewers, as well as another EPA employee who reviewed the cleared manuscript, raised concerns about the manuscript, but the ORD researcher chose not to address these concerns, despite the requirements laid out in the *ORD Clearance Policy and Procedures* and the guidance laid out in the *Peer Review Handbook*. Further, ORD management does not generally review cleared manuscripts until after they are published, and primary authors have broad leeway to independently revise cleared manuscripts. In addition, the ORD researcher brought [redacted] the researcher's minor children into an EPA lab [redacted] times totaling over [redacted] hours, despite prohibitions against this in the lab's safety policy. And finally, we are concerned that the OIG did not receive immediate notification of possible research misconduct and the subsequent internal investigation, which violates EPA policy and negatively impacted our investigation.

Ethical Conduct, Impartiality, and Scientific Integrity

The EPA's *Scientific Integrity Policy* requires Agency employees to ensure their impartiality and thus avoid the inherent conflicts of interest that a lack of impartiality presents. However, the ORD researcher failed to determine that working on matters with a family member presented impartiality and conflict-of-interest concerns, failed to recuse from those matters, and failed to report those matters to the deputy ethics official and obtain the proper waivers, as required by the *Standards of Ethical Conduct for Employees of the Executive Branch*, 5 C.F.R. part 2635. As a result, the ORD researcher violated both

[8] For the purposes of this report, the cleared version refers of the version of the manuscript approved by ORD management. The published version refers to the final manuscript version published by an outside journal.

federal ethical conduct regulations and EPA policy, and these violations remained undetected by EPA management until September 2023.

As part of our investigation, we reviewed the ORD researcher's other published manuscripts and found that many were developed in collaboration with the researcher's parent, [redacted]. The ORD researcher told us that the collaborating parent reviewed most, if not all, of the researcher's manuscripts [redacted]. At that point, the ORD researcher involved the researcher's minor child as an editor, ultimately listing the child as a coauthor in the published ORD manuscript. The child cited this coauthorship as an accomplishment in college applications.

The ORD researcher reported not believing there were conflicts of interest when collaborating with the parent and child. However, the collaborating parent and the child represent covered relationships, as defined in 5 C.F.R. part 2635. By not avoiding such covered relationships with family members in the performance of official duties, the ORD researcher did not comply with 5 C.F.R. part 2635 or the *Scientific Integrity Policy*'s mandate to ensure impartiality. Furthermore, by facilitating an accomplishment for the child's college applications, the ORD researcher did not ensure that the EPA's scientific work was free from personal motivations, as required by the *Scientific Integrity Policy*. Pursuant to 5 C.F.R. § 2635.502, the ORD researcher should have determined that these matters presented impartiality and conflicts of interest concerns that should have been reported to the deputy ethics official to obtain waivers to participate. However, the deputy ethics official told us that the ORD researcher did not provide the proper ethics disclosures or obtain the proper waivers.

These failures occurred despite the Agency's efforts to ensure that its employees are aware of their ethical obligations and scientific integrity responsibilities. According to the deputy ethics official, the Agency requires all new employees to take ethics training, and all employees in the ORD researcher's branch must also complete annual ethics training. Although the ORD researcher had completed the annual ethics training, which covered such topics as "Misuse of Position" and "Financial Conflicts and Impartiality," the researcher reported being unaware of the requirement to notify the deputy ethics official when working with a family member. The ORD researcher also reported not knowing who the deputy ethics official was for the ORD. Although the ORD researcher claimed ignorance of ethics obligations, it is the responsibility of every federal employee to know and follow ethics rules as laid out in Agency ethics training and the *Standards of Ethical Conduct for Employees of the Executive Branch*.

Not only did the ORD researcher fail to identify and either recuse from or obtain waivers to participate in matters with impartiality concerns, but these failures also remained unchecked by the Agency for several years. The ORD researcher's management did not engage in the level of scrutiny and oversight needed to identify scientific integrity or conflict-of-interest concerns in the researcher's work. For example, management should have detected that the ORD researcher was collaborating with family members, as the coauthors of papers are listed in both the ORD's clearance system and in published manuscripts.

Peer Review

Although the ORD manuscript did undergo the internal Agency peer review process, the ORD researcher did not abide by the EPA's *Peer Review Handbook* guidance to consider and incorporate all peer reviewer comments "where relevant and appropriate." In addition, contrary to *ORD Clearance Policy and Procedures* requirements, the ORD researcher's management did not ensure that all reviewer comments—including comments from the internal peer reviewers about the draft manuscript and comments from another Agency reviewer about the cleared manuscript—were "adequately addressed." Furthermore, we are concerned that the internal peer review process may not be robust enough to facilitate objective and honest feedback.

During the internal peer review process, the ORD manuscript was reviewed by two EPA employees who had expertise in that topic, who were not part of the originating division, and who did not help develop the manuscript. The peer reviewers told us that after they reviewed the manuscript, they had no further communication with the ORD researcher. We found no record of how or whether the internal peer reviewer comments were addressed. The ORD researcher and the researcher's division director told us that there is no requirement to respond to the comments or recommendations made by internal peer reviewers. While the *Peer Review Handbook* states that "the Agency is not obligated to take all recommendations provided by peer reviewers," it also says that "all reviewer comments should be considered and incorporated where relevant and appropriate." In addition, the *ORD Clearance Policy and Procedures* states that the primary author's first-line supervisor is responsible for ensuring that reviewer comments are "adequately addressed."

During our interviews with [redacted] highlighted concerns related to the peer review process in general. One said that peer reviewers typically do not select lower than an "Acceptable with minor revisions" recommendation on the Technical Manuscript Review Form in an effort to avoid future conflict or tension with the author. In addition, one said that although EPA policy may say that a supervisor in the originating office must approve how peer review comments are addressed, in reality supervisors have discretion over whether they oversee that process.

After the ORD manuscript was cleared, the ORD researcher provided it to an EPA [redacted] employee for another independent review. The [redacted] employee reported having "significant concerns" with the manuscript, including that the ORD researcher may not have properly followed preestablished scientific protocols when conducting the research and that the manuscript carried "policy implications." This employee reported expressing these concerns to both the ORD researcher and [redacted] management, wanting it to be clearly known that the manuscript did not have the employee's "stamp of approval." The [redacted] employee told us that the ORD researcher never responded to these concerns.

The ORD researcher's divison director said that the cleared manuscript was provided to the [redacted] as a courtesy and that an independent review of a cleared manuscript is not a normal or required

part of the review and clearance process. As such, the division director said that the ORD researcher was not required to make or accept changes from that review. However, the division director acknowledged that the ORD researcher should have addressed the edits with the branch chief in order to meet the intent of the *Peer Review Handbook*. [redacted] reported being "surprised" that the manuscript was published due to the deficiencies identified by the [redacted] employee.

ORD Management Clearance Process

According to the *Scientific Integrity Policy*, 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." And according to the *ORD Clearance Policy and Procedures,* the ORD clearance process "serves as a final check" that its scientific and technical work products adhere to the highest standards of technical rigor and scientific integrity. Our investigation highlighted that there are possible internal control deficiencies in the ORD clearance process. However, in the initial stages of the process, decisions made about the ORD manuscript precluded a higher level of management review that may have been necessary given the potential policy implications and public interest. Also, the ORD has no requirement that changes to cleared manuscripts be reviewed by management before publication. Finally, the ORD researcher was able to circumvent built-in internal controls in the ORD's clearance system to enter unverified data, and although there is training available on how to use the ORD's clearance system, this training is not required.

At the beginning of the clearance process, the ORD manuscript was determined to not require advanced notification. However, our interviews with EPA scientists suggested that advanced notification may have been appropriate for the manuscript. These scientists indicated that there is a need for the EPA to establish a regulatory testing method for stakeholders, [redacted], to monitor for the [redacted]. As the [redacted] employee indicated after reviewing the cleared manuscript, the ORD manuscript could thus be considered influential in terms of policy, as its analysis and conclusions could impact Agency decisions if and when a testing method for [redacted] is established. In addition, the fact that a non-EPA employee posed questions about the published manuscript at an EPA conference indicates that the manuscript's topic is of interest to the public. However, because it was not designated as one that required advanced notification, the ORD manuscript underwent only two levels of management review before it was cleared: the first-line supervisor and the division director. Had the manuscript undergone a higher level of management review, which serves as an additional internal control to check the quality and implications of high-profile manuscripts, those managers may have paused the manuscript's progression until all concerns were appropriately addressed.

A lack of internal controls at the end of the clearance process allowed the ORD researcher to make unverified changes to the ORD manuscript. Although the *Best Practices for Clearance of Scientific Products at EPA* says that "major changes" to cleared manuscripts *may* need to be reviewed, there is no policy that *requires* changes to cleared manuscripts to go back through the clearance process. This means that ORD management typically does not see cleared manuscripts again until they are published and

that primary authors have broad leeway to independently revise cleared manuscripts. The EPA thus relies on the author and the publishing journal to ensure that any edits made to the cleared manuscript are accurate. The EPA also trusts authors to submit the data documented in the ORD's clearance system at the time of clearance to the journal for publication. The ORD researcher, however, abused this autonomy. For example, after ORD management cleared the ORD manuscript, the researcher made changes to the coauthors listed in the ORD's clearance system. Specifically, the researcher removed one coauthor and added a new coauthor: the researcher's minor child. We found no evidence that an EPA manager cleared the child's involvement in the development of the manuscript or was aware that the child was added as a coauthor.

EPA management was not provided the opportunity to review the post-clearance changes to the ORD manuscript's authors, and the ORD researcher deliberately disregarded safeguards built into the ORD's clearance system. The system requires that an email address be entered for each listed author. Although the email address is not published, it is visible to internal reviewers as part of the manuscript's record and can help verify the legitimacy of the author. However, when the researcher entered the child as an author in the ORD's clearance system, the researcher entered a fraudulent EPA email address. The researcher told the Agency fact finder that [redacted] added the fraudulent email address because the clearance system would not allow the researcher to proceed without an email address and the researcher did not have another one for the child. The ORD researcher told us that using a fraudulent email was a "stupid mistake" and reported not recalling the child's high school email address when inputting the information into the clearance system. Our investigation found, however, that the ORD researcher sent approximately 300 emails from the researcher's EPA email address to the child's high school email address.

The Agency provides training on the ORD's clearance system to its employees. Some training is posted on the clearance system's website and is thus always available. Other training on clearance procedures, including on using the ORD's clearance system, is offered quarterly. However, this training is not mandatory, and the EPA does not retain rosters of attendees.

Ultimately, a lack of adequate internal controls throughout the ORD clearance process enabled a manuscript that had issues of integrity and impartiality and that may be scientifically unsound to be published. According to the [redacted] employee who reviewed the cleared ORD manuscript, because the ORD researcher did not follow preestablished scientific protocols when conducting the research, the Agency's stakeholders may be emboldened to also not follow these protocols. In addition, the ORD researcher's failure to follow these protocols may have resulted in faulty data. These faulty data, if not corrected, may adversely and improperly impact Agency decision-making. Without robust internal controls, the ORD's clearance process may be unable to ensure that its published manuscripts reflect sound science and scientific integrity. As a result, the EPA could suffer embarrassment and a loss of public trust in its research.

Authorship

Three of the [redacted] coauthors of the ORD manuscript did not meet the authorship criteria in the EPA's *Best Practices for Designating Authorship*. In addition, the ORD researcher misrepresented the researcher's child as [redacted] for the EPA, when such a position does not exist. Beyond the conflict-of-interest concerns presented by the covered parent-child relationship, which we discussed earlier, another listed coauthor also served as the quality assurance manager for the ORD manuscript, which means that individual would have been responsible for both contributing to and objectively reviewing the manuscript. At a minimum, this situation presents the appearance of conflict of interest and impartiality. And while there is EPA guidance that outlines the criteria for authorship, ORD staff were not familiar with either the guidance or the criteria, and the EPA does not have policy that specifies who is responsible for reviewing and determining whether listed authors meet the criteria.

In the published ORD manuscript, the ORD researcher and [redacted] of the [redacted] coauthors are listed as EPA employees. In support of the child's designation as coauthor, the published manuscript listed the child as being [redacted] We determined that the child was never vetted by the Agency as [redacted] In fact, the EPA does not have a position titled [redacted] The ORD researcher reported inventing the title of [redacted] for the purpose of the published manuscript.

We also identified concerns about the other [redacted] coauthors listed in the published ORD manuscript. In interviews, two coauthors expressed their belief that they did not meet the Agency's authorship criteria. They told us that they did not review any version of the manuscript, with one saying they were not even aware that the manuscript had been published or that they were listed as a coauthor until we notified them. Even the ORD researcher told us that, in hindsight, only two individuals "would have come close" to meeting the EPA's authorship criteria, with the researcher being one.

The ORD researcher reported being unaware of the EPA's *Best Practices for Designating Authorship*. The ORD researcher's explanation for not knowing about this guidance was being "young and stupid." At the time the ORD manuscript was published, the researcher had over [redacted] years of service with the EPA. Still, other EPA researchers who are in the same ORD branch as the researcher told us that they were also unaware of this guidance until the branch conducted training on authorship requirements. The training was conducted in response to the investigations of the ORD manuscript.

Yet another concern that we identified regarding authorship of the ORD manuscript involves a potential conflict of interest beyond the one presented by the ORD researcher's child. The quality assurance manager for the ORD manuscript is also listed as a coauthor, which, if not a conflict of interest, gives the appearance of one. In an interview, the quality assurance manager described assisting in the analysis of samples for the research included in the published manuscript before serving in a quality assurance capacity. However, the quality assurance manager did not write any of the manuscript, nor did the quality assurance manager provide any editorial revisions. In addition, the quality assurance manager

reported never reviewing the paper in its entirety, despite being responsible for the quality assurance review and ultimately being listed as a coauthor.

The two ORD managers who reviewed and cleared the ORD manuscript said that they did not thoroughly review its authors. Although the EPA's *Best Practices for Designating Authorship* guidance outlines criteria for authorship, we did not identify any guidance or policy that outlines what ORD managers should look for when reviewing a manuscript. We also did not identify any EPA policy, procedure, or guidance that stipulates that ORD managers must or should review whether each author meets the authorship criteria or vet the contributions each listed author made to the manuscript. For example, in the "Responsibilities" section of the *ORD Clearance Policy and Procedures*, verifying the validity of authors is not listed as a responsibility of first-line supervisors or division directors. Because of this lack of oversight, the published ORD manuscript listed at least [redacted] coauthors, including the ORD researcher's minor child, who did not meet the EPA's authorship criteria.

Further, ORD management did not conduct appropriate training to inform staff of the responsibilities and expectations of authorship. As mentioned previously, it was only after issues with the ORD manuscript were brought to the EPA's attention that the ORD researcher's branch offered training on the proper designation of authorship in EPA manuscripts.

Lab Safety, Health, and Environmental Management

During our investigation, we identified an ancillary scientific concern: the ORD researcher brought the researcher's [redacted] minor children, [redacted], into an EPA lab, contrary to safety and health policies. The ORD researcher told us that [redacted] who were under the age of 16 at the time, were brought into the lab on several occasions, and the visitor logs for the facility support this statement. In addition, an EPA supervisor reported discovering one of the children unattended in a laboratory on one occasion.

All EPA labs have safety, health, and environmental management and related policies, plans, and procedures in place that provide guidelines for both visitors and employees. For this particular lab, the chemical hygiene plan states that visitors to laboratories shall be escorted by an EPA employee and that "no one under the age of 16 is allowed in laboratory areas," except during tours and only then if all laboratory work stops during the tour. The ORD researcher thus violated EPA policy on two points: having children under the age of 16 at the lab and leaving at least one child unattended in the lab. The EPA supervisor told us that, after observing the unattended child, the ORD researcher was instructed to remove the child; however, the supervisor never followed up on or documented the incident.

[redacted] The ORD researcher reported speaking to the lab's safety, health, and environmental manager about the child's

presence in the lab and that the manager said the child had to complete the required safety training. The safety, health, and environmental management training policy for this lab requires staff, such as interns, who will work for the EPA for fewer than four months to complete only one safety course: the Chemical Hygiene Plan and Hazardous Waste Management Training. The ORD researcher admitted that the child never completed that training. [redacted] that child was never vetted as or approved to be an EPA intern.

Our investigation also revealed that this situation is not unique to the ORD researcher. Several other EPA employees at the lab disclosed that it was common for employees to bring their children into EPA facilities.

OIG Notification

Finally, we are concerned about the time elapsed from when the Agency was notified of the issues surrounding the ORD manuscript to when the Agency notified the OIG and that, unbeknownst to the OIG, the EPA had already initiated an internal investigation. EPA Order 3120.5, *Policy and Procedures for Addressing Research Misconduct,* requires EPA employees to ***immediately*** report to the OIG any allegation of research misconduct that involves public health or safety being at risk, Agency resources or interests being threatened, circumstances in which research activities should be suspended, reasonable indication of possible violations of civil or criminal law, federal action being required to protect the interests of those involved in an investigation, a research entity's belief that an inquiry or investigation may be made public prematurely, and circumstances in which the research community or public should be informed. Additionally, EPA Manual 6500, *Functions and Activities of the Office of Inspector General*, states, "Each employee is responsible for ***promptly*** reporting indications of wrongdoing or irregularity to the OIG and for cooperating and providing assistance during any audit or investigation" (emphasis added). The Agency, however, did not notify us of the allegations surrounding the ORD manuscript for eight days, during which time it had initiated its own internal investigation.

This lack of timely notification, an issue we have alerted the Agency to before,[9] prevented the OIG from interviewing the subject and witnesses before the internal ORD fact finder. Additionally, the ORD's fact finder completed the internal investigation, and the EPA acted upon the results of that investigation, before we completed our own independent investigation. The Agency suspended the ORD researcher for [redacted]. Our investigation uncovered additional records and relevant information that may have impacted the action the Agency decided to take. Furthermore, the ORD researcher's division director was responsible for determining the action taken in response to the fact finder's investigation. This presents yet another conflict-of-interest concern, as the division director was responsible for the overall quality of the ORD manuscript, in accordance with the *ORD Policies and Procedures Manual.*

[9] EPA Off. of Inspector Gen., Management Implication Report: The EPA Did Not Properly and Timely Disclose Fraud in its Programs and Operations (2024).

In addition to not notifying us immediately of the allegations, the Agency has yet to amend or correct the published ORD manuscript. As a result, the public remains unaware of the manuscript's deficiencies. The public entrusts the EPA to implement its programs in a fair and impartial manner and to base its decision-making on sound science that is free of inappropriate influence. Failure to adhere to ethical and scientific integrity principles could undermine public trust in the EPA.

MEASURES FOR IMPROVEMENT: We are notifying the Agency of the concerns we identified during our investigation so that it may consider:

- Ensuring that the OIG is properly notified immediately of scientific misconduct and research misconduct, including indications of scientific integrity lapses.

- If the OIG undertakes an investigation, refraining from taking disciplinary or other action until after receiving the results of the independent OIG investigation.

- Ensuring that the EPA managers who are responsible for the quality of a manuscript or other work product are not the decision-makers for any actions taken against an employee as the result of a scientific misconduct or research misconduct investigation or issue.

- Ensuring that *Standards of Ethical Conduct for Employees of the Executive Branch*, 5 C.F.R. part 2635, are followed when EPA employees contribute to a manuscript or other work product.

- Requiring that all ORD employees annually certify that they have read and understand the EPA's *Scientific Integrity Policy*, which will help ensure that they are familiar with the policy and understand their requirements as EPA researchers.

- Developing and requiring the use of an internal control by which primary authors clearly identify any internal review comments, including those from peer reviews, management reviews, and other independent reviews, that have not been addressed.

- Incorporating appropriate internal controls into the ORD clearance process to require that major changes to cleared manuscripts be reviewed by management before publication and to carefully ascertain advance notification determinations.

- Modifying the ORD clearance process to require that supervisors review all listed authors and ensure they meet the authorship criteria laid out in the EPA's *Best Practices for Designating Authorship* guidance.

- Providing regular training on the ORD review process, including the ORD clearance process; the ORD's clearance system; and relevant guidance, policies, and procedures, and keeping records of such training and attendance.

- Ensuring the safety of all personnel in an EPA lab by not permitting unauthorized guests to access EPA facilities and implementing procedures for supervisors to document and address violations of the relevant safety, health, and environmental management and related policies, plans, and procedures.

- Providing training on lab safety and regulations, as required by EPA policies and procedures.

- Publicly revising or recalling the published ORD manuscript.

My office is notifying you of this issue so that the Agency may take whatever steps it deems appropriate. If you decide it is appropriate for your office to take or plan to take action to address these matters, the OIG would appreciate notification of that action. Should you have any questions regarding this report, please contact Acting Assistant Inspector General Office of Investigations Nic Evans at [redacted] or evans.nicolas@epa.gov or Special Agent [redacted] at [redacted] or [redacted].

cc: Nicole N. Murley, Acting Inspector General
Greg Sayles, Director, Center for Environmental Solutions and Emergency Response
Francesca Grifo, Scientific Integrity Official

Whistleblower Protection

U.S. Environmental Protection Agency

The whistleblower protection coordinator's role is to educate Agency employees about prohibitions against retaliation for protected disclosures and the rights and remedies against retaliation. For more information, please visit the OIG's whistleblower protection webpage.

Contact us:

Congressional & Media Inquiries: OIG.PublicAffairs@epa.gov

EPA OIG Hotline: OIG.Hotline@epa.gov

Web: epaoig.gov

Follow us:

X: @epaoig

LinkedIn: linkedin.com/company/epa-oig

YouTube: youtube.com/epaoig

Instagram: @epa.ig.on.ig

www.epaoig.gov