# 1. DOD recently testified that DOD has a growing \$29.5 billion backlog of environmental restoration projects, yet the DOD requested less funding in the FY 2022 Budget Request for environmental restoration. If the cleanup backlog is growing, why is DOD requesting less funding? (*From Scott Faber, EWG*)

**Response:** Specific to PFAS, the Department has requested the funding required to continue DoD's investigation and cleanup of its PFAS releases. DoD has fully funded the initial assessments at 698 installations and needs to complete them before moving to the next step in the cleanup process, when additional funding may be needed. As DoD moves through the cleanup process, the Department will incorporate the required funding into future budget requests.

# 2. PFAS has been confirmed at more than 300 DOD installations. How many of these installations are in the remedial investigation stage? How many are in the feasibility study stage? When do you expect feasibility studies to be completed for installations where PFAS has been detected in the soil or groundwater? When you expect to have a remedy in place for these installations? (From Scott Faber, EWG)

**Response:** We currently have 88 remedial investigations (RIs) underway and plan to have a total of 146 RIs underway by the end of the fiscal year. [Breakdown of number: Of the 66 installations where PA/SIs have been completed, 24 have already initiated the RI phase. In addition, 64 RIs have been initiated, where we are just finishing up the PA/SI, but had enough information to award the RI. That is a total of 88 as of March 31, 2021. And, we expect to begin an additional 58 by the end of the fiscal year.]

As I mentioned in the brief, CERCLA takes time and each site has different characteristics that affect the timeframe of the cleanup (e.g., type of soil, depth to groundwater, amount of PFAS in the groundwater). At this point I do not have an estimate for when all DoD PFAS Feasibility Studies will be completed, or a long-term remedy in place, as those timelines are driven by what we find during the RI phase.

## **3.** How is the DOD prioritizing the cleanup of PFAS at DOD installations? Which installations are "high," which are "medium," and which are "low" priority for clean up? *(From Scott Faber, EWG)*

**Response:** DoD follows the same process for PFAS sites as it does for all the other sites in its cleanup program. It is called the Relative Risk Site Evaluation (RRSE). It is a risk-based process to assist DoD in prioritizing the highest risk sites first for starting the Remedial Investigation. The Military Departments evaluate each cleanup site, to include PFAS sites, and generate a result of "high", "medium", and "low".

4. DoD has pledged to meet state drinking water standards for tap water served on base in those states where state officials have set their own drinking water standards for PFAS. But, several states have set or will soon set groundwater cleanup standards for PFAS as well. When conducting an environmental restoration project, will DOD also meet state groundwater cleanup standards? (From Scott Faber, EWG)

**Response:** DoD follows the federal cleanup law, the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). Once a need for cleanup action has been determined based on CERCLA's nationwide risk assessment process, Federal and State cleanup standards are evaluated as required by CERCLA and its regulations to see if they will be incorporated as final cleanup levels at the specific site. This process is called the Applicable or Relevant and Appropriate Requirements (ARARs) process. This process applies to both State drinking water and groundwater cleanup standards.

5. In those states that have set their own drinking water standards for PFAS, will DOD provide bottled water, water filters, or access to public water when well water contaminated by PFAS pollution from a DOD installation exceeds the state drinking water standard but remains below the EPA LHA of 70 ppt? (e.g. between a state standard of 20 ppt and the LHA of 70 ppt). (From Scott Faber, EWG)

**Response:** DoD follows the Comprehensive Environmental Response Compensation and Liability Act (CERCLA), which is a Federal clean-up law. Under the CERCLA process, risk-based toxicity information is used nationwide to determine if a response is required. CERCLA also requires State standards be evaluated to determine if they should be used in setting final cleanup levels.

**6.** What is the Department's plan for phasing out the use of PFAS in firefighting foam? *(From Arlene Blum, Geren Science Policy)* 

**Response:** We are aggressively pursuing PFAS-free firefighting alternatives, however, currently no commercially available technology meets DoD's performance and safety standards.

In the meantime, DoD has been switching to newer formulations of AFFF, which contain significantly lower levels of PFOS and PFOA, for use on its installations. DoD also limits its use of AFFF to emergencies at its installations, unless the AFFF can be completely contained during testing or training.

7. What does the Department think about the idea of having two MilSpecs for firefighting foam--one for shipboard uses and another for less critical land-based uses where the performance of fluorine-free foams is sufficient? (From Arlene Blum, Geren Science Policy)

**Response:** We are evaluating that as an option as we continue our research into a PFAS-free firefighting alternative.

### 8. What is the Department's plan for disposing of PFAS-containing firefighting foam?

(From Arlene Blum, Geren Science Policy)

### **Response:**

EPA issued interim PFAS destruction and disposal guidance for public comment on December 22, 2020 (85 Federal Register 83554). The public comment period ended in February, and EPA will consider these comments in a revised version of this guidance based on the public comments. While DoD does not have the capacity to safely store all PFAS materials on-site, the interim EPA guidance identified a hierarchy of PFAS disposal options which based on currently available research and information may be effective in the destruction or disposal of PFAS and PFAS-containing materials, including landfill, thermal treatment, and underground injection technologies. DoD will issue a PFAS disposal implementation memo to the DoD Components once it receives and reviews the revised guidance from EPA.

## **9.** Is the Department acting on the provision in the 2020 NDAA that requires the phase out of PFAS in meals-ready-to-eat packaging? (From Arlene Blum, Geren Science Policy)

**Response:** Consistent with section 329 of the Fiscal Year 2020 NDAA, the Department is working with industry to ensure that PFAS is not knowingly used in food-contact substances for MREs.

## **10.** Does the Department see other opportunities for using procurement rules to reduce the amount of PFAS-containing products that it purchases, including in furnishings and building products? (From Arlene Blum, Geren Science Policy)

**Response:** The FY2021 NDAA includes a provision restricting DoD from purchasing certain consumer items that contain PFOS and PFOA, such non-stick cookware, beginning April 1, 2023. The Department is evaluating options for implementing this provision.

11. The Navy recently reported finding 7,950,000 parts per trillion of PFOS and 17,800 ppt of PFOA in the subsoil at the Naval Research Laboratory - Chesapeake Bay Detachment. Are these the highest numbers on any U.S. military installation worldwide? Yes or No, please. *(From Pat Elder, Military Poisons)* 

Response: No.

12. Can you please address the following with respect to the Outlying Landing Field in Coupeville, WA. Why is there no requirement for a NPDES and Storm Water permit for the OLF? Using the EPA definitions of "industrial facilities" and saying that there is no equipment maintenance at the OLF as a transportation facility, therefore, no permit required, means that the existing documented contamination remains uncontained plus any future use of the firefighting foam would immediately further contaminate the groundwater. (From Mary Juetten, Reader Bay Maintenance Association)

**Response**: Maintenance activities as defined in 40 CFR 122 do not occur at the OLF in Coupeville, WA , and ongoing activities at OLF Coupeville do not require a NPDES permit. Since training with AFFF is not permitted in accordance with DoD policy, any future releases would be due to emergency actions and, as such, would be exempt from permit coverage. OLF Coupeville is investigating and taking response actions under the federal cleanup law (CERCLA) to appropriately address PFAS.

13. Can you please address the following with respect to the Outlying Landing Field in Coupeville, WA. Is there a plan to clean up the PFAS at Ault Field and the OLF? A plan to put in reclamation measures for both facilities, including preventative measures? (From (From Mary Juetten, Reader Bay Maintenance Association)

**Response**: CERCLA response actions are being implemented for drinking water wells near Ault Field and OLF Coupeville, which are impacted from Navy PFAS releases. During the implementation period, affected residents continue to receive alternative water. The Navy has initiated Remedial Investigations for confirmed release areas at Ault Field and OLF Coupeville. These investigations will provide information regarding the nature and extend of PFAS impacts and evaluate human health risk. Based on these findings, remedial action alternatives will be developed and evaluated consistent with the requirements of CERCLA.

As part of these ongoing investigations at Ault Field, the Navy is verifying if PFAS impacted groundwater is entering the storm sewer through pipe joints and cracks. The Navy has conducted initial storm sewer repairs to minimize release of PFAS. Additional investigative and repair work is being planned.

## **14.** How will the DoD provide medical monitoring for those exposed and now have high **PFAS blood levels?** (From Mark Favors, Fountain Valley Clean Water Coalition)

**Response:** DoD does not provide medical monitoring for the general public. According to the Centers for Disease Control & Prevention, 98% of the U.S. population has some level of PFAS in their blood. There are currently no health-based screening levels for specific PFAS that clinicians can compare to concentrations measured in blood samples. Blood testing does not provide information to pinpoint a health problem nor will it provide information for treatment, or distinguish among the sources of PFAS. As a result, interpretation of measured PFAS concentrations in individuals is limited in its use. The Agency for Toxic Substances and Disease Registry (ATSDR) continues to study this issue. Please see the ATSDR website for further information: https://www.atsdr.cdc.gov/pfas/health-effects/blood-testing.html

15. Over the last five years, the Department of Defense has sent more than 20 million gallons of PFAS-containing firefighting foam to incinerators across the country. However, there is no evidence that incineration can safely destroy PFAS. DOD itself has warned that PFAS incineration is "likely" to result in PFAS releases or other toxic byproducts, and last

December the Environmental Protection Agency found that the effects of incineration had not been adequately studied and advised against near-term incineration until such studies were complete and alternate disposal technologies had been evaluated. Yet DOD continues to incinerate PFAS, placing communities around the incinerators at risk. Will the DOD agree to halt PFAS incineration and adopt safer destruction methods? (From Mark Favors, Fountain Valley Clean Water Coalition)

#### **Response:**

EPA issued interim PFAS destruction and disposal guidance for public comment on December 22, 2020 (85 Federal Register 83554). The public comment period ended in February, and EPA will consider these comments in a revised version of this guidance. While DoD does not have the capacity to safely store all PFAS materials on-site, the interim EPA guidance identified a hierarchy of PFAS disposal options which based on currently available research and information may be effective in the destruction or disposal of PFAS and PFAS-containing materials, including landfill, thermal treatment, and underground injection technologies. DoD will issue a PFAS disposal implementation memo to the DoD Components once it receives and reviews the revised guidance from EPA.

In the meantime, DoD is researching alternatives to incineration of PFAS, and notes that in March 2021 the New York State Dept of Environmental Conservation announced that it's study found no clearly discernible pattern of air deposition that could be traced to Norlite's PFAS incineration operations, and do not indicate a human health risk from PFAS incineration.

16. We are particularly concerned about extremely large levels of PFAS compounds at the Moore Army Airfield that have been found in the soils where the Fort Devens Fire Department did extensive training and may have also emptied tanks. Levels of 42,908ng/L have been found here. The Nashua River, part of the Scenic and Wild program, is approximately 200 FEET from this known hot spot. These PFAS are moving with the groundwater, entering the river. Can an immediate response action be taken here to prevent the spread of this hot spot downriver, where the Nashua River is used for irrigation and as a drinking water source for other towns and cities? (From Laurie Nehring, PACE)

**Response**: Currently, the Army is conducting a Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) Remedial Investigation and Feasibility Study (RI/FS) at the former Fort Devens. The RI will define the nature and extent of PFAS released into the environment and includes a risk assessment to evaluate risk. If the Army's CERCLA response actions identify an immediate need to address risk caused by PFAS released as a result of past Army operations, the Army will follow CERCLA to conduct an action. Additionally, if the RI concludes that an Army release of PFAS poses an unacceptable risk to human health, the Army will evaluate the feasibility of remedial alternatives to address the unacceptable risk. The Army continues to coordinate RI phase activities with the United States Environmental Protection Agency (EPA), Massachusetts Department of Environmental Protection, and community stakeholders. In addition, the Army regularly shares its investigatory results at Restoration Advisory Board (RAB) meetings and via the Devens PFAS website (https://www.nae.usace.army.mil/Missions/Projects-Topics/Former-Fort-Devens-Environmental-Cleanup/).

17. Ayer, MA is part of the Multi-Site Human Health Study for ATSDR. We need to determine when PFAS first entered the town of Ayer's municipal drinking water. Through our historical research, we believe that historical purchase order records for firefighting foam would greatly assist us in determining use and quantities over time. Can you assist us in locating purchase order records for AFFF, or any other pertinent purchasing information, such as what company/product was used over time? (From (From Laurie Nehring, PACE))

**Response:** The Army conducted a CERCLA Preliminary Assessment and Site Inspection (PA/SI) from 2016 to 2018, which included a historical records search as well as interviews with current and former Fire Chiefs. The Army was unable to locate historical records with pertinent purchasing information. Generally, purchasing records are retained for less than five years. Additionally, as documented in the PA/SI, the fire station and associated responsibilities were transferred to the local redevelopment authority (LRA) in 1996, and according to interviews, National Foam has been purchased by the LRA since that time.

18. Will DoD only concern itself with the PFAS that are 'regulated' - that is, those for which MCLs (or similar) exist? And, of course, if this is the case, will DoD abide by the state requirements? We believe that focusing on only the regulated compounds grossly underestimates the extent to which PFAS affects people and the environment, particularly in view of the use of "precursors", but also where PFAS alternatives have replaced the regulated compounds. Ignoring the broader set of compounds might also result in mitigation strategies that fail to remove significant amounts of PFAS from the environment. (Laurie Nehring, PACE)

**Response:** Currently there are several challenges to addressing the entire group of PFAS. First of all, it is a large group of chemicals with over 600 PFAS currently used in commerce. Only a small number of PFAS have multiple, in-depth toxicity studies that have been peer-reviewed, and their human health and ecological effects may differ by individual PFAS. Secondly, there are EPA-approved detection methodologies for only about 20 PFAS (although a draft methodology was recently released for up to 40 PFAS), and PFAS can be in many products in such small quantities that they are not even identified. The federal cleanup law is based on taking action to address scientifically supportable risks to human health and the environment. DoD looks to EPA and other public health regulatory agencies to issue toxicity information on individual PFAS, as well as establish regulatory standards for chemicals.

19. Is it DoD's understanding that AFFF are the only substantial PFAS-containing materials that we should be concerned about? The powered machinery employed by all DoD branches uses "high performance fluids" (hydraulics, lubricants, coolants, insulators),

### the inevitable leakage of which, summed over decades and the many devices, may be relevant to the PFAS issue? (Laurie Nehring, PACE)

**Response:** The Department understands that PFAS can be found in many consumer and industrial items. While DoD has focused on PFAS releases from its use of AFFF, DoD investigates the site-specific sources of PFAS in its cleanup investigations. DoD also comprehensively addresses PFAS migrating off a military installation, regardless of which specific on-base location is the source.

## **20.** How will DoD respond to the various guidelines being established by different states, and will they adhere to those in planning for their remediation? (*Laurie Nehring, PACE*)

**Response:** DoD follows CERCLA. Once a need for cleanup action has been determined based on CERCLA's nationwide risk assessment process, Federal and State cleanup standards are evaluated as required by CERCLA and its regulations to see if they will be incorporated as final cleanup levels to be attained at the specific site. This process is called the Applicable or Relevant and Appropriate Requirements (ARARs) process. This process applies to both State drinking water and groundwater cleanup standards.

## **21.** How will DoD support water supplies in various states that are being required to meet stricter standards set by state agencies? (*Laurie Nehring, PACE*)

**Response:** All public drinking water systems in the U.S., including DoD where it supplies drinking water on its military installations, must comply with State and/or federal drinking water standards. DoD is investigating its off-base migration of PFAS under CERCLA, and will share its monitoring data and engage with community stakeholders, including impacted local drinking water suppliers, as it implements the cleanup process.

## 22. Are there any plans for health studies on military personnel (esp firefighters) who aren't eligible for the Multi-Site study through ATSDR? (Laurie Nehring, PACE)

**Response:** Not at this time. The Department is working with the National Institute for Occupational Safety and Health to refine the evaluation of occupational exposures to PFAS, such as military firefighters exposed to Aqueous Film Forming Foam and turnout gear that may contain PFAS.

# 23. How will DoD be educating the medical professionals to understand and recognize illnesses that may be the result of PFAS contamination? How can the public be better informed, and be able to choose products that do not contain any PFAS chemicals? (Laurie Nehring, PACE)

**Response:** The Department has several outreach and education practices in place to inform Service members about PFAS, including:

-General fact sheets

-Military medical treatment facilities and healthcare provider guidance documents to inform all patients with health concerns;

-Military Department and Defense Health Agency websites accessible to Service members that provide PFAS specific health information and frequently asked questions, including references to Agency for Toxic Substances and Disease Registry (ATSDR) guidance.

While DoD must rely on manufacturers voluntarily disclosing if products contain PFAS, EPA is reviewing substitutes for perfluorooctanoic acid (PFOA), perfluorooctane sulfonic acid (PFOS) and other long-chain per- and polyfluoroalkyl substances (PFASs) for new chemicals under EPA's New Chemicals Program. EPA's review of alternatives to PFASs has been ongoing since 2000. Through September 2015, hundreds of alternatives of various types have been received and reviewed by EPA. See https://www.epa.gov/assessing-and-managing-chemicals-under-tsca/new-chemicals-program-review-alternatives-pfoa-and

## 24. How are the 'creators', DuPont and 3M involved (or not) in all of this important work? Are they being held liable? *(Laurie Nehring, PACE)*

**Response:** The manufacturers of AFFF are not involved in DoD actions to address PFAS. We note that AFFF manufacturers are currently in multi-district litigation to resolve their liability.

25. DOD representatives have told us consistently over the years that there is not sufficient funding from Congress to address DOD PFAS contamination. However, Congress has consistently appropriated more PFAS funding than DOD has requested in its budget proposals. Why do DOD representatives blame Congress for inadequate funding for PFAS when Congress gives DOD more than DOD requests? Why isn't DOD submitting budget proposals that realistically address the problem? (From Anthony Spaniola, NPCC)

**Response:** A few years ago, when the Department began taking quick action to address PFAS in drinking water and began the initial assessments, the Department needed more funding than what had been planned for. However, over the last few years DoD has been able to request the funding necessary to continue to address our PFAS releases, including the FY2022 budget request.

The DoD annual budget request is based on a number of factors, including cleanup schedules and how much work would be ready to award in a fiscal year. DoD has fully funded the initial assessments at 698 installations and needs to complete them before moving to the next step in the cleanup process, when additional funding may be needed. As DoD moves through the cleanup process, the Department will incorporate the required funding into future budget requests.

26. We have recently learned that DOD is proposing substantial cuts to its overall environmental remediation budget. With a huge backlog of environmental liabilities, what is the justification for the proposed cuts? (From Anthony Spaniola, NPCC)

**Response:** Specific to PFAS, the Department has requested the funding required to continue DoD's investigation and cleanup of its PFAS releases.

The DoD annual budget request is based on a number of factors, including cleanup schedules, and how much work would be ready to award in a fiscal year. DoD has fully funded the initial assessments at 698 installations and needs to complete them before moving to the next step in the cleanup process, when additional funding may be needed. As DoD moves through the cleanup process, the Department will incorporate the required funding into future budget requests.

27. Why will DoD not follow state MCLs for PFAS? In my state of New Hampshire, they established MCLs for 4 different PFAS for drinking water based in science and to protect the most vulnerable populations (ie breastfeeding infants). DoD will not provide clean water to private wells in New Hampshire where PFAS levels are above NH MCLs for PFAS, but below the EPAs LHAs. And New Hampshire is not unique as many states have taken more proactive measures in establishing enforceable standards for PFAS in the absence of EPA leadership on PFAS to protect their residents. DoD should not be able to disregard these state standards. *(From Andrea Amico, Testing for Pease (NPCC))* 

**Response:** All public drinking water systems in the U.S., including DoD where it supplies drinking water on its military installations, must comply with State and/or federal drinking water standards under the Safe Drinking Water Act. Additionally, DoD follows CERCLA, and investigates the off-base migration of PFAS, including at private drinking water wells. Once a need for cleanup action has been determined based on CERCLA's nationwide risk assessment process, Federal and State cleanup standards are evaluated as required by CERCLA and its regulations to see if they will be incorporated as final cleanup levels to be attained at the specific site. This process is called the Applicable or Relevant and Appropriate Requirements (ARARs) process. This process applies to both State drinking water and groundwater cleanup standards, and State drinking water standards can be used to set final cleanup levels at private wells under this ARARs process.

# 28. Why has DoD not established a detailed timeline of testing, remediation, and cleanup of hundreds of DoD sites across the nation? Many communities are in the dark about what and when DoD plans to do to clean up PFAS in their communities. (From Andrea Amico, Testing for Pease (NPCC))

**Response:** The CERCLA process takes time and is influenced by many site specific factors. However, as I mentioned, if there is exposure to PFOS and PFOA in drinking water above the EPA HA, DoD takes immediate action to address that exposure. It will take much longer to address PFAS in the groundwater. We are in the initial PA/SI phase at 698 installations and as we complete the initial investigations, we will have a better idea of future cleanup schedules.

Having said that, we can do a better job with our transparency regarding our cleanup progress. We are currently updating our PFAS website to include installation specific information. 29. Why is the DoD either refusing to clean up legacy PFAS contamination or doing it irresponsibly? Our local DOD site in Horsham, PA took 3,500 tons of highly contaminated PFAS soil from the fire training area and moved it just 25 miles down the road to a landfill that sits - 1 mile from the Schuylkill River- where it now sits threatening the drinking water source for all of Philadelphia. PFAS laden bio solids are also being spread on PA farms as fertilizer putting PFAS right back into our bodies through our food supply. What are you doing to address these types of irresponsible attempts at clean up? (From Joanne Stanton, Buxmont Coalition for Safer Water (NPCC))

**Response**: DoD follows the federal cleanup law (CERCLA) and is investigating and addressing 698 military installations and Guard facilities that may have used or released PFAS. We are fulfilling our PFAS cleanup responsibilities, and have obligated over \$1 billion dollars to this effort. As part of our cleanups, material is generated that has to be disposed—whether it is soils or filters from treating drinking water. DoD only sends PFAS materials to permitted treatment or disposal facilities with stringent pollution controls and environmental regulator oversight. As to your site-specific question, the Air National Guard (ANG) has not conducted any soil removal actions at Horsham Air Guard Station (Biddle Air National Guard Base (ANGB)). The Navy completed its removal action at the former Naval Air Station Joint Reserve Base (NASJRB) Willow Grove following United States Environmental Protection Agency, Region 3, and Pennsylvania Department of Environmental Protection review and approval. The soil was safely transported and disposed of at a fully licensed landfill facility approved to receive PFAS impacted soil, in accordance with federal and state regulations."

**30.** Why has the DoD not honored its lease agreement with the City of Westfield? Part G of page five of the lease agreement between the DOD and the city of Westfield says in part that the government shall be responsible for remediating to the state or federal promulgated standard whichever is more stringent concerning any soil or water contamination resulting from their activities on the leased premises. So, I'm wondering whether or not that lease would be standard across all DOD sites? You know, is it boilerplate? And the state of Massachusetts in particular has promulgated the ground water standard to protect aquifers and drinking water -- how is the DoD not required to meet those standards if the lease agreements say that they do? (From Kristen Mello, Director and Cofounder of WRAFT: Westfield Residents Advocating For Themselves)

**Response**: The Air National Guard (ANG) is complying with its lease agreement with the City of Westfield by following the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), the federal cleanup law applicable to DoD cleanup and specifically referenced in paragraph 11.g. of the lease. As part of the CERCLA process, the ANG will evaluate whether more stringent state standards are an "applicable or relevant and appropriate requirement" (ARAR) that will be incorporated as final cleanup levels to be attained by the remedial action.

## **31.** What will the DoD do about the permanent contamination of an irreplaceable drinking water resource for the City of Westfield? (From Kristen Mello, Director and Cofounder of WRAFT: Westfield Residents Advocating For Themselves)

**Response**: In December 2016, the Massachusetts Department of Environmental Protection (MassDEP) reported to ANG that drinking water samples collected from City of Westfield municipal wells seven (7) and eight (8) exceeded the Environmental Protection Agency (EPA) lifetime Health Advisory (HA) levels of 70 parts per trillion (ppt) for perfluorooctane sulfonate (PFOS) or perfluorooctanoic acid (PFOA). The City of Westfield subsequently took both municipal wells off-line. Because these PFOS/PFOA concentrations are attributable to ANG mission-related activities, the Department of Air Force (DAF) and City of Westfield entered into an agreement to pay the City of Westfield \$1,350,917.26 for the installation of a PFOS/PFOA treatment system on City of Westfield drinking water .

## **32.** What will the DoD do about the decades long, extensive contamination of the natural resources and bodies of over 41,000 people in the City of Westfield? (From Kristen Mello, Director and Cofounder of WRAFT: Westfield Residents Advocating For Themselves)

**Response**: DoD and the National Guard follow the federal cleanup law, CERCLA to conduct PFAS-cleanup actions. DoD's priority is to quickly address PFOS and/or PFOA in drinking water above EPA's lifetime Health Advisory (HA) levels, where DoD is the known source. No one is drinking water, whether on or off-base, with PFOS and/or PFOA above EPA's HA of 70 parts per trillion, where DoD or the National Guard is the known source. The ANG has completed the initial CERCLA investigations at Barnes ANG Base, addressed off-base drinking water impacted by ANG activities, and is continuing with the long-term CERCLA remedial investigation process.

# **33.** Why have PFAS contamination victims not received even ONE apology for the DoD related decades long, knowing, toxic contamination of our bodies and natural resources? (From Kristen Mello, Director and Cofounder of WRAFT: Westfield Residents Advocating For Themselves)

**Response**: The Department remains committed to the health and safety of our Service Members, their families, the DoD Civilian Workforce, and the communities in which the DoD serves. We share your concerns about potential PFOS/PFOA impacts and we are proactively addressing drinking water supplies connected to and affected by our installations. DoD is evaluating nearly 700 military installations and National Guard locations for PFAS use or potential release, and has obligated over \$1 billion dollars to address PFAS under CERCLA. DoD looks to EPA and other public health regulatory agencies to issue toxicity information on individual PFAS, as well as establish regulatory standards. Currently, PFAS remain as unregulated substances, and the scientific understanding of human health effects continues to develop.

## 34. What specifically are the differences between a Restoration Advisory Committee (like for Stewart ANGB), and a Restoration Advisory Board (like the one forming for Barnes

**ANGB)?** (From Kristen Mello, Director and Cofounder of WRAFT: Westfield Residents Advocating For Themselves)

**Response**: Title 32 Code of Federal Regulations Part 202 requires each installation to establish a Restoration Advisory Board (RAB) where there is sufficient and sustained community interest to address environmental restoration activities under the Defense Environmental Restoration Program (DERP) at DoD installations. For environmental restoration activities not covered under DERP, a Restoration Advisory Committee (RAC) is developed. The RAB and the RAC serve the same purpose, which is to communicate restoration activities where there is sufficient and sustained community interest. The ANG anticipates that Barnes ANGB PFAS sites will be eligible for DERP inclusion under Section 316 of the Fiscal Year 2020 National Defense Authorization Act, which will allow for a RAB to be established in place of a RAC. In March 2021, Stewart ANGB PFAS sites were authorized for DERP inclusion. This enabled Stewart ANGB to convert the RAC status to a RAB.

**35.** What is the chemical composition of the PFAS polluted, "treated" water from MCAS Futenma that DoD is currently negotiating with the Japanese government to discharge into Okinawa Prefecture and Ginowan City? (From Kristen Mello, Director and Cofounder of WRAFT: Westfield Residents Advocating For Themselves)

**Response:** At MCAS Futenma, water from AFFF containment discharge tanks, which contains water mixed with AFFF that potentially contained PFOA and PFOS, has been treated through an ion exchange process. The treatment process resulted in waste water containing a combined concentration level of PFOA and PFOS at 2.7 ng/L, which is below the current Japanese advisory level for drinking water and United States Forces, Japan policy guidelines for waste water discharge of 50 ng/L. Approximately 17K gallons of treated water was released in to the local sanitary sewer system.

**36.** What level of responsibility is DoD taking for their contaminated sites overseas? Is it the same as in the U.S.? Does it vary based on region and/or foreign relations? Be specific. (From Kristen Mello, Director and Cofounder of WRAFT: Westfield Residents Advocating For Themselves)

**Response:** The laws that govern DoD's cleanup overseas are not the same as the U.S. and vary based on country specific agreements. Several DoD PFAS policies, such as drinking water testing, are applied overseas.

**37.** What is the chemical composition of AFFF currently in use by the DoD? (No, not the MSDS sheets or manufacturer's information. I am asking for the actual chemical composition.) (From Kristen Mello, Director and Cofounder of WRAFT: Westfield Residents Advocating For Themselves)

**Response:** DoD purchases AFFF from multiple vendors whose products have been qualified using Military Specification (MILSPEC) standards. For those products that have been qualified for use in DoD, we have the relevant SDS information that is made publicly available by the manufacturers. Under section 8(a)(7) of the Toxic Substances Control Act (15 USC 2607), EPA is proposing regulations that will require PFAS manufacturers to report certain information, including the chemical identity and the molecular structure.

**38.** What is the current cleanup & reclamation protocol for AFFF discharges on any DoD site? (From Kristen Mello, Director and Cofounder of WRAFT: Westfield Residents Advocating For Themselves)

**Response:** DoD treats the use or release of AFFF on our installations as a spill and follows existing spill response plans and procedures to contain and recover the AFFF to the extent practicable.

**39.** Does the DoD treat every PFAS contaminated site equally? How does PFAS investigation/mitigation/remediation vary among sites? How does the time/money/effort spent vary across time, geography, political district, economic/class divisions, BRAC vs Active bases, and environmental justice regions? What factors that Community members can control affect DoD action? Please be specific. (From Kristen Mello, Director and Cofounder of WRAFT: Westfield Residents Advocating For Themselves)

**Response:** While each site is different based on site specific conditions (e.g., levels of PFOS, depth to groundwater), DoD follows the same risk-based process nationwide for every site in the DoD cleanup program. DoD follows the CERCLA process and DoD's implementing policy, the Defense Environmental Restoration Program Manual (available through google). This cleanup process does not vary based on demographics such as economic status.

Prior to making cleanup decisions, DoD coordinates with environmental regulators, and provides an opportunity for public comment. In addition, DoD also has restoration advisory boards, known as RABs, where DoD shares information about ongoing cleanups at an installation and where community members have the opportunity to provide input.

40. On what basis did the U.S. EPA adopt the safe threshold for PFAS @ 75 PPT and can that threshold be reconsidered and lowered for small island ecosystem? Shouldn't this threshold be lowered as evidence mounts on the increased toxicity of PFAS? (From Hope Cristobal, Northern Guam Soil & Water Conservation District)

**Response:** We recommend you ask this question of EPA, and note that EPA published information explaining the lifetime Health Advisory levels for PFOS and PFOA under the Safe Drinking Water Act at <u>www.epa</u>.ground-water-and-drinking-water/drinking-water-health-advisories-pfoa-and-pfos.

## **41.** What is DoD doing to clean up PFAS in municipal wells adjacent to closed military bases like the old NAS Agana airbase in Guam? (From Hope Cristobal, Northern Guam Soil & Water Conservation District)

**Response:** Where potential DoD PFAS uses or releases were identified that could impact drinking water sources, the DoD has sampled drinking water wells on and adjacent to closed military bases, such as former NAS Agana. In locations where the property has been transferred to a new owner who has also used and potentially released PFAS, the DoD works with the property owner to identify what cleanup actions may be needed and by whom.

## **42.** What alternative measures or solutions have DoD engaged in place of PFAS? (From Hope Cristobal, Northern Guam Soil & Water Conservation District)

**Response:** We are aggressively pursuing PFAS-free firefighting alternatives, however, currently no commercially available technology meets DoD's performance and safety standards.

In the meantime, DoD has been switching to newer formulations of AFFF, which contain significantly lower levels of PFOS and PFOA, for use on its installations. DoD also limits its use of AFFF to emergencies at its installations, unless the AFFF can be completely contained during testing or training.

## **43.** We would like to obtain any and all data related to PFAS and any of its forms from inception to date directly from DoD. How do we access this information from you? (From Hope Cristobal, Northern Guam Soil & Water Conservation District)

**Response:** DoD does not have information on all PFAS uses and any of its forms. DoD can provide information on PFAS sampling conducted on and nearby military installations and Guard facilities. We are currently updating our PFAS website to include installation-specific water sampling information.

# 44. If PFAS is a forever chemical, how is it forever cleaned once a municipal well is contaminated? Shouldn't DoD bear the responsibility and accountability for this clean-up? For the drilling of other wells to serve the local community? (From Hope Cristobal, Northern Guam Soil & Water Conservation District)

**Response:** DoD follows CERCLA and takes action to address PFOS and PFOA in drinking water above EPA's lifetime health advisory level, where DoD is the known source of PFAS.

**45.** Can DoD provide consistent and current follow-up alerts on contaminated municipal wells adjacent to, or, inside military bases in Guam? (From Hope Cristobal, Northern Guam Soil & Water Conservation District)

**Response:** Throughout the cleanup process, DoD works in concert with regulatory agencies and communities, and strives to share information in an open and transparent manner. When elevated levels of PFOS and PFOA are detected above the U.S. EPA lifetime health advisory levels and DoD is the known source, DoD uses a proactive outreach strategy to promptly notify potentially affected community members. These include hosting public meetings, working with state and local environmental and health officials, and media alerts. We are also currently updating our PFAS website to include all installation-specific water sampling information.

### **46.** In what ways can DoD assist the communities affected by highly contaminated municipal wells? (From Hope Cristobal, Northern Guam Soil & Water Conservation District

**Response:** DoD follows CERCLA and takes action to address PFOS and PFOA in drinking water above EPA's lifetime health advisory (HA) level, where DoD is the known source of PFAS. DoD works with communities to provide alternative water and water treatment when the PFOS and PFOA in drinking water is above the EPA HA and directly attributable to DoD activities. DoD can also enter into funding agreements with municipal water suppliers to assist DoD in carrying out these cleanup actions.