Q127
Based on your understanding and experiences, please share any suggestions that you have for improving scientific integrity at EPA.

1 Make the policy visible

2 Senior leaders need more training and must be held accoutable

3

Reach out to the employees at least once a year and make the topic interesting (so we don't just overlook it) - maybe a summary of the results of this survey and what may come out of it for example.

4 I don't necessarily think there is a problem with the science we create. I think the issue is the gap between the science and the policy decisions taken. The policy needs to reflect the science much more closely and clearly.

5

Staff doing the work are not always included in discussions with upper management. We are dependent on the First line of management taking the information up the chain. I have found they do not always understand the details and can always correctly answer the questions. So they get it wrong and upper management makes the wrong decisions based on that first managers lack of understanding.

6 Hire more people.

7 Frequent training of the staff on this.

8 The Scientific Integrity Official at EPA needs more staff to do the work expected of the position.

9 None, highest integrity at EPA.

10 Provide adequate funding and staffing. Provide better site characterizations and better contaminant plume delineation and mapping. Eliminate GIS mapping as a drawback in reports-- provide groups that specialize in GIS, Arcmap, and programs to provide vizualization and mapping of data. The process now falls on each scientist to do their own and can be very time-consuming and limiting based on each individual's level of expertise and experience in mapping. Streamline the process and make EPA a standard-setter in the industry for this aspect of reporting. Do not just rely on expensive contractors for this.

11 Transparency

12 I like the idea of presenting "differing scientific opinions" in documents. This would contribute to "transparency" which could go a long way to improving scientific integrity. Also, what research we do or don't do, and how we present it can be inappropriately influenced. An example is (b) (5) [redacted] despite the fact that there was no scientific justification. Changes in overall research strategy or priorities should be justified scientifically, and if not, we should be required to open and transparent that we are changing our focus due to political preferences (I understand that research focus can be a matter of policy preference and is inherently political, but the shift should be made transparently to the public).

13 Not applicable to my duties.

14 none

[15] Have (b) (6) [redacted] and her staff, respect science.

[16] Where possible, have scientists generate scientific findings without the knowledge of what policy decision or outcome their findings may support or result in. Objective science should not be results oriented or results dependent.

[17] The main issue is time and resources are very low.

[18] EPA needs to rejuvenate our ranks of scientists and engineers. We need to increase the number of technical staff by at least a factor of two. The agency needs to create a culture that values scientific and technical work as the core of the agency and our ability to achieve our mission. It would help if the agency created a career promotional ladder/path for senior scientists and engineers so that promotional opportunities existed besides going into management.

[19] Improvement will be gradual and dependent on the Agency attracting and hiring competent scientists. Without adequate funding, this will prove impossible.

[20] None.

[21] Training especially for political leadership and holding them accountable

[22] There needs to be a more robust presence that is less influenced by changes in political dynamics.

[23] Regular and possibly required scientific integrity training could be helpful

[24] None

[25] none

[26] I think it would be helpful to do a public postmortem on some of the problems that we faced over the past 2 years to see what we can learn from those challenges. I also think it would be helpful to have targeted guidance for non-scientists (e.g., lawyers) about what their role is in scientific integrity and what best practices are.

[27] I think scientific integrity should be at the for front more often. We need to hear or read about you more often.

[28] Trainings, accessibility and visibility of the program.

[29] Invest in assessment and training of staff tailored to their jobs. Help (b) (6) [redacted] understand their limits in making technical decisions. Maintain a culture free from screaming, bullying and abusive emails. Train scientists in the art of the "memo to file" to document their technical opinions.

[30] NONE

[31] Depoliticize the science, more outreach programs to the public, better PR to stakeholders

[32] This is not related to my job function or field.

[33] I do not work on science. I'm a (b) (6) [redacted].

[34] ensure that science is respected, that political appointees who don't believe in science don't have influence over decisions that demand solid, good science. Prevent the interference of political appointees in scientific decisions. I understand that politics will guide what policy decisions that EPA makes; however, the years '17-'20 demonstrated how extreme that influence was and severely damaged EPA's scientific integrity and reputation, shattering trust that we had with communities with the work we do. I can only hope that with this new administration and its respect for science that we can rebuild that trust with communities

[35] More training and voluntary discussions of issues surrounding scientific integrity.

[36] I think lack of knowledge of statistics is the single biggest source of bad science, and we should be doing more to cross-train our researchers on proper statistical techniques and interpretation of data to improve the quality of our products and research practices. In advertent failures are much more common than active decisions to undermine scientific integrity.

37 The best advice I can offer is to enhance the transparency of decisions by our senior Administration officials. I have worked in one (b) (6) [redacted]. To the best of my knowledge, the Regional offices and labs have always maintained the highest level of scientific integrity. I am not aware of any example otherwise. I think support for scientific integrity is primarily an issue with the senior political appointees. Administration leaders have sometimes made policy decisions that have ignored scientific evidence. For example, they have (b) (5) [redacted] or that it's something not to be concerned about by citing to minor studies suggesting this and ignoring the overwhelming evidence otherwise. However, as mentioned, I cannot think of a single example in which scientific integrity was not supported by my Regional office. I have always been fully able to do my job of protecting the environment, adhering to the highest standard of scientific integrity, regardless of the policies chosen by the Administration. Given a "less protective" policy, I can tell management what the available options are that nevertheless do not allow the potential for environmental harm. And I can inform them of any option that could lead to environmental harm -- "We can't do this because X might happen." I have no control over whether the Administration chooses to ignore or undermine science in order to implement a policy that places higher value on economic development than on environmental protection. But this has no impact on the scientific integrity of staff level scientists and engineers, and it has no impact on how we go about performing our duties.

38 Let science speak the truth.

39 None.

40 There needs to be less micromanagement from career and political appointees high up in (b) (6) [redacted], because they rarely have the context for the work and now they have a vested personal interest in being chummy with the program offices, which often do not WANT to strengthen existing or future regulations to make them more consistent with international scientific knowledge.

41 Keep high level SES managers and political appointees accountable for interfering with scientific integrity.

[42] Questionnaires such as this is a great start and could happen every year or every other year. SI starts at the top and having senior leaders at the Agency who are committed to upholding SI principles is key. Unfortunately, that is not always something we have control over. In the previous screen I did not check mandatory training for staff and management, but I think that would be helpful.

[43] N/A

[44] More resources (staff, funding, etc.), appropriate workloads and deadlines and focus on the science rather than pressure from industry and politicians.

[45] It really comes down to leadership. When leadership (usually political appointees) say that they want it done, management falls in line. They find a way to make it OK. There has to be some kind of third party oversight to ensure that scientific integrity is not violated. This third party must be accessible anonymously by staff to report issues. Staff must see that this process results in change or it's not worth the risk to their career and livlihood.

[46] n/a

[47] We need to find a way to keep scientific decisions away from political appointees. As long as science can be influenced by who is in the White house, we will never achieve scientific integrity (or the appearance of it even if staff does their best).

48 (b) (5) [redacted] (b) (6) [redacted] management should promote an environment that is not intimating to staff scientists but open to scientific discussion (staff often feel blacklisted when they are too conservative). Greater efforts should be made to promote professional development. Greater efforts should be made to train/conference with staff by experts other than the (b) (6) [redacted].

49 Individuals' scientific integrity is just fine. The Agency's scientific integrity would be greater if we weren't so risk averse and pressured by politics.

50 when one group of people or "scientists" can muzzle technical analyses by technical staff b/c they don't agree with or have been told to disagree, then you no longer have science ... you're just left with politics. Again, this shit happens regardless of administration.

51 More transparency

52 Transparency, funding and periodic updates on changes in regulations/policies.

53 Having scientific integrity embedded in the foundation and backbone of all the work we do

54 Separating the timelines for policy decisions and scientific research if policy decisions are to change.

55 Some of response to last ranking could comprise "best practices" with training topics and/or guidance issues.

56

Track the internal review of documents and how long they stay on people's desks. If that person has too much work to do, delegate. Scientific material should not be held up because of policy decisions somewhere else in EPA (air, TSCA, water) or controversial site activities.

57 I do not have any suggestions.

58

more outreach on the process of rule development - it crosses administrations we are not impacted by politicals other than priorities

59 N/A

60 Demand TRANSPARENCY of ALL DATA and ALL DECISIONS.

61 Greater articulation and some specific examples of the confusion that science is policy.

62 Demonstration of adherence to scientific integrity is my strongest suggestion to create improvement. Since the 1980's I have seen lack of peer review with replacement by tracking projects in lieu of commitment to scientific integrity. There is less time allowed for project development and scoping based on need to demonstrate accomplishments in a monthly, quarterly and annual fashion as opposed to a defining optimum or even interim results in environmental improvement goal(s). It should be noted when scientific integrity training was last offered in (b) (6) the system did not work and training was not delivered to all staff.

Time to really review and appreciate what the scientific integrity process addresses, and does not address, would be helpful. There are some things I think I know, but have not actually seen written down.