

EXAMINING PFAS CHEMICALS AND THEIR RISKS

HEARING

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SUBCOMMITTEE ON ENVIRONMENT
OF THE
COMMITTEE ON OVERSIGHT
AND REFORM
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* The Toxicology Profile of Perfluoroalkyls; submitted by Rep. Ocasio-Cortez.

EXAMINING PFAS CHEMICALS AND THEIR RISKS

Tuesday, March 6, 2019

HOUSE OF REPRESENTATIVES
COMMITTEE ON OVERSIGHT AND REFORM
Washington, D.C.

The subcommittee met, pursuant to notice, at 10:06 a.m., in room 2154, Rayburn House Office Building, Hon. Harley Rouda (chairman of the subcommittee) presiding.

Present: Representatives Rouda, Hill, Tlaib, Krishnamoorthi, Ocasio-Cortez, Comer, Armstrong, and Jordan.

Also present: Representatives Khanna, Kildee, and Fitzpatrick.

Mr. ROUDA. Good morning. The subcommittee will come to order. Without objection, the chair is authorized to declare a recess of the committee at any time.

This hearing is entitled, "Examining PFAS Chemicals and Their Risks." I now recognize myself for five minutes to give an opening statement.

Today we will hold the first hearing of the Committee on Oversight and Reform, Subcommittee on Environment. Our country is at a crossroads. In fact, our planet is at a crossroads. The overwhelming evidence clearly shows climate change and environmental damage caused by human kind is no longer open to debate, nor are the short-term and long-term consequences if we fail to take immediate action.

For America, it is time to lead by example, just as we have repeatedly done throughout our cherished history. America must unleash its strength, innovation, and commitment to take on these threats. For our children, our grandchildren, and generations to come, I ask, I hope and pray that our elected leaders will stand together in unison to win this fight. I'm looking forward to working with Ranking Member Comer, as well as the impressive members of the subcommittee, as a bipartisan force to meet this responsibility.

This morning, the subcommittee will call attention to the issue of perfluoroalkyl and polyfluoroalkyl substances, a class of man-made chemicals often referred to as PFAS chemicals. These chemicals are toxic and poisonous. PFAS chemicals are known as forever chemicals. They do not dissolve naturally. So they just accumulate, not only in the environment, but also in the human body.

The information available is sufficiently alarming to trigger immediate action from this administration. PFAS chemicals can lead to serious, adverse health outcomes in humans, including low fer-

tility, birth defects, suppression of the immune system, thyroid disease, and cancer.

PFAS chemicals are everywhere. They can be found in goods that we use every day—nonstick cookware, waterproof clothing, takeout containers, just to name a few.

PFAS chemicals have also infected our water supplies of those who risk their lives for our country—our active servicemembers and our veterans—as well as the water supplies of communities around military bases. DOD's long history of using these chemicals has led to serious water contamination issues in and around military bases. In fact, according to the DOD, 401 of the Department's military installations have known of potential releases of PFAS chemicals.

We should all be angry that those who are willing to pay the ultimate price for our country have to worry about exposure to toxic chemicals. We know that Seal Beach, a military community in my district, is one of many that has been affected.

Two of our witnesses today, my colleagues, Representative Kildee of Michigan and Representative Fitzpatrick of Pennsylvania, helped create the bipartisan congressional task force on PFAS to advocate for communities around the country whose drinking water has been contaminated by PFAS, and I want to thank them for their efforts on this issue. Representatives Kildee and Fitzpatrick will share with us the stories of their constituents who have been exposed to these chemicals and express to us the urgency of the Federal Government to act now to protect Americans from these toxic chemicals.

We also have here today Dave Ross from the Environmental Protection Agency, Maureen Sullivan from the Department of Defense.

The EPA has the authority to regulate PFAS chemicals, and as we sit here today, it has yet to do so. In 2016, the EPA did issue a nonbinding health advisory for two of the most toxic types of PFAS chemicals, PFOS and PFOA, stating that the concentration of these two chemicals in drinking water above 70 parts per trillion could be hazardous to human health.

However, last year, the Center for Disease Control and Prevention recommended that exposure limits be set 10 and 6.7 times lower, respectively, from the EPA's suggested thresholds. Last month, the EPA issued a PFAS Action Plan, announcing that the agency would consider—consider—regulating PFAS chemicals, with no indication of when the process might actually be completed.

DOD has taken some steps to reduce exposure to PFAS chemicals in and around military installations and to clean up contamination. And private companies have made efforts to phaseout PFAS chemicals in their production of consumer goods. But it is not enough, and we have run out of time.

DOD has stated that any Federal effort to contain the spread of PFAS must be led by the EPA. But to put it charitably, it is unclear why the DOD feels justified in passing the buck to the EPA.

DOD must do everything in its power to minimize exposure to these chemicals in military communities, particularly in light of evidence suggesting DOD's awareness of the toxicity of PFAS chemicals since the early 1980's.

And although this hearing is focused mostly on PFAS contamination around military bases, we cannot and must not ignore the role of large corporations like 3M and DuPont, whose knowledge of how harmful these chemicals are dates back to the 1970's.

We're holding this hearing to understand what has gone wrong, why the executive branch isn't taking more serious action to address the PFAS crisis, to ensure that the Federal Government is transparent about contaminated sites so families can protect themselves and their children, and what Federal agencies, Congress, and the industry can do to minimize exposure to PFAS.

In attendance today are Americans who grew up in and around military bases who are suffering due to their exposure to these toxic chemicals. Hope Grosse, who grew up next to the Naval Air Warfare Center in Warminster, Pennsylvania, was first diagnosed with Stage 4 cancer at the age of 25, just a few months after her father died of cancer at the age of 52.

We also have people in attendance here today whose family members are suffering due to their exposure to these toxic chemicals. Mark Favors is a U.S. Army veteran who had 16 family members—16 family members—diagnosed with cancer, all of whom lived next to the Peterson Air Force Base in Fountain, Colorado. Several of those family members are also veterans.

We also have other veterans, members of military families, and Americans who have gotten sick from drinking water around industrial sites in the hearing room today. The subcommittee thanks each and every one of you for attending today. We want to know what you have experienced.

These Americans, their families, and their communities can no longer wait for the Federal Government to act.

The chair now recognizes the ranking member, Mr. Comer of Kentucky, for five minutes for an opening statement.

[Prepared statement of Mr. Rouda is available at: <https://docs.house.gov/Committee/Calendar/ByEvent.aspx?EventID=109020>.]

Mr. COMER. Thank you, Mr. Chairman, and thank you all for joining us today for the first hearing of the Subcommittee on the Environment. I look forward to serving as ranking member of the subcommittee in the 116th Congress. I hope to conduct oversight of our Federal policies and programs within the subcommittee's jurisdiction to make sure our Federal agencies are serving our constituents effectively and efficiently. I am eager to work together to implement commonsense, reasonable solutions to the challenges facing our country.

We need to ensure access to reliable and affordable sources of energy that have proven capable of meeting our country's needs. Our Federal policies must facilitate responsible use and development of our valuable natural resources. Our businesses back home need a regulatory climate that affords them an opportunity to succeed without unreasonable burdens and without being stifled by unnecessary costs.

I understand the importance of safeguarding our environment, and vested with my ranking membership role on this subcommittee, I look forward to examining Federal policies that have impacted and will impact our Nation's important natural resources.

In Kentucky's First District, lakes and rivers and the fish and wildlife found throughout them are a crucial part of our recreational and tourism economy. Additionally, farmers and other contributors to Kentucky's vibrant agriculture industry depend on access to clean soil and water. As a farmer myself, I understand firsthand the importance of ensuring clean soil and water for this livelihood, which is absolutely critical to the well-being of our citizens, our food supply, and many other industries.

I look forward to hearing more about our Federal agencies—about how our Federal agencies are working together to protect our environment and public health.

Today we have convened to learn more about a group of synthetic chemicals referred to as PFAS, as they are found in a number of consumer products and very persistent in the environment, according to the U.S. Environmental Protection Agency. Most people have been exposed to PFAS in their lifetime.

While this is a very large group of chemicals, most attention is focused on two of the more widely studied chemicals in the family: PFOA and PFOS. These two chemicals are no longer manufactured in the United States. However, as they have been associated with certain adverse health effects, concerns about their presence in the environment and drinking water persist.

Last month, the EPA released its PFAS Action Plan. According to then Acting Administrator Andrew Wheeler, this plan is, quote, the most comprehensive cross-agency plan to address an emerging chemical of concern ever undertaken, unquote, by the agency.

Today we will learn more about this plan and the tools that the EPA currently has at its disposal to address contamination. In particular, I hope we can take a look at how the EPA can work with communities and water systems where contamination may be present.

As firefighting foam used by the Department of Defense is another potential source for introducing PFOA and PFOS into the environment, I look forward to getting an update from the Department on their efforts to identify potentially contaminated sites, ensure clean drinking water on their installations, and work with surrounding communities concerned about the impact of the Department's activities on their drinking water and environment.

While the EPA's action plan outlines a number of ongoing long-term actions, the Department of Defense previously indicated they had been working to support efforts to develop firefighting foams that do not contain PFOS or PFOA. Our conversation needs to include a discussion of a current cleanup strategy and any remediation activities that should be taking place now.

Potential drinking water contamination is frightening for any community. As such, we need to learn more about what the EPA is doing to effectively communicate with states and localities and provide information to the general public about these substances and which areas might be affected.

I thank all of our panelists for joining us today. I look forward to working with my colleagues, Representatives Fitzpatrick and Kildee, on this issue.

Thank you, Mr. Chairman, and I yield back.

[Prepared statement of Mr. Comer is available at:<https://docs.house.gov/Committee/Calendar/ByEvent.aspx?EventID=109020>.]

Mr. ROUDA. Thank you, Ranking Member Comer.

Now I want to welcome our colleagues, Congressmen Kildee from Michigan and Fitzpatrick from Pennsylvania, and thank them for testifying in today's hearing. This subcommittee commends your efforts of working across the aisle to advocate the health of all Americans.

At the conclusion of your statements, without objection, your written statements will be made a part of the hearing record. And also without objection, after your testimony, Congressmen Kildee and Fitzpatrick will be permitted to join us on the dais and question the witnesses.

The microphones are sensitive, so please speak directly into them. Representative Kildee, you may begin.

STATEMENT OF THE HON. DANIEL T. KILDEE, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF MICHIGAN

Mr. KILDEE. Thank you, Chairman Rouda and Ranking Member Comer, for inviting me to speak here today and for your leadership on this issue addressing PFAS chemicals, which is a public health crisis impacting literally hundreds of communities across this country.

PFAS are a family of man-made chemicals that have been used for decades on military bases and in consumer products. These chemicals are very effective at being fire-, grease-, and water-resistant and have been used in a wide range of products, including firefighting foam, as was stated, Teflon, food packaging, clothing. And although they are effective, studies have shown that PFAS chemicals pose significant health issues in people, including cancer, thyroid disease, pregnancy complications.

There are two primary sources of PFAS chemicals. The first includes industrial sites where consumer products are made. The second, which I will focus my testimony on today, is in the use of PFAS in firefighting foam at military installations across the country.

I represent Oscoda, Michigan, a small, rural community. It's home to the former Wurtsmith Air Force Base. At one time, Wurtsmith was home to part of the Strategic Air Command B-52 fleet. And in fact, I remember as a kid traveling to that part of what is now my district to see those planes come and go. Now, unfortunately, according to the GAO, Wurtsmith is one of those 401 military sites identified as having known of potential release of PFAS after decades of use of firefighting foam by the military.

Veterans who worked at Wurtsmith were certainly exposed to PFAS, but nearby Oscoda residents were also affected, since PFAS chemicals used on the base have leached into the nearby groundwater and private drinking water wells.

Despite the Defense Department knowing about this PFAS chemical contamination at Wurtsmith since 2012, the military has failed to act quickly enough to stop contamination coming from the

former air force base. As a result, PFAS continues to leach into the ground and surface water in Oscoda even today.

Oscoda is just one of many communities across the country dealing with this public health crisis. Across America, residents, veterans, and families are increasingly fearful of exposure to PFAS chemicals. Each week—I'm sure Congressman Fitzpatrick shares this with me—each week, Members of Congress from around the country tell me about their constituents who want greater action to protect public health from these dangerous chemicals.

It's my view that the Defense Department in particular has so far failed to act with the required urgency to address this growing public health and environmental crisis. Congress and the Defense Department have to work together to do more to address PFAS chemical contamination, especially in those communities that surround current and former military bases.

Last year, Congress did appropriate nearly \$150 million to clean up PFAS. Unfortunately, this represents only a fraction of the resources that will be needed to clean up hundreds of PFAS-contaminated sites, and yet the Defense Department has not requested additional funds.

According to the GAO, of the 401 sites the military identified as having PFAS chemicals, the Defense Department has only acted at 32 of those to clean up contamination, less than 10 percent of the identified sites. Clearly, more has to be done, and there must be greater urgency.

So I believe we have to take the following steps to begin to properly address PFAS chemical contamination around the country. First, we need to stop putting new PFAS chemicals into our environment. On military bases and airports around the country, firefighting foam containing PFAS is still regularly used for training exercises. One way we can significantly decrease PFAS from being introduced into the environment is to limit the amount of new releases of chemicals, especially for training exercises, until we find an effective alternative to firefighting foam containing PFAS.

Next, we need to more fully understand the scope of this problem. I introduced legislation—bipartisan legislation—with Congressman Jack Bergman, along with Senator Debbie Stabenow, to conduct a study to determine the scope of PFAS chemical contamination across the country. Unless we know the true scope of contamination, we are not in a position to appropriately respond and expedite cleanup.

And, of course, we have to focus on cleanup. This month, the EPA took a first step by releasing its long awaited PFAS Action Plan, which says that the EPA will eventually regulate PFOA and PFOS, two types of PFAS as hazardous substances.

By recognizing these chemicals as hazardous substances, the EPA can then require polluters to clean up the contamination that they cause. And so while this is a start, I have to admit, I was quite disappointed to see the plan not specify a timeline to begin taking meaningful action on cleanup or establishing a national health standard for PFAS in drinking water. Working with my colleague, Congressman Fitzpatrick, I've been pushing the EPA to commit to a specific timeline for regulating these dangerous chemicals.

Finally, and perhaps most importantly, we need to take care of those veterans and families that have already been exposed to PFAS chemicals, helping them get the healthcare and resources that they certainly deserve. Last Congress, I introduced the VET PFAS Act which would provide healthcare and disability benefits to any servicemember with health conditions caused by PFAS chemicals as already identified by past health studies, and I plan on reintroducing this bill soon.

I'm also pleased that in 2017, Congress passed legislation, that I supported, to conduct a new first-of-its-kind health study on PFAS chemicals, which will give the public a much greater understanding of the health risks associated with PFAS exposure. This ongoing study will help make the case that we need to do more to ensure that all people exposed to PFAS chemicals get the healthcare and resources they need.

In this Congress, I worked with Congressman Fitzpatrick to establish this bipartisan PFAS task force, where Republicans and Democrats—yes, Republicans and Democrats—are working together on an aggressive, urgent action plan on PFAS. This task force now has more than 30 members on both sides of the aisle from all over the country.

The dangers and prevalence of PFAS cannot be understated. While some argue that the science has not evolved enough on this issue or that the problem is too costly to clean up, I simply do not accept those arguments. Inaction will not make this public health crisis go away. Instead, it will only continue to compound the scale and the cost of the cleanup in the future.

In closing, the administration and Congress must work together to fully address PFAS contamination and ensure that Americans exposed to these chemicals, including our veterans and families and people who live near these sites, have the resources they need. Our constituents deserve nothing less.

Thank you, Mr. Chairman. I yield back.

[Prepared statement of Mr. Kildee is available at: <https://docs.house.gov/Committee/Calendar/ByEvent.aspx?EventID=109020>.]

Mr. ROUDA. Thank you, Representative Kildee.
Representative FITZPATRICK.

STATEMENT OF THE HON. BRIAN K. FITZPATRICK, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF PENNSYLVANIA

Mr. FITZPATRICK. Thank you, Mr. Chairman. Thank you to the ranking member and to the subcommittee for your time this morning. My name is Brian Fitzpatrick, representing Pennsylvania's First congressional District.

For several years now, I've worked to address contamination in our drinking water by toxic PFAS chemicals because I believe, as does my friend and colleague, Dan Kildee, that these chemicals represent one of the most widespread public health crises we as a Nation currently face.

I want to thank the committee once again for holding this hearing and exploring actions that can be taken to protect our Nation's drinking water supply from these toxic chemicals. And I also want

to thank the committee for inviting us here today to explore the negative effects that PFAS chemicals have on the people across many districts across this country.

Mr. Chairman, nationally, 1.3 percent of our drinking water contains more than the EPA's current lifetime health advisory of 70 parts per trillion combined PFOA and PFOS. However, toxicological profiles of these chemicals released by the Agency for Toxic Substances and Disease Registry suggests that there are harmful levels up to 10 times lower than this lifetime health advisory level, which would mean that tens of millions of more Americans than we previously thought are drinking water with harmful levels of these chemicals.

In 2017, I introduced legislation that was passed into law as an amendment to the National Defense Authorization Act, which required the Department of Defense to carry out a nationwide five-year human health effects study of these chemicals. While that study remains underway, there currently exists a broad enough body of research to justify regulating these chemicals as hazardous substances.

From exposure data collected internally by major PFAS manufacturers 3M and DuPont, to the massive eight-year study involving over 30,000 participants in the Ohio River Valley, human exposure to PFAS has been linked to the following negative effects: negative effects on developing baby in its mother's womb, and children, including possible changes in growth, learning, and behavior; decreased fertility and interference with the body's natural hormones; increased cholesterol levels; ulcerative colitis; thyroid disease; testicular cancer; kidney cancer; and pregnancy-induced hypertension. There is more than enough research to know that we—to know that these chemicals are harmful at far lower levels than the EPA is currently suggesting.

Some of the highest concentrations of PFAS in drinking water have been found in the district both that myself and Representative Kildee represent. This water contamination is primarily associated with decades long use of aqueous film-forming foam, or AFFF, firefighting foams, on or around military installations across the country. AFFF firefighting foams are designed to suppress certain classes of fires. Unfortunately, the chemicals that make AFFF so effective at extinguishing fires are also toxic PFAS chemicals that are extremely persistent both in the environment and within the human body.

A perfect example of how my constituents were impacted by this issue is West Rockhill Township. In 1986, a team of firefighters from the former Naval Air Station Willow Grove and the Naval Air Development Center Warminster used the AFFF spray trucks to assist fighting a massive tire fire. The tire fire burned for 21 hours before it was finally brought under control.

However, Mr. Chairman, over 30 years later, the water supply for many households in this vicinity tests at some of highest levels of PFOA and PFOS in the entire Nation. The Pennsylvania Department of Environmental Protection first started sending notices to affected households in 2016. That means that for over 30 years, my constituents were drinking water and bathing their children in

water poisoned by these chemicals with no idea of the harm that they were being exposed to, through no fault of their own.

Regulating PFAS effectively and responsibly will not be easy. It is essential that we implement the regulatory steps necessary to eliminate any health risk associated with these chemicals in our drinking water. That is a priority.

However, there is a very real risk associated with overregulating chemicals. Setting MCLs, maximum contaminant levels, through the Safe Drinking Water Act, lower than the necessary to ensure safety of our drinking water, would expose thousands of municipal water authorities to cost-prohibitive compliance requirements that would yield no benefit to the communities they serve.

These compliance costs, which could total tens of billions of dollars, would be covered by loans that would ultimately end up getting paid off through increased rates charged to their customers, many of whom were never exposed to any health risks from PFAS.

It is my firm belief that the framework we have in place to regulate these chemicals can work, if implemented the right way. And it is our constitutional duty as Members of Congress to commit to the oversight necessary to ensure that it does. That is the primary intent of the congressional PFAS Task Force, which I organized with my friend and colleague, Dan Kildee of Michigan.

The EPA must designate PFOA and PFOS as hazardous substances under the SuperFund Act, and moreover, they must establish MCLs under the Safe Drinking Water Act. With these two regulatory actions, our constituents will be given the protection they need after so many years of inaction.

I want to again thank the committee for their time and consideration, and we look forward to answering any questions the committee has.

I yield back.

[Prepared statement of Mr. Fitzpatrick is available at:<https://docs.house.gov/Committee/Calendar/ByEvent.aspx?EventID=109020>]

Mr. ROUDA. Thank you, Representatives Fitzpatrick and Kildee. Really appreciate you taking the time to come here, and, more importantly, working in a bipartisan fashion to address this very important issue. At this time, we'd like to invite you to join us on the dais.

And if the next panel of witnesses will come forward to the witness table.

Today we have the honorable Dave Ross, assistant administrator from the EPA's Office of Water; and Maureen Sullivan, the Deputy Assistant Secretary of Defense for Environment.

Mr. Ross has been working on water issues for both state government and the private sector for more than 20 years. Ms. Sullivan has over 20 years of experience working on environmental issues for the Department of Defense.

If the witnesses would please rise, I will begin by swearing you in.

Do you swear or affirm that the testimony you're about to give is the truth, the whole truth, and nothing but the truth, so help you God?

Mr. ROUDA. Let the record show—please be seated. Let the record show that the witnesses answered in the affirmative.

The microphones are sensitive, so please speak directly into them. Without objection, your witness statements will be a part of the record.

And with that, Mr. Ross, you are now recognized to give an oral presentation of your testimony.

STATEMENT OF DAVE ROSS, ASSISTANT ADMINISTRATOR FOR THE OFFICE OF WATER, U.S. ENVIRONMENTAL PROTECTION AGENCY

Mr. ROSS. Good morning, Chairman Rouda, Ranking Member Comer, and members of the subcommittee. I am Dave Ross, the assistant administrator for EPA's Office of Water. Thank you for the opportunity to testify today. More importantly, thank you for your interest in PFAS and what we can collectively do to address the growing public health concern associated with the release of these chemicals into the environment.

Since my first day on the job, I have been advised by our dedicated career professionals and scientists on all aspects of the emerging PFAS problem, from understanding the potential adverse health effects to the fate and transport in the environment, to what we know and don't know about the identification, treatment, and monitoring of these substances. EPA scientists and technical staff have been amazing and Administrator Wheeler and I greatly appreciate their expertise and counsel.

As we've heard already today, PFAS are a class of synthetic chemicals that have been widely used around the globe since the 1940's because of their stain-resistant, waterproof, and nonstick properties. We use them when we floss our teeth, we use them when we hike in the rain, and we use them to protect public health and safety. They are very effective, for example, in fighting fires.

Despite their everyday use, the body of science necessary to fully understand and regulate these chemicals is not yet as robust as it needs to be. Recognizing that, EPA is using and developing cutting-edge research and moving forward with regulatory mechanisms designed to protect human health and the environment.

EPA's commitments on these fronts are outlined in the agency's PFAS Action Plan, which was released on February 14. The action plan was authored by a crew of professionals, and the recommended actions are a product of their expertise and counsel.

The action plan was also informed by extensive stakeholder engagement that the agency formally initiated last year at our national leadership summit. EPA held listening sessions in multiple communities across the country and reviewed approximately 120,000 written comments.

Despite what is commonly reported in the press, the views on how to address PFAS are diverse and sometimes at odds. The action plan commits EPA to take important steps that will improve how we research, detect, monitor, and address PFAS chemicals. Today, I would like to highlight five of the most important areas of the action plan, but I encourage you all to read the plan in its entirety.

So first, EPA is committed to following the MCL rulemaking process for PFOA and PFOS as established by the Safe Drinking Water Act. That process is designed to ensure public participation, transparency, and the use of the best available science and other technical information.

The agency has committed to making a proposed regulatory determination for PFOA and PFOS, which is the next step in the regulatory process, by the end of this year. EPA will also evaluate a broader range of PFAS chemicals and whether or not they should be regulated under the Safe Drinking Water Act.

Second, EPA will continue our enforcement actions and will clarify our cleanup strategies. EPA has initiated the regulatory development process for designating PFOA and PFOS as hazardous substances under CERCLA. EPA will also issue interim groundwater cleanup recommendations for sites contaminated with PFOA and PFOS in the very near future.

Third, EPA will expand its focus on monitoring and understanding PFAS in the environment. For example, the agency will propose to include PFAS in the next round of drinking water monitoring under the unregulated contaminant monitoring program. This action will improve EPA's understanding of the frequency and concentration of PFAS occurrence in drinking water by using newer methods that will detect more PFAS chemicals at lower levels.

Fourth, EPA is expanding its research efforts and the scientific foundation for addressing PFAS by developing new analytical methods and toxicity assessments. Our goal is to close the gap on the science as quickly as possible, especially as it relates to emerging risks like GenX. We're also working to develop new technologies and treatment options to remove PFAS from drinking water.

Finally, we'll be working across the agency and the Federal Government to develop a PFAS risk-communication toolbox that includes materials that states, tribes, and local partners can use to effectively communicate with the public. Additionally, the agency remains steadfast in our commitment to support states, tribes, and local communities to address PFAS contamination where and when it has been identified.

Again, thank you for your opportunity to testify today. I can assure you that the emerging PFAS exposure concern is a top priority for the agency, and we share the subcommittee's concern for communities across the United States that continue to deal with these substances in the environment. I look forward to answering any questions that you may have.

[Prepared statement of Mr. Ross is available at: <https://docs.house.gov/Committee/Calendar/ByEvent.aspx?EventID=109020>.]

Mr. ROUDA. Thank you, Mr. Ross.

Without objection, the gentleman from California, Congressman Ro Khanna, member of the full committee, shall be permitted to join the subcommittee on the dais and recognized for questioning of the witnesses.

With that, I will yield to Ms. Sullivan.

STATEMENT OF MAUREEN SULLIVAN, DEPUTY ASSISTANT SECRETARY OF DEFENSE FOR ENVIRONMENT, OFFICE OF THE ASSISTANT SECRETARY OF DEFENSE FOR SUSTAINMENT, U.S. DEPARTMENT OF DEFENSE

Ms. SULLIVAN. Chairman Rouda, Ranking Member Comer, and distinguished members of the subcommittee, I am Maureen Sullivan, the Deputy Assistant Secretary of Defense for Environment. My portfolio includes policy and oversight of DOD's programs to comply with—just checking—sorry, thank you—to comply with environmental laws such as the Safe Drinking Water Act and the Comprehensive Environmental Response Compensation and Liability Act, CERCLA.

I want to thank Congress for your strong support for the Department of Defense, our national security priorities, and for the funding we need to protect our Nation. Ensuring the health and safety of our servicemembers, the families living on our installations, and the surrounding communities is one of our top priorities. I also want to thank the subcommittee for the opportunity to discuss PFAS. We believe DOD has been leading the way to address these substances.

One commercial product that contains PFOS and PFOA is aqueous film-forming foam, or AFFF. This highly effective firefighting foam has been used by DOD, airports, fire departments, and the oil and gas industry. However, it only accounts for approximately three to six percent of PFOS production in the year 2000. And DOD is just one of the many users.

Over the last two-plus years, DOD has committed substantial resources and taken action to respond to concerns with PFOS and PFOA. When the EPA issued the lifetime health advisories, or LHAs, for PFOS and PFOA in May 2016, DOD acted quickly to voluntarily test our 524 drinking water systems that serve approximately 2 million people on our installations worldwide. Twenty-four of these systems tested above EPA's LHA level, and DOD has followed EPA recommendations to include providing bottled water or additional treatment.

CERCLA provides a consistent approach across the Nation for cleanup. The Defense Environmental Restoration Program statute provides authorities to DOD to perform and fund actions and requires that they be carried out in accordance with CERCLA. The first step is to identify known or suspected releases. DOD has identified 401 active and base realignment enclosure installations with at least one area where there's a known or suspected release of PFOS or PFOA.

The military departments then determine if there was exposure through drinking water. If so, the priority was to cutoff—has been to cutoff—human exposure where drinking water exceeds EPA's lifetime health advisory. Now that exposure pathway is broken, the military departments are prioritizing sites for further actions using the long-standing CERCLA risk-based process "worst first."

These known and suspected PFOS and PFOA release areas are in various stages of assessment, investigation, and cleanup. As DOD moves through the CERCLA process, we will work in collaboration with the regulatory agencies and communities and share information in an open and transparent manner.

To prevent further releases to groundwater, DOD issued a policy in January 2016 requiring the military departments to prevent uncontrolled land-based AFFF releases during maintenance, testing, and training. The policy also required the military departments to remove and properly dispose of supplies of AFFF containing PFOS.

Currently, no fluorine-free version of AFFF meets the military's stringent performance requirements. We have solicited research projects to identify and test the performance of fluorine-free AFFF. These efforts support DOD's commitments to finding an AFFF alternative that meets critical mission requirements, while protecting human health and the environment, and will represent \$10 million in research and development funding.

In summary, DOD is taking actions to reduce the risks from PFOS and PFOA. Our efforts reinforce DOD's commitments to meet mission-critical requirements, while protecting human health and the environment. The Department recognized that this is a national problem involving a wide array of industries, commercial applications, as well as many Federal and state agencies. Therefore, it needs a nationwide solution.

We look forward to working with you as you move forward. Thank you.

[Prepared statement of Ms. Sullivan is available at: <https://docs.house.gov/Committee/Calendar/ByEvent.aspx?EventID=109020>.]

Mr. ROUDA. Thank you, Ms. Sullivan and Mr. Ross.

At this time, I'm going to defer my five minutes of questioning and now recognize the distinguished member from California, Ms. Hill.

Ms. HILL. Thank you, Mr. Chairman, and thank you to our guests.

This is a personal issue for me, as well as for my district. I come from a district rooted in defense and service where we have a large Active Duty military and veteran population. But I was also born on an air force base which has known contaminants of PFAS, and I grew up right next to one. And, in fact, my dad was a firefighter with the Air Force who used such chemicals for an extended period of time. So the health effects are unknown as to how they're going to impact me and my family. And for my constituents, these are people who fight and have fought for this country and who have been exposed to these chemicals, expect the EPA and the DOD to take responsibility and work to regulate the harmful substances.

So I'm very concerned about the EPA's delayed response to the PFAS health crisis. When Scott Pruitt served as the administrator of the EPA he called the issue of PFAS chemicals contaminating drinking water supplies a, quote, national emergency. But we sit here today a year after these comments were made by Mr. Pruitt, and the EPA has still not regulated these chemicals.

So, Mr. Ross, do you believe that the PFAS health crisis is a national emergency?

Mr. ROSS. I do. Sorry about that. We do believe it is a major national issue for EPA and our Federal partners to address. This is an emerging issue, and we have been working it aggressively. Historically over the agency has—has used as TSCA authorities to take a couple hundred chemicals and regulate them before getting

into the market. We've worked with the regulated industry to pull PFOA and PFOS voluntarily off the market. We've developed health advisories, and we're developing and working on our toxicity assessments for new chemicals.

And so, yes, we agree it's a—it's a major issue, and we're focused [on it] as one of our highest priorities of the agency.

Ms. HILL. So last month, the EPA announced its action plan, which I appreciate, but the plan didn't call for action. The EPA delayed the decision on setting the maximum contaminant levels for PFOA and PFOS until the end of this year. So the long awaited action plan disappointed many, including many in the audience here today.

So, Mr. Ross, why did the EPA choose to delay another 10 months to make a decision regarding these chemicals?

Mr. ROSS. The EPA did not choose to delay additional 10 months. What we heard from stakeholders and from a wide variety of people in the country that this was a multifaceted, complicated problem. It's not just simply about drinking water. It's about market entry. It's about what we know and don't know about the science. It's about what we can do under TSCA. It's what we can do about cleanup standards. It's CERCLA. It's a multifaceted problem that needs a holistic solution.

What we heard is we needed to go listen to the communities. And so the agency in the past has been criticized for not engaging with states and local communities, and not listening, and writing in the dark. This agency, this administration, committed to going, engaging with the communities, listening to what the people need from EPA. And the action plan, if you take a look at table I, the executive summary, specifically lists about 20 to 25 actions that we heard stakeholders wanted the agency to address. In the first column on the left it says what we heard in the stakeholder engagement. And as you go to the columns to the right, it's what are we going to do to address those concerns.

So we took the time to listen, to engage, and so the action plan has very specific commitments across about 20 to 25 issues. So we are taking action.

Ms. HILL. It's been—this is an issue that's personal for me on a number of levels in terms of how influence happens in politics. It's an issue that I ran on. And it's been reported by Politico that Dave Dunlap, former Koch Industries official who now works in the EPA's Office of Research and Development, participated in, quote, at least nine PFAS meetings in Mr. Dunlap's first six weeks on the job. This raises serious questions regarding Mr. Dunlap's potential conflicts of interest and any influence he may have had to delay regulations of these chemicals.

So, Mr. Ross, were any lobbyists or industry representatives involved in the decision to delay regulation of these chemicals?

Mr. ROSS. So when I was sworn in last January and took over as the assistant administrator for the Office of Water, I came up to speed very quickly with our career staff—Dr. Peter Grevatt, Dr. Jennifer McLain—on the scope of the PFAS issue. At the time, we had a task force running that was being staffed by ORD, our scientists, and other members—career staff, and it was a research-ori-

ented task force. And we decided to transfer leadership of the effort to a regulatory program, the Office of Water, to take the lead.

So at that time, under the leadership of Administrator Pruitt and the continued leadership of Administrator Wheeler, I have been running point for the political team at EPA. I have not taken a meeting with the regulated entities that you are talking about.

Mr. Dunlap, just like every other political appointee in their program offices, has participated, together with our career, political—or our career deputies—in this overall holistic effort. So I have been running point for the past year.

Ms. HILL. Do you have any idea, based on his previous work history, why Mr. Dunlap was not recused—or did not recuse himself from working on this plan?

Mr. ROUDA. Congresswoman Hill, your five minutes are up, but please answer the question.

Mr. ROSS. Thank you, Chairman.

I do not know the scope of his recusals. I know mine. And so—I do know that all political appointees come in and work with our ethics counsel very carefully. We fill out recusal statements and we abide by them. And every time we have a meeting or an external engagement, we try to—try to run clearances. I don't know the scope of his personal recusals.

Ms. HILL. Thank you, Mr. Ross.

Thank you, Mr. Chairman.

Mr. ROUDA. Thank you.

And now I yield to Ranking Member Comer.

Mr. COMER. Thank you, Mr. Chairman.

Mr. Ross, we've heard a lot of discussion in the news about the need for maximum containment level under the Safe Drinking Water Act. Can you please elaborate a little more on the steps and the process to set a maximum containment level, what is required, and what does the agency need to do?

Mr. ROSS. Yes, I'd be happy to. And that's actually the program—Safe Drinking Water Act program in the Office of Water. So Congress gave us very, very specific guidance as to how to establish maximum contaminant levels, nationwide drinking water regulations under the Safe Drinking Water Act. It's a robust process where we evaluate the best available science. We make a determination about the health hazards, the occurrence data, and whether or not, through national regulation, we can do something about the issue. And then we're—then we go through a very robust public engagement, go through peer review, public science, work with our drinking water advisory counsel, and engage through multiple steps with the public.

It's very prescriptive. And so Congress gave us the direction on how to establish an MCL, and we are beginning the process, as I mentioned in our opening statement, to follow the guidelines as established by Congress under the Safe Drinking Water Act.

Mr. COMER. Right. You mentioned science. What role does science play in this process, and what type of information does EPA consider as part of this process?

Mr. ROSS. I think science leads this process. Congress was very specific in the Safe Drinking Water Act about the specific science that we need to gather, very specific requirements about peer-re-

view science and using our drinking water advisory committee. So we will—we will start with our health advisory that the Obama Administration developed at the end of it—at the end of its, you know, mid 2016.

We also gather other available science. The states are working on their standards. ATSDR, as we've heard today, has come out with minimum risk levels that are different than—than the health advisories, and I'm happy to answer questions about that. But science will—science plays the lead role. And we have amazing toxicologists and scientists at EPA, and we rely on them heavily. I am not a scientist, and so I need to rely on them to tell me what I need to do to establish a standard.

Mr. COMER. OK. I understand some states have been setting their own levels. Are there any differences in the process a state must go through and the EPA must go through to set enforceable levels of substances such as the PFOA and PFOS?

Mr. ROSS. Yes, there are. So the Federal—the Federal Government, it's sort of our—our federalism principles embodied in many of our clean—in many of our environmental statutes. EPA has the lead in establishing minimum requirements on the Safe Drinking Water Act. We have 49 states and one tribe that serve as the primary authority for implementing the program. Only the state of Wyoming does not have a primary delegation.

So the Federal Government has a role, but the states—and that's one of the strengths of our system, is that if the states implementing their individual state authorities need to move quicker or have different programs, they have the ability to do that, and we actively encourage and work with them to do that. So there's a—there's a cooperative federalism principle embodied in the Safe Drinking Water Act.

Mr. COMER. My last question here. Once the EPA implements a nationwide maximum containment level, what would the impacts be for states and public water systems? And what kinds of actions might they undertake to prepare to comply with the new levels?

Mr. ROSS. Well, so traditionally the way an MCL is looked at is, is you establish sampling requirements. And so in this particular instance, you would establish, you know, traditionally about quarterly sampling requirements. Each individual community water system—and there are about 50-to 60,000 of them that we'd be looking at—would require a sample on a quarterly basis. You round about 300 to 500 on a sampling protocol on a quarterly basis. You rough-math that out. Over the course of a year, you're looking at 60 to 100 million in compliance costs. That's not—that's just at the monitoring level.

Once—if you have a hit above our MCL, then we take a look at imposing technology-based requirements, protect the public health, to hit that standard. And so it's a—it's a monitoring, reporting, and eventually a technology control to protect human health and the environment.

Mr. COMER. OK. Thank you, Mr. Chairman. I yield back.

Mr. ROUDA. Thank you.

Congresswoman Tlaib, you have five minutes for questions.

Ms. TLAIB. Thank you, Chairman.

I want to first thank the leadership of Congressman Dan Kildee, as well as Fitzpatrick, in working on such a critical issue to our Nation.

According to reports, Mr. Chairman, big manufacturers PFAS—that produce PFAS chemicals, including 3M and DuPont, knew about the toxicity of PFAS chemicals for decades and did nothing. I would like to bring our attention to a story—it's very important to put a human face to such a huge issue. And Emily Donovan, who is unfortunately not able to be with us today—but I would like to submit her statement for the record, Mr. Chairman—she lives in Wilmington, North Carolina, not far from the chemical giant—I think it's called Chemours, if I'm—which spun off of DuPont in 2015—and has discharged dangerously high levels of toxic PFAS chemicals into Cape Fear River. Her entire community has been affected.

Ms. Donovan's statement tells a very heartbreaking story, and I want to highlight one of them, that of Tom Kennedy, a long-time resident of Wilmington. Ms. Donovan states, quote, he was diagnosed in December 2016 with stage II-B nongenetic breast cancer. By 2017 of August he learned that cancer went to his brain and bones and to stage IV terminal cancer. He does chemotherapy every three weeks to stop the growth of his cancer.

Tom is in his early forties. He has a wife and two daughters. He is the primary source of income for his family, and the cancer is robbing the Kennedy family of the best years of their lives. Tom's eldest daughter is a teenager, and let's keep in mind how many children are unwittingly exposed right now to these chemicals throughout their lives and how many children are now seeing their young parents suffer. And let's also keep in mind that research suggests that even lower levels of exposure for children and babies are toxic.

So, Mr. Ross, this subcommittee has learned that these big corporations like 3M and DuPont knew about the health risks associated with PFAS chemicals for decades, but did nothing to stop the exposure. What has the EPA done to penalize, hold them accountable, for poisoning the water supplies of Americans, and what actions in the future does EPA plan to take?

Mr. ROSS. So in the past, we've used, particularly for some Chemours facilities in West Virginia and other places on the East Coast, we've used both TSCA enforcement orders and Safe Drinking Water Act imminent and substantial endangerment orders. And so if you take a look at the action plan, one of the concerns I had is if you just have a regulatory mechanism to address the issue, you're talking about, you know, Administrative Procedure Act, Safe Drinking Water Act.

And so what the action plan is focused on are short-term solutions and our long-term strategies. The short-term solutions focus on taking action where we have the most critical issues, so working with the states, working with the local communities, identify and providing the technical assistance they need to identify and monitor, working with the states on cleanup. If we have an imminent and substantial endangerment, we have and we will use our enforcement authorities under the Safe Drinking Water Act.

And so the short-term focus is helping the communities that are affected now, while we grapple with the longer term strategy on the regulatory side.

Ms. TLAIB. Yes. And just because we're short on time, and it's very critical that I ask this question, I represent a very—a community that has been polluted—you know, corporations have been polluting the air there, impacting the water source for decades now. And one of the things that I learned through the state government and being in the legislature is that sometimes there's undue influence on various bureaucrats or various officials. And one of the things that kind of came out of your opening testimony, or answering some of the questions, were—you said, I've heard from so-called stakeholders.

Who are these stakeholders? And have you ever received any communication or e-mail or a call or text from anyone in the administration about this issue indirectly or directly requesting you not to do or not to act?

Mr. ROSS. Well, so the stakeholder engagement, we sent our teams, including the director of the office for the drinking water program office as part of the stakeholder engagement. We went to about six or seven communities, held listening sessions. We've worked with the state of Michigan, and Michigan's doing some really valuable work in this area. Our Region 5 office spends a lot of time—

Ms. TLAIB. Beyond government, what stakeholders?

Mr. ROSS. Well, beyond government, so I—I have—

Ms. TLAIB. Because you said stakeholders and you said you're part of a political team. I'm trying to understand what that all means.

Mr. ROSS. Stakeholders is all encompassing. Our local communities, our state governments are affected. I've met personally with some of the affected activists, including from Michigan. And also our—our—our Federal partners. And so we go through interagency review, when, for example, the action plan was submitted to the Office of Management and Budget. We have interagency review teams that take a look at that. And so stakeholders is all of the above.

If you're asking if I have been lobbied personally by my members of the regulated community, to my knowledge, I have not taken a meeting on this. I do know my career staff learns from everybody. And so if they want to learn about—from the chemical manufacturers, they talk to them. They talk to the affected communities. Because our job is to know as much as we possibly can about this issue so we can guide our decision-making.

Mr. ROUDA. Thank you.

Mr. ROSS, the second part of that question was also any information or attempted e-mails or texts from the administration regarding regulations in this area. Would you like to supplement your answer to Member Tlaib on that issue?

Mr. ROSS. Thanks, Chairman. So there's regular communication between all branches of the Federal Government. One of our jobs is to make sure the Federal Government's coordinated. And so, you know, we have regular communication as part of the interagency review process. I'm sure our career teams, as they're submitting in-

formation and answering questions, there's plenty of e-mail correspondence and communication. That's the regular course of government business. So the answer would be yes, there is communication.

Mr. ROUDA. And any communication directly asking you not to promulgate regulations in this area?

Mr. ROSS. I am not aware of it, but we can double-check that. As part of the interagency review process, people have diverse viewpoints. That's part of the—that's part of the system. So to the extent it's there, you know, again, I—I haven't seen anything directly, but at the same time, that's—everybody has diverse viewpoints on how to actually grapple with these issues. That's, you know, this country is founded on diversity of thought, and we want that diversity as we think about the right course of action going forward.

Mr. ROUDA. Thank you.

At this time, I'd like to recognize Member Armstrong for five minutes of questioning.

Mr. ARMSTRONG. Thank you.

I suppose I should start, we have two Air Force bases in North Dakota. So, Ms. Sullivan, do you have any update on PFOA or PFOS contamination on any DOD facilities in North Dakota?

Ms. SULLIVAN. I tend to—honestly, sir, I'm a policy person, so I look at overall. I defer to the military departments onsite specific, but we can get you—

Mr. ARMSTRONG. Yes, I fully—so thank you.

Ms. SULLIVAN [continuing]. detailed background on North Dakota.

Mr. ARMSTRONG. So when DOD learns of a water contamination issue [it is] above the lifetime ban, right?

Ms. SULLIVAN. Correct.

Mr. ARMSTRONG. What are the immediate steps that go into place to protect the drinking water on the base?

Ms. SULLIVAN. Oh, on the base. We immediately, when—as soon as EPA issued the lifetime health advisory, we directed everywhere where we are the purveyor of drinking water worldwide—there are 524 systems we operate—to immediately test using EPA's test method, and if there was above the lifetime health advisory, to immediately provide alternative drinking water. So all of that occurred in the—over the summer of 2016.

For those installations where we buy water from the local community, we asked the military installations to work with the local purveyor to see if they would voluntarily adopt EPA's lifetime health advisory in the water that we're buying from them for our installation. So by the end of the summer, that summer of 2016, no one on a military base was drinking water above the lifetime health advisory.

Mr. ARMSTRONG. OK. And so when the EPA issued their action plan last month, I mean, it's pursuing a hazardous-substance designation. Do you think there's any steps the EPA can do, can help you in any current cleanup efforts or future cleanup efforts? I mean, we're talking about interagency coordination.

Ms. SULLIVAN. Right.

Mr. ARMSTRONG. This is a pretty big one.

Ms. SULLIVAN. Yes. And we work closely with EPA. My additional career staff works closely with Dave's career staff. Actually, it's very interesting, because PFOS and PFOA are considered what is called a hazardous substance—I'm sorry—a pollutant or a contaminant, under the Comprehensive Environmental Response—CERCLA, under CERCLA, we are already in. So we have already begun the whole process. So designating as a hazardous substance under CERCLA is actually not going to make a difference in terms of our going out and investigating sites and—and laying out the cleanup path. It will actually do more to ensure that all of the sites across the Nation are also looking to the degree that the Department of Defense is already looking.

Mr. ARMSTRONG. And I guess in my former life, before I got involved in this line of work, I was a volunteer fireman. So I think when we talk about firefighting, people think of actually fighting fires, but significantly what you do as a fireman is training. And so when—when the military conducts training exercises, does it use AFFF products, or does it use—I mean containing PF—

Ms. SULLIVAN. So in January 2016, which was before EPA issued their Lifetime Health Advisory, we actually instructed people to stop using it in training and testing. They use, for the most part, water, for that. And when they actually have to use it to fight a fire, that they contain it to make sure that it doesn't get into the groundwater. So we—we do not—we're not requiring the use of it as part of testing and training and maintenance in the day-to-day activities.

Mr. ARMSTRONG. I guess then—

Ms. SULLIVAN. Except for shipboard.

Mr. ARMSTRONG. And then I guess my follow-up question to that, have you done any testing since, and has the Department seen any reduction in these chemicals in either your water supplies or the surrounding water supplies since you made that training? Because I got to assume training was using the vast majority of these chemicals as opposed to actually firefighting. So—

Ms. SULLIVAN. Correct.

Mr. ARMSTRONG [continuing]. by switching, have you seen a reduction?

Ms. SULLIVAN. I have not tracked that information, honestly, sir, because the groundwater situation, most of it is so long-term that—that we're—this is an evolving issue. Right now, we're trying to determine the extent of the presence in the groundwater around our bases, how far it is, where it's flowing, so we can design the right system to contain it, now that we've cutoff human exposure through drinking water.

Mr. ARMSTRONG. Thank you. And then I think just one question, and I think it's for actually both of you. You're working with different agencies, and obviously bases exist all over. How are we working with the Department of Agriculture to make sure that we're not mitigating into surrounding farmland or cropland?

Mr. ROSS. Maureen, I can take that.

In fact, the Administrator—I've actually talked to USDA, because there's a—there's a dairy situation out in New Mexico, and so I talked to USDA within the last couple of weeks, getting more information about that. The Administrator, just last week, issued

a memo directing the Office of Research and Development as part of our—as part of our action plan. We have a very robust research component to specifically take a look at the cross section between groundwater contamination and agriculture use. And so we'll be setting up meetings with USDA, FDA, and our—and our research staff to work that very issue the Administrator issued in that memo last week.

Ms. SULLIVAN. And I would add to that, that we believe that this is a nationwide problem that does need a whole-of-government solution. So we would encourage USDA and the Food and Drug Administration to get engaged.

Mr. ARMSTRONG. Thank you, both.

Mr. ROUDA. Thank you.

Next, Congresswoman Ocasio-Cortez.

Ms. OCASIO-CORTEZ. Thank you, Mr. Chair.

And thank you both for coming to testify with us today—or to share your knowledge with the subcommittee.

I—like many of my colleagues here are very concerned about the use of PFAS chemicals which, as you stated, are in everything from firefighting foams to commercial household products like nonstick pans and water-repellant clothing.

Serious health effects have been associated with these chemicals. In fact, the Center for Disease Control issued a report recently on this topic. I would like to enter into the record a recent toxicology profile of PFAS chemicals completed by the CDC's agency for toxic substances and disease registry.

Ms. OCASIO-CORTEZ. Mr. Ross and Ms. Sullivan, are you both familiar with this report?

Ms. SULLIVAN. Yes, I am.

Mr. ROSS. Yes, I am.

Ms. OCASIO-CORTEZ. And is it true that this agency report acknowledges that epidemiological studies have provided evidence that there is a link between PFAS chemicals and thyroid disease?

Ms. Sullivan.

Ms. SULLIVAN. I'm not familiar with the details. I just know the report exists, ma'am.

Ms. OCASIO-CORTEZ. Sure.

Mr. ROSS.

Mr. ROSS. Yes. I am familiar with the end points in that study, yes.

Ms. OCASIO-CORTEZ. So it does?

Mr. ROSS. Yes.

Ms. OCASIO-CORTEZ. Mr. Ross, isn't it also true that this report acknowledges that there is a suggestive link between PFAS chemicals and, I quote, increased risk of decreased fertility?

Mr. ROSS. Yes. I believe that—I don't have the report in front of me, but I do believe that that's in that report.

Ms. OCASIO-CORTEZ. And is it true that this report also found a suggestive link between PFAS chemicals and liver damage?

Mr. ROSS. There are liver affiliation end points with the use of various PFAS chemicals.

Just to be clear, though, there are different chemicals that have different end points. So, for example, our toxicology work that we did last year with GenX and PFBS. One has an end point and fo-

cused on liver. The other has an end point and focused on kidney. So you have to be little bit careful about the chemicals that you're talking about.

Ms. OCASIO-CORTEZ. Thank you.

And have you also seen information here with increased risk of testicular and kidney cancers with PFOA?

Mr. ROSS. I am not familiar, but that's—off the top of my head. But I can get my scientist to answer that question for you.

Ms. OCASIO-CORTEZ. Thank you. And I'll make sure that this report is submitted to the record.

I think it's important to acknowledge here that people are suffering. And some of them are here in Washington with us today. Hope Grosse, who grew up in Warminster, Pennsylvania, next to the Naval Air Warfare Center, she drank and bathed in the local water throughout her life.

And, Mr. Chairman, I would like to enter Ms. Grosse's statement also into the record. Ms. Grosse was diagnosed with stage IV cancer at the age of 25 years old. Ms. Grosse's father died of cancer at 52 years of age, and her sister suffered from ovarian cyst, lupus, fibromyalgia, and abdominal aneurysms. She worries that she has unwittingly exposed her own children to these toxic chemicals as well.

Scientists believe that there may be a link between PFAS chemicals, exposure, and the kinds of diseases and illnesses that Ms. Grosse and her family members have suffered.

Mr. Ross, do you believe that the EPA should further regulate these chemicals?

Mr. ROSS. Yes. And that's what we've stated in our action plan. We have a robust plan to regulate these chemicals across a wide variety of our programs.

Ms. OCASIO-CORTEZ. Thank you.

And I have one additional question. I know that, since you all come from a policy perspective, it's hard to say which airport or which naval base may have these chemicals or not.

I'm very concerned about my own constituents in my own district. LaGuardia Airport, which is one of the busiest airports in the country, is in my home district.

So one of my questions, and particularly when it comes to the surrounding community, I want to make sure that my constituents are safe or, if they have exposure to these chemicals, that they would know.

Is there a place that they can go to? What documents could they examine? Is there an agency or an individual that they can ask for an assessment or that has already done an assessment that they can figure out this information.

Mr. ROSS. Yes. So a couple things. One, my office water team is tracking wherever we have a site-specific issue across the entire country. So we have a data base that we're building. Our regional offices sort of run point on the specifics. New York has got a very robust program working carefully up there with three or four sites.

So the New York public health—I don't know the right acronyms up there, but their Department of Environmental Quality, their public health, are really great resources.

And so I would always encourage folks to go to local and state first because they know their resources and their people best. But the Federal Government's also tracking and developing data bases.

Ms. OCASIO-CORTEZ. OK. Fabulous. Thank you very much.

Ms. SULLIVAN, do you have anything to add?

Ms. SULLIVAN. I would just say that ATSDR is doing exposure assessments in West Hampton and in Orange County, New York. So they'll be starting those exposure assessments in those two communities in New York shortly.

Ms. OCASIO-CORTEZ. Thank you very much.

Mr. Chair, I yield my time.

Mr. ROUDA. Thank you.

Member Khanna.

Mr. KHANNA. Thank you, Mr. Chair. Thank you for allowing me to ask questions on the subcommittee. Thank you to the witnesses for testifying.

I want to follow up on Ms. Ocasio-Cortez's excellent line of questioning.

The GAO reported last September that DOD had identified 401 military sites with known or suspected PFAS.

Ms. Sullivan, you acknowledge in your testimony that there's a growing body of evidence that highly fluorinated chemicals are harmful.

Do you know how many active or closed military installations are there today with any known or suspected releases?

Ms. SULLIVAN. Yes, sir. We have confirmed 401 installations within the United States have known or suspected releases, and all are in various stages of investigation of the extent of those releases and what the remedy would be.

Mr. KHANNA. And did all of these sites test above the EPA's health advisory of 70 parts per trillion?

Ms. SULLIVAN. No, sir. To divide this between drinking water and groundwater. So we submitted a report to Congress in 2018 that listed all of the locations that—where it was tested in the drinking water off the base as a result of our contamination and laid out exactly where those systems were where the drinking water tested above the lifetime health advisory and what actions we've taken with the communities to make sure that that drinking water is below—goes below 70. It could be everything from providing bottled water to installing home treatment systems or hooking up the host to the local municipality and installing a system in the local municipality.

So that was our first priority in—when the lifetime health advisory was to cutoff that exposure through the drinking water. Now we're doing all the investigation into the groundwater.

Mr. KHANNA. But was it the 70 parts per trillion that was the standard?

Ms. SULLIVAN. Yes. Yes, it was.

Mr. KHANNA. And are you aware of the draft agency for toxic substances and disease registry's report suggesting that the threshold should actually be 7 to 10 times lower than the EPA's advisory?

Ms. SULLIVAN. Yes. I'm aware of that report. It is in draft right now. We are waiting for ATSDR to issue the final report.

Mr. KHANNA. So do you have a guess on how many military sites may have contamination at, let's say, 10 parts per trillion as opposed to the 70 that was used?

Ms. SULLIVAN. I couldn't tell you, sir.

Mr. KHANNA. It could be a lot more?

Ms. SULLIVAN. It could be more.

Mr. KHANNA. Is there any plan to look at more sites under the lower standard that many people recommend?

Ms. SULLIVAN. Well, generally, when we're investigating groundwater, we use a factor below—a 10 times factor below. So, right now, we're looking anywhere that it is 40 parts per trillion and above in the groundwater to see what the situation is. And we're monitoring the drinking water. In those locations, we monitor the drinking water for a certain range to make sure that we're not getting close to the 70.

Mr. KHANNA. And Ms. Ocasio-Cortez spoke about this heart-breaking story.

Do you know, Ms. Sullivan, how many active servicemembers, veterans, or their families, have possibly been exposed to these chemicals?

Ms. SULLIVAN. I'm sorry, sir. I don't. However, in accordance with the National Defense Authorization Act of 2019, our health affairs staff is going to be conducting a health study in creating an inventory of those servicemembers that have been exposed through drinking water or occupational exposure and work in coordination with the Veterans Administration to share that information. So they're complying with that requirement in the National Defense Authorization Act.

Mr. KHANNA. So that's the plan? To notify people who have—

Ms. SULLIVAN. To notify, to create a registry. But they are sharing information now. Through our health program, they share all the information that we've collected from EPA and for the Agency for Toxic Substances and Disease Registry and make it available to our medical community.

Mr. KHANNA. I have one final question. I don't know if you saw the report by Sharon Lerner in The Intercept that a Dupont spinoff company tried to import PFAS waste from the Netherlands to destroy it here. Of course, the Netherlands has strict regulations for PFAS waste. We do not. Should we be importing PFAS from other countries that are trying to get rid of them?

Ms. SULLIVAN. I would defer to Dave on that one.

Mr. ROSS. I'm not familiar with the story, so I would have to talk to our hazardous waste and our solid waste folks.

Mr. KHANNA. In general, would you support not importing PFAS into this country?

Mr. ROSS. Well, as far as market entry, we use our toxics—or our TSCA program as far as, you know, use in commerce. I'm not an expert on our, kind of, waste management systems, so I can't answer that question.

Mr. KHANNA. Thank you.

Mr. ROUDA. Thank you.

I will now grant myself five minutes for questioning.

And, again, I want to thank the witnesses and everybody here for coming.

I would like to ask anybody in the audience that has been directly affected by PFAS or their family members or friends to please stand up and stay standing for a moment.

I'd like everyone to look around and recognize that these Americans are just a small fraction of Americans across our country who have been affected by the toxicity of these chemicals by simply drinking water. Let that sink in. Here in the United States, by simply drinking water, that you could have an impact along the lines that we have discussed here today.

Thank you. Please be seated.

While we're all here recognizing that we have bipartisan support in wanting to address this issue, the question is the sense of urgency, the sense of urgency for those who were just standing, the sense of urgency for their families, a sense of urgency for those who have yet to be impacted by our failure to move quickly in addressing this issue.

Mr. Ross, I appreciate your comments earlier about your action plans. But in that statement, your opening statement, you used the word "we will do this, we will do that" repeatedly.

I do not think "will" is what we want to hear. "When" is what we want to hear. When will we take action to address these issues?

So I ask you, in that detailed plan, do you have specific dates, milestones, that the EPA wants to accomplish under the 15 action items that you talked about with specific timelines and milestones?

Mr. ROSS. Yes, we do. And we are taking action. In the local communities that are affected, we're working with the states to provide point of use, point of entry, treatment technology. Treatment technology exists right now for local communities to put on. Granulated activated carbon, other methods.

So where there are impacted communities, we're working with those communities and working with the states to take action.

Of our 15 to 20, to get to your question, action, yes, there are specific commitments in there. For example, we didn't wait to do the action plan. We needed work done on the toxicity assessments for GenX, PFBS. We've got another six in line. We're working with our toxicologists to do high throughput tox work on a group of about 150 chemicals to try to accelerate our toxicology knowledge, for the MCL, which I think obviously is an interest for you. We are committed to getting the proposed regulatory determination out this year, and then we'll work through that system that Congress has established for us as expeditiously as we can in the—

Mr. ROUDA. Any internal unreleased timelines that you have that you would commit to releasing to the public?

Mr. ROSS. No. I don't have an internal deadline. There are multiple, multiple public statements. We're also coming out with our reg agenda, which, as we're going through the rulemaking process in OMB—

Mr. ROUDA. One of the reasons I'm asking this question on timeline is that there was indications that the White House tried to suppress the release of toxicology profile for PFAS chemicals completed by the agency for toxic substances and disease registry. Are you aware of that?

Mr. ROSS. I'm aware of the reports, yes.

Mr. ROUDA. Are you aware of the email?

Mr. ROSS. I'm aware of the email, yes. I've read about that in the news.

Mr. ROUDA. And so is it a public relations nightmare for the White House if this information gets out?

Mr. ROSS. I don't believe so. In fact, Administrator Wheeler, one of his No. 1 priorities for the agency is risk communication. This agency, and the Federal Government, needs to do better on risk communication.

For example, we've talked about the ATSDR study that you're just asking about. And there's confusion in the public, and including today, about what those numbers mean versus EPA's health advisory. They're different numbers.

Their scientists have a mission at the ATSDR to establish screening levels below which there isn't a health risk associated with a community. And then they take those screening levels and then go do further investigation to figure out what the real risk assessment is in those communities.

Our drinking water standards are focused on actual consumptive use, our most sensitive populations drinking contaminated water over their lifetime.

And so health advisories our are different than the ATSDR number. That's a risk communication issue that we need to do better collectively for the American public.

Mr. ROUDA. Thank you.

Ms. Sullivan, I want to also turn to sense of urgency to you.

Is there anything preventing the DOD from cleaning up all of these sites and the contaminated soils immediately? Is there any law preventing your from taking action?

Ms. SULLIVAN. Sir, we are moving out—we've been moving out for almost three years very aggressively under CERCLA and under our authorities under the Defense Environmental Restoration Program. We're actively investigating sites. We've cutoff exposure already through drinking water and installing remedies across the Nation.

Mr. ROUDA. How much did the DOD request in the 2019 budget for cleanup?

Ms. SULLIVAN. Approximately \$1.3 billion.

Mr. ROUDA. And is that enough to do a complete cleanup of all 401 sites?

Ms. SULLIVAN. Oh, sir, I estimate that the—and this is a very, very rough back-of-the-envelope calculation that the cleanup of PFAS and PFOA right now is going to add approximately \$2 billion to our existing liability of \$27 billion. So I have multiple contaminants, including everything from other hazardous substances to unexploded ordnance to chemical weapons that I have to address. It's being part of the entire cleanup program.

Mr. ROUDA. So, in other words, woefully inadequate funding to address this issue.

Ms. SULLIVAN. We have the funding to address what we can physically do in the year.

Mr. ROUDA. Thank you.

Ranking member, would you like to do a closing statement?

Mr. COMER. I just want to thank the witnesses for coming here today and thank the bipartisan group of members trying to come to a solution to the problem.

I look forward to working with this body to see that we can fix the problem and do something for the families and the citizens who have been negatively affected by this terrible substance.

With that, I yield back, Mr. Chairman.

Mr. ROUDA. Thank you.

I too would like to thank everyone for coming here to testify today.

Our first goal here was to ensure that, when the regulatory process at the EPA is completed, the EPA sets a minimum contamination level, MCL that we've talked, that fully takes into account the CDC's recommendations and accurately reflects the significance of the PFAS health crisis.

Our second goal is to get the DOD to commit to taking significant strides toward completing cleanup of contaminated sites as well as providing more assistance to families living in contaminated communities, including provisions for bottled water, installation of water filtration systems, et cetera.

And I would also like to thank Member Armstrong for his comments and service as a firefighter. I represent the Orange County Professional Firefighters Association in my district and part of the International Association of Firefighters. And they're exposed to PFAS through installation on a regular basis. And like all the members here, we want to do everything we can to make sure that our first responders are not exposed to these poisonous toxins.

To the ladies and gentlemen who are in audience here that took the time to share with us their stories and their commitment to addressing this issue, on behalf of the entire committee, thank you so much for coming here.

And, finally, we just have a few housekeeping items, and that is to make sure that these items are presented into the record?

Good.

So, without objection, so ordered.

Mr. ROUDA. And with that, we are adjourned.

[Whereupon, at 11:27 a.m., the subcommittee was adjourned.]

