INSPECTOR GENERAL
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Statement of

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for a Hearing on

Examining Federal Efforts to Address PFAS Contamination

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Good morning, Chairman Peters, Ranking Member Portman, and distinguished members of the Committee. Thank you for inviting us to appear before you to discuss the Department of Defense Office of Inspector General's July 22, 2021 report on perfluoroalkyl and polyfluoroalkyl substances, better known as PFAS. Not only am I the Acting Inspector General for the Department of Defense, but I am also the Inspector General for the U.S. Environmental Protection Agency, which is responsible for protecting human health and the environment, including from chemicals such as PFAS. As such, I have unique insight into these issues. In my comments, I will define what PFAS are, explain the EPA's role in addressing PFAS and chemical safety, and highlight deficiencies the EPA OIG has observed preventing the EPA from fulfilling its mission and leading Federal efforts to address PFAS.

I am accompanied by Michael Roark, the DoD Deputy Inspector General for Evaluations, the DoD Office of Inspector General component that conducted the PFAS evaluation at issue. In his testimony, he will provide specific details on the DoD OIG's findings.

Introduction to Per- and Polyfluoroalkyl Substances

Per- and polyfluoroalkyl substances, commonly called PFAS, are long-lasting synthetic chemicals widely used in consumer and industrial products. The EPA estimates that over 4,000 PFAS have been manufactured and used since the 1940s. Some products containing PFAS, such as fire suppressants, are largely limited to the DoD and other heavy industries. But PFAS are also found in a wide range of consumer products, such as fast food containers, microwave popcorn bags, pizza boxes, and candy wrappers. They are even found in personal care products, such as certain shampoos, dental flosses, and cosmetics.

PFAS are so ubiquitous that they are found in our water, soil, air, and food. Because of the widespread use of PFAS and their persistence in the environment, most people in the United States have been exposed to some level of PFAS. This exposure is made worse because PFAS break down very slowly over time, which is why they are commonly called "forever chemicals." According to the EPA, continued exposure above specific levels to certain PFAS may lead to adverse health effects, such as decreased fertility, developmental effects or delays in children, and an increased risk of some cancers.

Challenges to the EPA's Role in Addressing the Risk of PFAS Pollution or Contamination

The EPA's ability to effectively carry out its mission of protecting human health and the environment depends on credible and timely assessments of the risks posed by PFAS, as well as other chemicals and pesticides. In fact, the EPA OIG recently identified *Ensuring the Safe Use of Chemicals* as one of the top management challenges facing the EPA in fiscal year 2022. Our identification is based on, among other things, a significant body of EPA OIG projects. Some of those projects dealt specifically with PFAS, such as our report on the EPA's failure to coordinate compliance monitoring and enforcement activities to reduce risks in the manufacturing of GenX chemicals, which are a type of PFAS. Some others focused on other chemicals of concern, such as our three reports on the EPA's failure to adequately communicate the risk of exposure to ethylene oxide, a chemical associated with elevated cancer risk. And still other projects addressed overarching processes related to chemical safety, such as the Agency's risk assessments to determine which chemicals—and how much of these chemicals—pose threats to human health and the environment.

To give you a sense of the breadth of the issue, let me provide just a few examples of our past findings related to PFAS. In November 2018, the EPA OIG detailed how the EPA's controls

over the land application of biosolids—which are used for agricultural and residential soil fertilization—were incomplete or had weaknesses. While the EPA consistently monitored biosolids for nine regulated pollutants, it lacked the data or risk assessment tools to determine the safety of 352 other pollutants found in biosolids, including many types of PFAS.

In August 2020, the EPA OIG found that the EPA lacked the overall capacity to conduct chemical risk evaluations in compliance with the Toxic Substances Control Act, or TSCA. The 2016 TSCA amendments required the EPA to conduct a first set of ten chemical risk evaluations on existing chemicals, conduct at least 20 self-initiated risk evaluations on "high-priority" substances, and conduct manufacturer-requested risk evaluations for 25 to 50 percent of EPA-initiated risk evaluations. The EPA OIG found that the EPA did not have the internal capacity to conduct even the first set of ten TSCA risk evaluations in a timely manner. Despite the reassignment of up to 19 full-time equivalents to help with those ten evaluations, the EPA still failed to meet the deadline.

Along the same lines, the EPA's drinking water health advisories have not kept pace with emerging chemicals of concern. Health advisories are important to communicate the risks posed by chemicals, including PFAS; however, we found that out of 212 health advisories issued by the EPA, at least 75 percent were issued prior to 2000, with at least 50 percent being issued prior to 1990. And although the EPA issued health advisories in May 2016 for perfluorooctanesulfonic acid, which is commonly known as PFOS or commercially as Scotchguard, and perfluorooctanoic acid, which is also known as PFOA and used in the manufacturing of Teflon, these discontinued PFAS are only two of the 27 PFAS found in drinking water and of the estimated 4,000 PFAS manufactured since 1940.

Scientific Integrity Issues

Perhaps even more concerning than these deficiencies is a corresponding uptick in allegations regarding a loss of scientific integrity. Allegations of the loss of scientific integrity have undermined the EPA's ability to effectively assess the risk of chemicals and take appropriate action. For example, in May 2021, the EPA OIG reported that senior officials improperly interceded in the dicamba registration process, changing or omitting key information in scientific documents. The Ninth Circuit ultimately vacated these registrations, finding that the EPA had substantially understated some risks and failed to acknowledge others entirely. As another example, senior scientific officials recently publicized concerns of political interference in the EPA's toxicity assessment of perfluorobutane sulfonic acid, or PFBS, which is a type of PFAS. These are serious allegations that, if true, would further undermine the public's confidence in the EPA's assessments. For this reason, the EPA OIG is currently evaluating whether the EPA's Office of Research and Development and Office of Chemical Safety and Pollution Prevention followed applicable policies and procedures in the development and publication of the January 19, 2021 PFBS toxicity assessment.

Regulatory Consistency

Another area where the EPA OIG has found challenges to the EPA's ability to properly address the safety of chemicals like PFAS is its adherence to its established rule-making procedures. For example, in March 2021, the EPA OIG reported on the wide variation in the EPA's adherence to rulemaking guidance. One PFAS action—*Addition of Certain Per- and Polyfluoroalkyl Substances to the Toxic Release Inventory*—was among the least adherent, adhering to little over half of the EPA's rulemaking guidance. And in October, in response to a congressional request, the EPA OIG initiated an evaluation to examine the changes made to a

PFAS rule—the *Long-Chain Perfluoroalkyl Carboxylate and Perfluoroalkyl Sulfonate Chemical Substances Significant New Use Rule*—from the time the EPA administrator signed it on June 22, 2020, to its publication in the Federal Register on July 27, 2020.

Communicating Risks Posed by PFAS

Of course, none of the EPA's work matters if it is not communicated clearly and expeditiously to the public, and particularly to those communities at risk. Just two months ago, in September, the EPA OIG reported that the EPA's communication related to PFAS and other emerging chemicals was limited. For example, in 2016, the EPA found emerging contaminants, including PFAS, at the Coakley Superfund site in New Hampshire. The Agency subsequently issued the November 2016 health advisory I mentioned previously, but it did not update the Coakley site website to reflect the health advisory until five years later. Without timely and accurate communication about contaminants, community members may not know how to manage their risks.

Recent Developments in the EPA's Assessment of the Risks Associated with PFAS

The EPA OIG's body of work on chemical safety and scientific integrity issues has drawn a lot of attention. From the start of my tenure as an inspector general in 2020, I have expressed my unwavering commitment to support whistleblowers and protected whistleblower activities. The EPA OIG has significantly stepped up its outreach to whistleblowers, and we are seeing dividends with a significant number of whistleblower complaints. For example, starting this summer, several EPA scientists, through Public Employees for Environmental Responsibility, or PEER, shared allegations of harassment, retaliation, and research misconduct with members of Congress, the EPA OIG, and the public. These whistleblowers alleged that

senior leadership inappropriately changed or removed the human health hazards for several chemicals—including one PFAS—from their chemical assessments. The EPA OIG is examining some of these allegations in a project to determine the extent to which the EPA is using and complying with applicable standards during its review and approval of new chemicals under TSCA. And the EPA OIG continues to review other aspects of these allegations for further oversight.

The EPA has been called upon to lead governmentwide efforts to combat PFAS pollution. To this end, the EPA has published its PFAS Roadmap, which will guide its actions over the next three years. This PFAS Roadmap requires consistent enforcement, scientific integrity, and effective risk communication. It also requires effective communication to governmental partners, including the DoD during its efforts to address PFAS pollution at its installations and National Guard locations.

We are here today, as my colleague Michael Roark at DoD OIG will testify, because the EPA and the DoD did not adequately identify, mitigate, and remediate exposure to PFAS contamination.

Background

As Mr. O'Donnell identified earlier, I am the Deputy Inspector General for Evaluations, and I am here today to discuss the specific details of the Department of Defense Office of Inspector General's findings and recommendations related to the DoD's actions to control contaminant effects from PFAS.

In a July 25, 2019, letter, 31 Members of Congress requested that the DoD Office of Inspector General undertake a review of the DoD's use of PFAS at military sites around the

country and the exposure of both military personnel and civilians living near military sites. In response to the congressional letter, the DoD Office of Inspector General announced an evaluation on February 3, 2020.

The objective of our evaluation was to determine the extent that the DoD has taken steps to:

- identify, mitigate, and remediate contamination from PFAS at DoD installations; and
- identify populations exposed to PFAS at DoD installations and inform them of the associated health and safety concerns.

PFAS are fire-resistant, man-made chemicals that repel oil, grease, and water. Products that contain PFAS can be found in almost every U.S. home and business; however, some products containing PFAS are largely limited to the DoD and other heavy industries. One such product is Aqueous Film Forming Foam (AFFF), which the DoD began using in the 1970s as a fire suppressant to fight dangerous petroleum-based fires.

The DoD, the Military Departments, and the Defense Logistics Agency have issued policies and established programs and organizations that require their officials to, among other things, manage Environment, Safety, and Occupational Health risks caused by their activities; perform environmental cleanup; control health hazards associated with exposures to chemical, physical, and biological hazards in DoD workplaces; and perform medical surveillance to identify illness trends and annual occupational medical examinations for firefighters.

Additionally, DoD officials required proactive evaluations and risk management for "emerging chemicals of environmental concern."[1] We referred to "emerging chemicals of

[1] DoD Instruction (DoDI) 4715.18, "Emerging Chemicals (ECs) of Environmental Concern," September 4, 2019. DoD officials initiated the EC Program in 2006, established the EC Program with the first publication of DoDI 4715.18 in 2009, and updated DoDI 4715.18 in 2019.

environmental concern" as emerging chemicals (ECs) and the program as the EC Program throughout our report. Furthermore, in 2019 and 2020, Congress included PFAS-related requirements in the National Defense Authorization Act, including the requirement that the Secretary of Defense "provide blood testing to determine and document potential exposure to… PFAS for each firefighter of the [DoD] during their annual physical exam" beginning in FY 2021.

DoD Efforts to Identify, Mitigate, and Remediate Contaminant Effects of PFAS-Containing AFFF, and Improvements Needed in the DoD's Emerging Chemicals Program

DoD officials have taken steps to identify, mitigate, and remediate contaminant effects from PFAS-containing AFFF at DoD installations, including restricting nonessential use of AFFF and initiating Federal cleanup response actions. However, DoD Instruction 4715.18 requires DoD officials to proactively mitigate contaminant effects from ECs at DoD installations when risk management actions are endorsed by the Emerging Chemicals of Concern Governance Council. EC Program officials included two types of PFAS, Perfluorooctane Sulfonic Acid (PFOS) and Perfluorooctanoic Acid (PFOA), on the EC Watch List and commissioned impact assessment reports.

EC Program officials issued a risk alert in 2011 that described risks to DoD areas of concern, including risks to human health and the environment. However, the 2011 risk alert was not a risk management action because it was not endorsed by the Emerging Chemicals of Concern Governance Council. Therefore, DoD officials were not required to plan, program, and budget for any actions in response to the 2011 risk alert.

EC Program officials did not require proactive risk management actions for PFAS-containing AFFF until 2016. This occurred because DoD Instruction 4715.18 does not include

objective requirements for EC Program officials to use when determining when to initiate risk management actions or to elevate an EC from the EC Watch List to the EC Action List. As a result, people and the environment may have been exposed to preventable risks from PFAS-containing AFFF.

Additionally, DoD Instruction 4715.18 requires DoD officials to apply an enterprise-wide approach to mitigate contaminant effects from ECs. An enterprise-wide approach would address all sources of potential EC exposure caused by DoD activities and the impacts of that exposure to DoD areas of concern. EC Program officials identified PFOS and PFOA as ECs and commissioned impact assessment reports. However, DoD officials have not proactively identified, mitigated, and remediated contaminant effects from PFAS-containing materials other than AFFF at DoD installations. Therefore, DoD officials did not apply an enterprise-wide approach to mitigate the contaminant effects of all sources of potential PFAS exposure caused by DoD activities, as required by DoD Instruction 4715.18. This occurred because DoD officials were focused on AFFF, a major source of potential PFAS exposure, and not on all sources of potential PFAS exposure caused by DoD activities. As a result, people and the environment may continue to be exposed to preventable risks from other PFAS-containing materials.

DoD Efforts to Identify Populations Exposed to PFAS, and DoD Firefighter Blood Testing

DoD officials have taken steps to identify populations exposed to PFAS at DoD installations and inform them of the associated health and safety concerns. These steps include identifying sources of water containing PFAS and providing PFAS health-related information to military medical treatment facilities.

DoD Instruction 6055.05 requires DoD Components to implement risk management steps, including evaluating occupational and environmental health risk management.[2] These risk management steps include tracking, trending, and analyzing clinical examination results related to workplace exposures.

DoD officials developed a plan to implement PFAS blood testing for DoD firefighters by FY 2021, as required by the FY 2020 National Defense Authorization Act. However, DoD officials do not plan to track, trend, and analyze the results of PFAS blood tests conducted on DoD firefighters at a DoD-wide level, as required by DoD Instruction 6055.05. This occurred because DoD officials were focused on the immediate collection of the PFAS blood test results to address the FY 2020 National Defense Authorization Act requirement to test the blood of DoD firefighters and not on the analysis of the blood test results at a DoD-wide level. As a result, the DoD is missing an opportunity to capture comprehensive PFAS exposure data for DoD firefighters to be used for risk management, including future studies to assess significant long-term health effects relating to PFAS.

Recommendations

In our report, we made five recommendations to address the deficiencies we identified. We recommended that the Under Secretary of Defense for Acquisition and Sustainment revise DoD Instruction 4715.18 to include requirements for Emerging Chemical Program officials to initiate risk management actions based on measurable risks to the DoD as early as possible, and to inform DoD users of emerging chemicals of their status. We also recommended that the Deputy Assistant Secretary of Defense for Environment and Energy Resilience complete the

[2] DoD Instruction 6055.05, "Occupational and Environmental Health (OEH)," November 11, 2008, incorporating Change 2, August 31, 2018.

Emerging Chemical Process for potential PFAS exposure caused by DoD activities from PFAS-containing materials other than AFFF.

Regarding PFAS blood testing of DoD firefighters, we recommended that the Assistant Secretary of Defense for Readiness develop a plan to track, trend, and analyze PFAS blood test results for DoD firefighters at a DoD-wide level, in accordance with DoD Instruction 6055.05.

As of November 19, 2021, the recommendations are resolved, but remain open.

This concludes our statement and we would be happy to answer any questions you have.