The subcommittee met, pursuant to call, at 10:00 a.m., in Room 2123 Rayburn House Office Building, Hon. John Shimkus [chairman of the subcommittee] presiding.

Members present: Representatives Shimkus, Upton, McKinley, Olson, Johnson, Flores, Hudson, Walberg, Carter, Duncan, Walden (ex officio), Sarbanes, Welch, Tonko, Ruiz, Peters, Green, McNerney, Cardenas, Dingell, and Pallone (ex officio).

Staff present: Samantha Bopp, Staff Assistant; Daniel Butler, Legislative Clerk, Health; Karen Christian, General
Counsel; Kelly Collins, Legislative Clerk, Energy/Environment; Margaret Tucker Fogarty, Staff Assistant; Ali Fulling, Legislative Clerk, Oversight & Investigations, Digital Commerce and Consumer Protection; Drew McDowell, Executive Assistant; Brannon Rains, Staff Assistant; Mark Ratner, Policy Coordinator; Annelise Rickert, Counsel, Energy; Peter Spencer, Senior Professional Staff Member, Energy; Madeline Vey, Policy Coordinator, Digital Commerce and Consumer Protection; Elizabeth Ertel, Minority Office Manager; Jourdan Lewis, Minority Staff Assistant; John Marshall, Minority Policy Coordinator; Tim Robinson, Minority Chief Counsel; and Tuley Wright, Minority Energy and Environment Policy Advisor.
Mr. Shimkus. If I can ask all our guests today to please take their seats. The Subcommittee on Environment will now come to order. The chair recognizes himself for 5 minutes for an opening statement. All right, let's quiet down.

Good morning. Today's hearing focuses on a class of emerging environmental contaminants that are highly fluorinated chemicals. Technically known as perfluorinated polyfluoroalkyl substances, they are more commonly referred to by their acronym, PFAS.

PFAS is a group of man-made chemicals numbering in the thousands that have been manufactured and used in a variety of industries around the globe. These chemicals have been used to make coatings and products that are widely used by consumers due to their oil and water repellent characteristics.

Items containing PFAS include food packaging like pizza boxes and microwave popcorn bags and in non-stick products like Teflon as well as polishes, waxes, paints, and cleaning products. The chemicals also serve to make components of firefighting foams and mist suppressants from metal plating operations. The military uses them in foam to extinguish explosive oil and fuel fires.

PFAS are considered emerging contaminants because today's advanced analytical technology is increasingly detecting their presence in the environment and there isn't a great deal of toxicology data on many of these substances, meaning that we don't know enough...
to say how risky each PFAS chemical is or what the exact impact of exposure to these substances will be for each person.

In truth, while we are only on the front end of the understanding how they move in the environment or their effect on the environment and public health, what we do know is that because of their unique properties and vast usage, most people have come into contact with at least one PFAS. In addition, studies on a few PFAS chemicals suggest those chemicals might cause health problems for humans. And, these PFAS chemical appear to be very persistent in the environment and in the human body, meaning they don't break down.

In the past few years, public anxiety about PFAS detection and uncertainty about what to do about it has grown. News reports have highlighted several communities, near military bases or facilities making PFAS, have discovered these chemicals in their drinking water.

This hearing is about starting the dialogue on PFAS. It means taking stock of what the government knows about PFAS, what efforts to contain its contamination have promise, and what is preventing people from being helped with cleanup or avoid contamination of their air, soil, and water. It is time to figure out what can be done right now and what needs to be done to respond appropriately to legitimate risks created by PFAS contamination in the environment.

I understand that in 2016 EPA established health advisories
for certain PFAS chemicals to provide drinking water system
operators and state, tribal, and local officials with information
on health risks of these chemicals. In addition, in May of this
year, EPA kicked off a national PFAS effort. We welcome back
the committee, Dr. Grevatt, the unofficial EPA PFAS czar who will
walk us through EPA's ongoing as well as future plans for
addressing PFAS.

We also will hear from the Department of Defense because
the various branches of the military have often used these
chemicals for fire suppression and now many military
installations are faced with significant issues concerning PFAS
contamination. We welcome Mr. Niemeyer, the Department
Assistant Secretary of Energy, Installations, and Environment
-- that is not right -- Ms. Sullivan, who will talk us through
what DOD is doing to tackle this issue.

For the critical state perspective, which represents the
front lines for addressing the issue, we will hear from our friends
in the state drinking water and solid waste agencies. We welcome
back Ms. Daniels who is here on behalf of the Association of State
Drinking Water Administrators, and Mr. Sandeep who is here on
behalf of the Association of State and Territorial Solid Waste
Management Officials.

Without stealing from my colleagues from Michigan and their
thunder, I also want to welcome Ms. Isaacs from the Governor's
Office in Lansing. She is the official Michigan PFAS czarina
and it will be good to understand her state's work in this area. And with that I would like to yield to Mr. Hudson for the remaining of my time. Mr. Hudson. Thank you, Chairman Shimkus and Ranking Member Tonko. I appreciate you holding this hearing today on PFOS and PFAS chemicals. This issue remains a top priority for me and I am looking forward to hearing from our witnesses today.

I want to thank the EPA for agreeing to testify so we can continue to learn more about these chemicals. The EPA recently accepted an invitation to hold its third community engagement summit in my district. Dr. Grevatt, I look forward to hearing from you and what you have learned at that summit as well as discussing what plans EPA has to release a public health advisory specifically for GenX.

I also want to thank Emily Donovan, a former North Carolinian, who will be testifying on our second panel. Too often we are focused on the technical sides of these issues and forget at the end of the day we are talking about real people. So I look forward to Emily's testimony that will put a human face on this issue, Mr. Chairman.

And with that I yield back.

Mr. Shimkus. The gentleman yields back his time. The chair recognizes the gentleman from New York, my good friend Mr. Tonko, for 5 minutes.

Mr. Tonko. Thank you, Mr. Chair, and welcome to our guests,
including the czars and czarina. So, it is awesome to have you here.

Seventy parts per trillion, per trillion -- it is hard to even fathom that amount -- drops in an Olympic-sized swimming pool, but that is the health advisory level established by EPA for lifetime exposure to PFOA and PFOS in drinking water. When we discuss other serious drinking water contaminants we often deal in parts per billion. Lead and perchlorate and other dangerous contaminants are considered on a scale order of magnitude larger than PFOA. That gives you a sense of how toxic this class of chemicals is.

After a number of high profile incidents in 2016, EPA significantly lowered its health advisory level from 400 parts per trillion to 70. Since then, we have seen some states set standards lower than 70 parts per trillion, and the press has reported what appears to be political interference that sought to delay a CDC toxicity study which suggests that these substances are dangerous at even lower levels than previously stated by EPA.

Clearly, we have issues with risk communication. So I understand the frustration felt by individuals and communities that do not know who to trust. Perfluorinated substances, collectively known as PFAS, have been linked to cancer, to thyroid disease, and other serious health problems. These compounds such as PFOA, PFOS, and GenX have been used for industrial purposes including cookware, food packaging, and firefighting foam.
We know PFAS are toxic, bioaccumulative, and stick around in the environment for years to come. We know almost all Americans have had some PFAS exposure and we know drinking water contaminations are being found in communities across our country. Research from Environmental Working Group estimated PFAS contamination in the water supplies of 15 million, 15 million Americans. Due to how these chemicals are monitored the number is likely underestimated.

Under the EPA's Unregulated Contaminant Monitoring Rule, or UCMR, from 2013 to 2016, all U.S. public water systems serving 10,000 or more customers tested their supplies for PFOA, PFOS, and other similar compounds, but as it is UCMR is not adequate. It only covered six PFAS out of thousands within this chemical class that have been found in products or the environment.

About 50 million Americans are served by water systems that were not required to test for these PFAS at all, and 15 percent of Americans rely on private wells which are not covered by any EPA drinking water standards or testing requirements. Communities nearby my district are dealing with the consequences of contamination. Hoosick Falls, New York, in Upstate New York, only discovered they had a problem after a private citizen tested his water.

I want to stress that communities like Hoosick Falls and Newburgh in Upstate New York and the dozens and dozens of others are not unique and the elevated rates of cancer and unusual
diseases are surely not a coincidence. It should not and cannot fall upon every private citizen to test the water only after a loved one passes away from kidney cancer. This is why we have national protective standards that require monitoring and treatment for dangerous common contaminants. We need EPA action on an enforceable standard, but without such action this committee has made efforts to ensure more widespread monitoring of PFOA and PFOS.

In the Drinking Water System Improvement Act passed by the committee last year, we would require water systems serving more than 3,300 people to test for unregulated contaminants, a vast improvement over that 10,000. Unfortunately, this does not help people served by the smallest systems or private well, but it is a start.

Mr. Chair, we should continue to look into additional ways to improve testing and monitoring. Today is a great opportunity for us to learn what EPA and state governments are doing to address the growing course of concerns from scientists and private citizens about the risks posed by PFAS. I hope we will hear that EPA is exploring all regulatory options available and plans to act expediently. But even on the most aggressive timeline, regulatory action will likely take years, so we must consider what can be done right now to identify contaminations, prevent exposure, and expedite cleanups.

We are also joined today by the Department of Defense. For
decades, aqueous film-forming foam, a firefighting foam that contains PFAS, has been used by DOD and commercial airports. In communities where PFAS are not manufactured, ground water contamination has often been traced to a nearby DOD installation where these firefighting foams have been used. Communities near these bases and industrial facilities did not sign up for this risk and deserve, deserve clean water.

DOD must step up and make it right. We know the cost of remediation can be expensive and the health consequences of exposure can indeed be fatal. Ultimately, we must hold polluters accountable to clean up and make the communities and families that have suffered from this pollution whole again. And yes that standard must apply to our United States Department of Defense.

Mr. Chair, I am grateful that you have called this hearing today. I expect we will learn a lot about the options of EPA, DOD, states, and communities to protect people from these dangerous contaminants. But a hearing is not enough. I firmly believe there is a need for legislation to ensure that adequate testing, monitoring, remediation, and protection is occurring, and this can best be guaranteed if Congress requires EPA to take the steps necessary to make a determination on a maximum contaminant level in addition to other potential protective actions.

I believe there are legislative proposals that would have bipartisan support and I hope we can continue to look into this
issue based on today's conversations. With that Mr. Chair, I
yield back. Mr. Shimkus. The gentleman yields back his time.

We can tell by the length of the statement that Jackie has
returned, so welcome back.

The Chairman. Swing and a hit.

Mr. Shimkus. The chair now recognizes the chairman of the
full committee, Chairman Walden, for 5 minutes.

The Chairman. Thank you, Mr. Chairman. I appreciate you
holding this hearing. It is really, really important work and
I know many of our colleagues on the dais -- Mr. Hudson, Mrs.
Dingell, Mr. Upton and others -- have been very involved in this.

On my way back to Washington at the end of last week, I went
at Mr. Upton's request to Michigan to learn more firsthand from
him about this horrible situation in his district and state.
And I think it is really important we got right on this hearing.

I appreciate everybody's input. You know, we are going to do
three things here today. First, is we need to increase our
understanding of what the government knows or doesn't and
establish what the public should know about the risks, how
confident they should be in that information, and the best ways
to prevent unhealthy exposure to these chemicals.

Second, we need to explore what can be done right now to
address contamination by these substances based on what we do
know starting with the practical steps that may be taken to reduce
risk from contamination. And third purpose of the hearing, it
should help develop an outline for a more sustained strategy to fill important information gaps, identify any longer terms challenges, and set realistic expectations for results based on science and risk-informed decision making.

And that is why we have our witnesses today who can help us in this effort. I want to thank Chairman Shimkus for assembling these two very good panels of witnesses. They have important knowledge not only on the complicated nature of PFAS contaminated sites and the state of the science on these contaminates, but also on policy.

I know EPA announced a more comprehensive PFAS plan this past May and have been traveling the country to hear from people impacted by PFAS contamination. And we look forward to hearing what EPA ranks PFAS exposure in terms of other environmental and public threats that are facing us and how the federal government plans to try to tackle the issues associated with PFAS chemicals including around Defense Department sites.

And we look forward to learning about the technical and economic barriers that states and communities face in dealing with this contamination. We have seen these sorts of things before in America. We know how difficult they can be and deadly they can be in various examples in the past including at Department of Defense sites. I think of Hanford in my region and the waste that is there from World War II we are still trying to clean up, and other things that have occurred around the country.
So I appreciate our panel being here. I appreciate this hearing. I am going to yield the balance of my time to the former chairman of this committee, nobody who has worked harder on this issue -- got on it right away with Governor Snyder -- than Fred Upton. So, Mr. Upton, I would yield the balance of my time to you.
Mr. Upton. Well, thank you, Mr. Chairman. And I want to particularly thank you too, Mr. Chairman Shimkus, not only for this hearing this morning, but also for your great work in the last Congress to pass TSCA legislation, something that passed this committee when I was chairman, on a unanimous vote thanks to your leadership, and really provided the EPA the authority to begin to look at all these somewhat unregulated chemicals for the first time in 40 years. And had that not happened we probably wouldn't be here today. So that work really paid off.

Let me just share with you a couple things at what happened when I went back to Michigan beginning the August break. I literally was just off the plane on my way home when I got a call from my state senator, Margaret O'Brien, and she said, Fred, I have really bad news. We just got the results from a small city in my district, Parchment, and they are 20 times the standard for PFOS and we are assembling a meeting yet tonight, we want you to come.

And so I went to the other end of my district, it was not a problem, and we spent about 5 or 6 hours there that night. We had a conference call with the state with every player of any importance to figure out what we should do. And we praised the media, because this particular town doesn't have the system on their cells even though earlier in the week here in Washington we got a weather alert that everyone's cell phone buzzed, take cover, flooding, et cetera, we didn't have that ability to do
that in Parchment. But we knew at 1,400 parts per trillion, 20 times the standard that they should not be using that water right away. People were ready to go door-to-door to tell folks in this small community don't put the water out for your pet, don't use it for infant formula, don't make it for coffee in the morning, don't -- just disconnect your icemaker, no water for cooking, and thanks to the media, particularly Channel 3 and Channel 8, they came out with radio stations and the word was out right away to stop.

And for a month we literally were giving bottled water to everyone in those two communities, City of Parchment and Cooper Township. That water just got turned on last week and when they were able to connect with the City of Kalamazoo to hook up. But you still have a good number of private wells and others that are in trouble because that level is too high.

So as the Governor said, this is a textbook case of what ought to happen, getting the word out, trying to figure out what is the next step, but immediately take care of the residents that were there. So I want to praise so many people on the ground.

I know that we have a good panel, a couple panels here ahead of us. I look forward to the questions. But, Mr. Chairman, I appreciate you taking this hearing up literally the first week that we are back so that we can better understand this and help other communities that yes will be on the same path as Parchment and Cooper Township in the future. I yield back.
Mr. Shimkus. The gentleman yields back his time. The chair recognizes the ranking member of the full committee, Mr. Pallone, for 5 minutes.

Mr. Pallone. Thank you, Mr. Chairman. PFAS contamination is a very serious issue affecting communities nationwide. We will hear today from some of those communities and I urge my colleagues to listen closely to the firsthand accounts of the harm these chemicals can cause. These health issues include multiple types of cancers, impaired childhood development, reproductive issues, hormone disruption, increased cholesterol levels, and immune system issues. And Americans across this country are being injured right now by these chemicals and it seems that more affected communities are being discovered all the time.

This hearing is a good start but the communities affected by PFAS contamination need more than just a hearing. They need real solutions and real action from the EPA and the DOD. The impacted states need more than just summits and enforceable advisories. We need a binding, enforceable, and strong drinking water standard.

Democrats on this committee have been pushing to set a deadline to promulgate a strong drinking water PFAS standard for several years and recently we have heard calls for alternative approaches to address these chemicals from communities and experts who don't believe EPA's regulatory process under the Safe
Drinking Water Act will actually work, and it isn't hard to see why.

In 2016, the EPA released a health advisory for two chemicals in this category at 70 parts per trillion. We know this level is too high to protect public health. States have known it for years and have set their own standards much lower, yet millions of Americans currently receive water that exceeds even this weak standard and the problem is spreading. The more water systems we test for PFAS, the more contamination we find. Earlier this year, the Agency for Toxic Substances and Disease Registry drafted a report identifying hazardous effects well below the EPA health advisory standard. Instead of acting on this information to protect the public health, the EPA and the White House worked to block publication of the report.

And the Trump administration feared the potential public relations nightmare more than public health nightmare facing many communities today, so this is yet another outrageous example of the Trump administration ignoring the health needs of the American people. And we have seen these delay tactics before, particularly with another drinking water contaminant spread by the Department of Defense, namely perchlorate. Next month will mark a decade since EPA determined that a drinking water standard for perchlorate was needed and we still have yet to see a proposed rule. So some may say that these troubling actions show that the Safe Drinking Water Act won't work, but I think
Congress can make it work. Congress should play a central role in setting the timeline for developing the PFAS drinking water standard and ensuring that the standard is truly protective of public health. And I hope this hearing is a sign that committee Republicans are finally beginning to share this view.

Additional actions under other environmental laws may be needed to fully address this contamination and support these communities, so I hope this subcommittee can work together quickly to address PFAS contamination and implement some of the solutions that we will hear about today.

And I would like to yield the remainder of my time to the gentlewoman from Michigan, Mrs. Dingell. Mrs. Dingell. Thank you, Mr. Chairman, and thank you to Chairman -- well, I meant Ranking Member, but thank you, Chairman Shimkus and Ranking Member Tonko, for holding this important hearing today to discuss and highlight the growing presence of harmful perfluorinated chemicals being discovered across the country.

You know, there is an old saying that says nothing lasts forever. Unfortunately, nothing that is except for fluorinated chemicals which were designed to stand the test of time. These chemicals, their dangers already having been laid out by my colleagues can be found all around us, and in recent years we have seen more and more cases of confirmed contamination sites in the environment and drinking water sources, especially across Michigan.
And like my colleague, Mr. Upton, we too found very dangerous levels in fish in the Huron River and have had the same crisis during the month of August. As we continue to test for PFAS I fear that this is only the beginning, the trend is going to continue. PFAS are man-made and will require a man/woman-made solution from all of us working together, every federal agency, every state and local official and Congress needs to immediately take this issue seriously.

I look forward to working with everyone on this committee and my colleague, Mr. Upton, and I, who will be shortly introducing legislation. Thank you and I yield back.

Mr. Shimkus. The gentleman yields back his time and the chair thanks the individuals.

We want to thank all our witnesses for being here today and taking the time to testify before this subcommittee. Today's witnesses have the opportunity to give opening statements followed by a round of questions from members. Our first witness panel for today's hearing includes Dr. Peter Grevatt, Director, Office of Groundwater and Drinking Water, U.S. Environmental Protection Agency, and Ms. Maureen Sullivan, Deputy Assistant Secretary of Defense for Environment, U.S. Department of Defense.

We appreciate you being here today. We will begin the panel with Dr. Grevatt and you are now recognized for 5 minutes for your opening statement. Thanks for being back and joining us.
STATEMENTS OF PETER GREVATT, DIRECTOR, OFFICE OF GROUNDWATER AND DRINKING WATER, U.S. ENVIRONMENTAL PROTECTION AGENCY; AND, MAUREEN SULLIVAN, DEPUTY ASSISTANT SECRETARY OF DEFENSE FOR ENVIRONMENT, U.S. DEPARTMENT OF DEFENSE.

STATEMENT OF PETER GREVATT

Mr. Grevatt. Good morning, Chairman Shimkus, Ranking Member Tonko, and members of the subcommittee. I am Peter Grevatt, Director of the Office of Groundwater and Drinking Water at the U.S. Environmental Protection Agency. I also serve as chair of EPA's cross-agency efforts to address per and polyfluoroalkyl substances, or PFAS. Thank you for the opportunity to testify today.

Protecting America's drinking water is one of EPA's top priorities and I am here today to share with you the actions the Agency is taking to address PFAS. PFAS are a group of man-made chemicals that have been in use since the 1940s and PFAS are or have been found in a wide array of consumer products and as an ingredient in firefighting foam.

PFAS manufacturing and processing facilities, airports, and military installations are some of the contributors of PFAS releases into the air, soil, and water. Because of their widespread use, most people have been exposed to PFAS and there is evidence that exposure to certain PFAS may lead to adverse health effects. EPA has taken steps under its various statutory
authorities to understand and address these chemicals. For example, under the Toxic Substances Control Act, the Agency has issued various significant new use rules for certain PFAS chemicals to guard against their reintroduction into new use or new use with prior EPA review. Under the Safe Drinking Water Act, which my office oversees, EPA has also monitored for six PFAS to understand the nationwide occurrence of these chemicals in our drinking water systems and in 2016, EPA issued drinking water lifetime health advisories for two well-known PFAS compounds, PFOA and PFOS, of 70 parts per trillion.

EPA is also working to move research forward on PFAS to better understand their health impacts, options for treatment, and how information on better known PFAS compounds can be applied to inform our knowledge of other PFAS. To build on these actions, EPA hosted a PFAS National Leadership Summit in May of 2018. The summit provided an opportunity for participants to share information on ongoing efforts, to identify specific near-term actions, and to address risk communication challenges.

At the event, EPA committed to work on four significant actions: First, to initiate the steps to evaluate the need for a maximum contaminant level for PFOA and PFOS; second, to begin the necessary steps to consider designating PFOA and PFOS as hazardous substances; third, to develop groundwater cleanup recommendation for PFOA and PFOS at contaminated sites; and lastly, to develop draft toxicity values for the PFAS compounds.
GenX and PFBS.

EPA also continues to provide support to states, tribes, and communities who are addressing PFAS issues. As EPA takes these actions, the Agency is also committed to working with our federal partners including the Department of Defense and the Department of Health and Human Services. We look forward to continuing our interagency dialogue and collaboration.

Additionally, EPA recognizes the need to hear from citizens. Since June, EPA has traveled to five states across the country to hear directly from impacted communities and these experiences have been invaluable and community feedback will now shape how we move forward. EPA will consider information from the National Leadership Summit, the community engagements, and the public docket to develop a PFAS Management Plan.

Protecting public health is EPA's top priority. Acting Administrator Wheeler has expressed his continued commitment to considering actions on PFAS so that EPA can lead efforts that meet the needs of impacted communities.

Once again Chairman Shimkus, Ranking Member Tonko, and members of the subcommittee, thank you for the opportunity to discuss PFAS. I look forward to answering any questions you may have.

[The prepared statement of Mr. Grevatt follows:]

**********INSERT 1**********
Mr. Shimkus. Thank you very much.

We next turn to Ms. Maureen Sullivan. Your full statement is in the record. You have 5 minutes.
Ms. Sullivan. Chairman Shimkus, Ranking Member Tonko, 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 environmental laws such as the Safe Drinking Water Act and the Comprehensive Environmental Response Compensation and Liability Act, CERCLA. That is a mouthful.

I want to thank Congress for your strong support for the Department of Defense, our national security priorities, and for funding that we need to protect our nation. Ensuring the health and safety of our service members, the families living on our installations, and the surrounding communities is one of our top priorities.

I want to thank this committee for the opportunity to discuss the establishment of a national approach to per and polyfluoroalkyl substances, PFAS. We believe DOD has been leading the way to address these substances. One commercial product that contains PFOS is aqueous film-forming foam, or AFFF. This highly effective firefighting foam has been used by the Department of Defense, commercial airports, local fire departments, and the oil and gas industry. However, it only accounted for approximately three to five percent of the PFOS production in calendar year 2000.
And the Department of Defense is just one of the many users of the foam. DOD has committed substantial resources in the last 2 years and taken significant actions to respond to the concerns from PFOS and PFOA. When EPA issued the lifetime health advisory for PFOS and PFOA in 2016, the Department quickly acted to voluntarily test our 524 drinking water systems that serve approximately two million people on our installations worldwide. Twenty four of these systems tested above EPA's LHA level.

Although it is only an advisory, DOD followed EPA's recommendations to include providing bottled water or additional water treatment at those locations. CERCLA provides consistent approach across the nation for cleanup. The Defense Environmental Restoration Program statute provides authorities to DOD to perform and fund actions and requires they be carried out in accordance with CERCLA.

The first step is to identify the source of known or suspected releases. The Department of Defense has identified 401 active and Base Realignment and Closure installations with at least one area where there is a known or suspected release of PFOS or PFOA. The Military Departments then determined whether there was exposure through drinking water and, if so, the priority is to cut off human exposure where drinking water exceeds EPA's lifetime health advisory. Once the exposure pathway is broken, the Military Departments prioritize the sites for further action using the longstanding CERCLA risk-based process, worst first.
These known and suspected PFOS and PFOA release areas are in various stages of assessment, investigation, and cleanup. To prevent further releases to groundwater, DOD issued a policy in January of 2016 requiring the Military Departments to prevent uncontrolled, land-based AFFF releases during maintenance, testing, and training activities. The policy also requires the Military Departments to remove and properly dispose of supplies of AFFF containing PFOS other than for shipboard use.

Currently, no fluorine-free version of AFFF meets the military's stringent performance requirements to extinguish petroleum fires. From fiscal year 2017 to fiscal year 2019, we solicited research products to identify and test the performance of fluorine-free AFFF. These efforts support DoD's commitment to finding an AFFF alternative that meets critical mission requirements while protecting human health and the environment and will represent at least $10 million in research and development funding.

In summary, DOD is taking actions to reduce the risks. We are committed to mitigating PFOS and PFOA releases to the environment that are a direct result of DOD activities. We are making significant investments in a fluorine-free AFFF. These combined efforts reinforce DOD's commitment to meeting critical mission requirements while protecting human health and the environment. Thank you very much.

[The prepared statement of Ms. Sullivan follows:]
Mr. Shimkus. The chair thanks the gentlelady.

We now conclude with the opening statements from our panel and we would like recognize members for their round of questions. And we would like to start by recognizing myself for 5 minutes, and this is to Dr. Grevatt.

A little over a year ago, our committee unanimously reported a bill to reauthorize and modernize the Safe Drinking Water Act to help water systems comply with federal mandates and keep their water safe. The centerpiece of that bill was a 5-year, $8 billion reauthorization of the Drinking Water State Revolving Loan Fund.

We are quite proud of that bill and I want to explore how that bill can help with PFAS contamination.

Can Drinking Water State Revolving Funds themselves be used for infrastructure upgrades needed for things like treatment, well upgrades, or distribution upgrades to help address levels of PFAS?

Mr. Grevatt. Thank you, Chairman Shimkus. Yes. Yes, certainly that fund can be used for those purposes.

Mr. Shimkus. Would this include filtration, disinfection and disinfectant facilities, and project planning and design activities?

Mr. Grevatt. Yes, sir. The fund can be used for those purposes as well.

Mr. Shimkus. What about Drinking Water State Revolving Fund set-asides? May these be used by a state to provide technical
assistance to support PFAS related work?

Mr. Grevatt. Certainly the set-asides can be used for those purposes and are used quite broadly across the country to support these efforts.

Mr. Shimkus. Would this apply to contamination and treatment problems, outreach, and training on new issues for water system workers' scoping studies for treatment purposes?

Mr. Grevatt. Yes, sir. All those things would be covered by the Drinking Water SRF as eligible activities.

Mr. Shimkus. Thank you. We have several viewpoints on what government should do to address PFAS contamination. What specific actions under existing statutory authority can federal government take to address PFAS?

Mr. Grevatt. Thank you, Chairman. So there are many actions across the broad authorities that we have at EPA currently that we are using right now to address PFAS and those include actions under the Safe Drinking Water Act. For example, the Unregulated Contaminant Monitoring Rule effort that a number of the members have cited under SDWA focused on PFAS. The last round we have the opportunity to develop drinking water health advisories which we did for PFAS compounds and we also have the opportunity as a number of the members have noted to develop maximum contaminant levels. That particular action is one that we are looking at very carefully as we speak. We have used steps under TSCA to address PFAS compounds including under TSCA Section
5. We have also used our authorities under CERCLA to address PFAS compounds at contaminated sites. So there are many opportunities that exist today to address these issues.

Mr. Shimkus. Which of these actions has EPA or others in the federal government not used and why?

Mr. Grevatt. So likely the two most significant that folks may be thinking about are the development of an MCL and also the listing of PFAS compounds as hazardous substances under CERCLA. And both those actions that EPA committed in its National Leadership Summit to explore very carefully and we are involved in that process right now as we speak.

They are both potentially very important in terms of the requirements that would be put on community water systems across the country on an MCL and also the hazardous substance listing would provide EPA with the opportunity to both order cleanup actions and recover costs that EPA may expend in cleanup actions. So they are both very important steps. There are many different ways to achieve the hazardous substance listing not only through CERCLA but through a number of the other statutes that currently are in place that EPA is responsible for fulfilling.

Mr. Shimkus. Thank you.

Ms. Sullivan, your testimony notes that DOD is taking response actions in accordance with CERCLA or Superfund law. Does DOD agree that cleanup of PFAS contamination is governed
Ms. Sullivan. Yes, sir. Following the longstanding process that EPA has established under CERCLA it is considered a tier 3 value. The reference dose behind the lifetime health advisory can be used and is being used to determine the risk associated with sites.

Mr. Shimkus. I will end my questions and yield back my time and turn to the ranking member, Mr. Tonko, for 5 minutes.

Mr. Tonko. Thank you, Mr. Chair.

And, Dr. Grevatt, thank you for your testimony. You described a number of actions EPA committed to doing earlier this year. I would ask here, what steps must be taken before EPA can make a determination about PFOA and PFOS as a hazardous substance under Section 102 of CERCLA and what is the timeline for that decision?

Mr. Grevatt. Right. Thank you very much, Ranking Member Tonko. I appreciate the question and as I note it is a very important issue. And so there are a number of ways that EPA can achieve this hazardous substance listing through CERCLA as you noted, but also through TSCA, through the Clean Water Act, through the Clean Air Act, so there are a number of different ways to achieve a hazardous substance listing. And EPA is currently looking at the various authorities including RCRA that allow us to list these as hazardous substances thinking carefully about the different steps that would be involved under each of
those statutory authorities and weighing which ones are going to make the most sense in this case. Ultimately, the administrator will be making the decision both as to whether he wants to proceed with the hazardous substance listing and then under which statutory authority to address that.

Mr. Tonko. And again what would the timeline for the decision be?

Mr. Grevatt. So EPA is going to be developing a National Management Plan for PFAS compounds. That was one of the commitments at the National Leadership Summit and our goal is to have that National Management Plan completed by the end of his calendar year. So we are working diligently on that right now, we expect that National Management Plan will include this consideration of the hazardous substance list.

Mr. Tonko. So that is in less than 4 months.

Mr. Grevatt. Yes, sir.

Mr. Tonko. If this determination is made, how will it help states and localities address contamination issues and hold responsible parties accountable for remediation?

Mr. Grevatt. Right, thank you. So the critical issue that the hazardous substance listing will allow under CERCLA is for EPA to order cleanup actions and if EPA has to expend funds from the Superfund for the purpose of cleaning up sites EPA will be able to recover costs that are expended. So this will give very important tools for states and local communities to address these
PFAS challenges at contaminated sites.

Mr. Tonko. Right. And what is the timeline for that decision?

Mr. Grevatt. Right. So as I noted, we expect that this issue will be addressed in the National Management Plan and our goal is to have that completed by the end of this calendar year.

Mr. Tonko. Okay. And if you listen to today's second panel, I am certain you will hear from states' public health advocates and concerned citizens that there is a widespread problem that needs a national framework and federal funding to support state, local, and individual responses. At this point there can be no doubt about the severity of the problem. You cannot hold a national summit and a public meeting tour without acknowledging this.

So the gravity of the situation should be apparent by today's hearing, we are not holding hearings on other CCL or contaminants. So with all that in mind, will EPA commit to including PFOA and PFOS as part of Regulatory Determination 4?

Mr. Grevatt. So a couple of important points on your question and thank you, Ranking Member Tonko, for that question. So the Regulatory Determination Number 4 is, the schedule for that is 2021 when that is due. EPA is currently looking at this issue of the Regulatory Determination for PFOA and PFOS as we speak. We expect that decision will be made long before 2021 and we will be addressing this issue as well in the context of
the National Management Plan that will be completed by the end of this year.

Mr. Tonko. So can we commit to that then or, obviously there is a sense of urgency here.

Mr. Grevatt. Yes, absolutely. So we certainly can commit to look carefully at this issue in terms of how the agency will approach the Regulatory Determination. I don't have an answer yet as to whether and how EPA will include PFOA and PFOS in the Regulatory Determination. That is an issue that as the Safe Drinking Water Act states is in the sole judgment of the administrator, and Acting Administrator Wheeler is looking at this issue right now as we speak.

Mr. Tonko. Okay. Well, we have seen some walking away from commitments to the environment. So if you are going to make this extensive effort to explore potential regulatory actions, in the end EPA must be willing to say one way or another if these contaminants need a national standard. There can be no more kicking the can down the road, so I would hope that we would get that sort of commitment.

Mr. Grevatt. Yes, sir.

Mr. Tonko. With that Mr. Chair, I yield back.

Mr. Shimkus. The gentleman yields back his time. The chair now recognizes the vice chairman of this subcommittee, Mr. McKinley, for 5 minutes.

Mr. McKinley. Thank you, Mr. Chairman. Certainly we have
had, in West Virginia we have had some exposure to the PFOA and PFOS. We went through it a couple of years ago and we saw the concerns that people had, the population in one of the communities. Vienna, West Virginia wound up, with about 10,000 people it cost them $6 million to address this problem and annually now it is going to be about a $200,000 cost that they are going to have to incur.

We all want clean water. I am a hundred percent behind that on this, where we need to go on this. I am just, I am a little bit curious. Often we have an independent verification and validation process in software. Are we going to have anyone review the -- as we drop down from, remember, it went from 400 down to 70, now we may be talking about going down to 10. That is all wonderful. Is there going to be another validation of that to see that as we keep ratcheting down, will there be an independent verification, a second opinion so to speak that that is the right thing to do?

Mr. Grevatt. Without question, Congressman, if we were to make a change from the current drinking water health advisory of 70 parts per trillion for PFOA and PFOS combined, we would subject that, the scientific basis for that to independent peer review before we were to take such an action.

Mr. McKinley. Thank you. I think that is going to be overall well, because I am concerned we had 63 sites around the country 2 years ago. This was a very interesting report. Did
you help author that 2 years ago?

Mr. Grevatt. Yes, sir.

Mr. McKinley. About 103 pages long, as an engineer it was enjoyable reading but it also told how the points we have to raise on these matters. So now we had 63 communities that are affected with this back then. If we were to go down to 10, 15 do you have any idea how many communities across the country could be impacted with that?

Mr. Grevatt. Thank you, sir. It is difficult to conjecture on the exact number. What I can say is in terms of UCMR process that that process covered, it was a census of all the large drinking water systems, larger than 10,000 people served, and a representative sample of systems smaller than 10,000. As you noted, we found 63 of those systems had levels above the drinking water health advisory of PFOA and PFOS of 70 parts per trillion. That sample covered 80 percent of the United States population that is served by community water systems and so we consider it a very comprehensive effort.

Mr. McKinley. Well, what kind of numbers are we talking? Could we have if we were to drop to 10, which again in an ideal world that would be wonderful. As an engineer, all of us want to have the purest water we can. But to get down to 10, is that going to affect perhaps 300 communities, 3,000 communities to get down to 10?

Mr. Grevatt. I think it is very difficult to guess. What
we can say for certain is it will be more than 63 and we know as a result of --

Mr. McKinley. So as a result I know the timeframe on this is that we, at least in West Virginia we had a company that was on the hook to pay for this, but there are going to be some communities that the companies are long gone and how are they going to do this, so I don't know whether from the military or the communities.

We have trouble right now with brownfield sites that we have 480,000 brownfield or contaminated sites across America but we only clean up about a thousand or less during a years' time. I want to see this thing done, but I have got to find out how to push the urgency that this is our number one priority in addressing water on that.

Would you say that of all -- I want to, careful now on this. Of all the water contaminants that we face -- bleach, salts, nitrates -- is PFOA, is that the number one contaminant?

Mr. Grevatt. I think it is very important to look at this --

Mr. McKinley. Is it the number one? Is that the one, because we can chase a lot of rabbits here. I want to make sure that we are chasing the right rabbit, the one that is causing the greatest harm to the American public I want to see us focus on that. Not one that just pops up over here and, you know, that -- I won't give you an analogy. Is this the number one health
risk in water today in America, PFOA?

Mr. Grevatt. Thank you, Congressman. In communities where PFAS compounds have impacted drinking water supplies they are presenting significant challenges. Nationally, I would say no, this is not the number one challenge that we face. I think there are important issues around the basics of water treatment, especially around areas, things like disinfection and disinfectant byproducts in systems. It is very important to make sure that we also focus holistically on the full spectrum of challenges that face our nation's drinking water systems.

Mr. McKinley. Thank you and I yield back.

Mr. Shimkus. The gentleman yields back his time. The chair now recognizes the ranking member of the full committee, Congressman Pallone, for 5 minutes.

Mr. Pallone. Thank you, Mr. Chairman.

My home state of New Jersey has been studying PFAS contamination in drinking water since 2006, following reports of contamination from a DuPont facility, and monitoring by the state and by EPA has shown widespread contamination across New Jersey. In 2017, New Jersey set an MCL for PFOA at 14 parts per trillion and another MCL for PFNA at 13 parts per trillion.

And those standards were a triumph for science and advocates in New Jersey who worked for years to overcome political opposition and this standard has been important to communities across the state and ensures that drinking water is being treated
to remove those chemicals. But I have heard serious concerns that the Department of Defense is not cleaning up contaminated sites in New Jersey to that state standard.

So, Ms. Sullivan, the Department of Defense has conducted testing at and around some military facilities in New Jersey. According to the presentation you made to Congress in March, drinking water contamination has been found around Naval Weapons Station Earle, which is in my district, and Joint Base McGuire-Dix-Lakehurst.

Groundwater contamination has also been found around the former Naval Air Warfare Center in Trenton with levels as high as 22,800 parts per trillion detected. According to your March report, the contamination at former Naval Air Warfare Center in Trenton will be handled through a continued Superfund process.

So my questions are, will that cleanup in Trenton meet the New Jersey standards of 14 and 13 parts per trillion and will you commit to me that DOD will meet those standards for cleanups in my state?

Ms. Sullivan. Thank you, Congressman, for the question. I appreciate that you have read our detailed report from earlier this year. The Department of Defense as we are required to by CERCLA in the Defense Environmental Restoration Program statute is following the CERCLA process. And as part of that process the state levels are rolled in through the risk assessment process.
So as we go through our analysis following the structure of it, these state standards will in fact be rolled in as a consideration as an appropriate and relevant regulation. At the end of that risk assessment process there will be a determination of unacceptable risk that will be reviewed not only by us, but by the state, your state environmental agency and the Environmental Protection Agency to determine what the end remedy solution will be.

Mr. Pallone. But my concern as you can imagine, is that because I am very familiar with the Superfund process is oftentimes DOD or even EPA do not necessarily recommend a more strict standard. You know, they look at it as a factor and you are saying they will, which I appreciate, but they may not adopt the standard.

I just think -- I mean they may not insist on that as the remediation alternative that they pick. And the fact that DOD is not bound by these state drinking water standards, you know, to me, shows how important a national drinking water standard is because it may very well be that those state standards are not met. I mean obviously I would urge you to meet them, but you are not going to guarantee that they would be because you are just saying it will be considered.

Ms. Sullivan. Yes, sir. They will be considered as part of the CERCLA process which we are bound to.

Mr. Pallone. Yes. Well, I think, I mean I think that is
unfortunate. I think you should be bound by them, and even if you are not that you should, you know, you should adopt them.

But I appreciate your candor.

Now, Ms. Sullivan, what chemicals is the Department of Defense using in place of PFOA and other PFAS? Has the Department conducted studies of those chemicals to establish their safety?

Ms. Sullivan. Thank you again, sir, for that question.

We are in the process of investing a significant amount of research and development to first demonstrate the commercially available substances to see -- that are PFOA-free -- to see if they meet our strict standards in order to fight fires. We are also investing research and development dollars to sponsor development of a fluorine-free foam that also meets.

And as I stated, while we continue to do that we are working with the current manufacturers to fully understand how much PFOA is in the products that they are providing to us and controlling the releases of those.

Mr. Pallone. All right. I am just going to run out of time. I just was going to ask you if you could provide the committee, through the chairman, with any and all studies that the Department of Defense has regarding the safety of these substitute chemicals if you would.

Ms. Sullivan. Certainly we can.

Mr. Pallone. And, Mr. Chairman, I know my time is running out, but I know you were so much involved with TSCA and I just
wanted to say that the concern over substitutes is not limited
to PFAS and was central to our efforts to reform TSCA as you know.
And unfortunately EPA's implementation of TSCA has fallen short
of our hopes and so I was hoping that we have an opportunity for
a hearing on TSCA implementation. I will make that request again,
Mr. Chairman.

Mr. Shimkus. I would thank the chairman. I think that is
going to be doable. We will try to figure out a time. I think
both sides are kind of frustrated with the process and my
frustration is a surprise in some of the areas and I think it
has been flipped on both issues. So I think we will do our best
to try to find some time to do that. As one of our signature
legislative accomplishments, we would hate to see it bogged down
in implementation.

Mr. Pallone. Thank you.

Mr. Shimkus. Having that the gentleman returns his time,
the chair now recognizes the gentleman from Ohio if he is ready,
Mr. Johnson, for 5 minutes.

Mr. Johnson. Thank you, Mr. Chairman. I appreciate you
holding this very important hearing. You know, many people
throughout the country are very familiar with the issues we are
discussing today. And along the Ohio River, along with other
states along the river we are no exception to that. It is vital
that we continue to develop a complete understanding of how
chemicals in high concentrations like PFOA impact populations
and how best to take any actions necessary.

I know many studies including some prominent ones within Ohio such as the University of Cincinnati have been conducted on this issue and I hope to see those studies continue. I also know that the EPA is working on these issues as Dr. Grevatt has indicated in his testimony.

So, Dr. Grevatt, you have worked with Ohio on many occasions on water contamination issues and we appreciate that. How can Ohio continue to best engage with the EPA on these issues?

Mr. Grevatt. Thank you, Congressman, and appreciate your noting my work with Director Butler and others from Ohio EPA, my home state, so I have a great connection with folks there.

We are working very closely with all the states on the activities that we have underway. We will continue to stay very close to the state of Ohio and other states on issues like the development of toxicity factors for PFBS and GenX on these questions about development of the decision on a hazardous substance listing and potentially on an MCL, so as well as the groundwater cleanup goals. These are all issues that we are working very closely with the state of Ohio and others states on. We will commit to continuing that connection with the states.

Mr. Johnson. Okay. And are you working with them on any of the DOD facilities as well?

Mr. Grevatt. Yes, sir.

Mr. Johnson. Okay.
Mr. Grevatt. So yes, as Ohio and other states request support from EPA we are for certain going to be there to assist them with these challenges.

Mr. Johnson. Okay. I understand the local government advisory committee is soliciting input. How can people along the river along my district best engage in this process and what can Congress do to help?

Mr. Grevatt. Thank you very much. So one of the things that citizens across the U.S. can do right now is we have opened the docket in addition to the community engagement sessions which I referred to that we have had now in five different states. We opened the docket so anyone in the U.S. who wants to submit their perspectives to us can do so right now. That way we have about 80,000 comments that we have received thus far.

We will hold that docket open until right about the end of this month. And then if there are specific issues that you have that you would like to follow up on, we would be happy to circle back with you and your staff to discuss those.

Mr. Johnson. Okay, thank you.

Ms. Sullivan, same question for you. We have a significant Defense Department footprint in Ohio -- Wright-Patterson, Mansfield, Youngstown Air Reserve Base, et cetera. Is there anything that we can do to more closely engage with the DOD on some of these issues?

Ms. Sullivan. Thank you, Congressman. I know that
Wright-Patterson has, well, Wright-Patterson has a restoration advisory board which is community based so to try and engage the local community and be transparent in what is going on, on the base, and I encourage the local communities to engage in that. The Air Force has been very transparent in their process having established websites and public meetings and I encourage the community to get engaged in those processes.

Mr. Johnson. And, Ms. Sullivan, your written testimony discusses the remediation of PFOS and PFOA and you note that DOD is addressing known or suspected releases of these chemicals to determine whether there is exposure through drinking water. Is DOD only looking at drinking water exposure and what about releases to soil sediment and groundwater?

Ms. Sullivan. Thank you, I appreciate the opportunity to answer that question. The exposure through drinking water was our first priority so we wanted to make sure that we fully understand if anybody, humans were being exposed and to cut that off. Then we are going through the standard process to look at all of the potential exposure pathways including soil and groundwater. But we are taking a more deliberative approach because our first priority was to cut off human exposure.

Mr. Johnson. Okay. Just real quickly back to you, Dr. Grevatt. You mentioned EPA is working on response actions with other agencies such as HHS. Can you explain your work partnership with HHS including what agencies at HHS and what collaboration
has occurred and what we can expect moving forward?

Mr. Grevatt. For certain. Thank you, Congressman. So as I noted we are working very closely with HHS on a number of the actions which we identified. Those include the development of the toxicity values of PFBS and GenX. We are working, really, with all the different parts of HHS including the assistant secretary's office, Assistant Secretary for Health, right down through FDA, NIEHS, ATSDR, CDC, every part of HHS has been involved to participate in this effort. And we will continue to work side by side with them on these issues.

Mr. Johnson. Okay. Well, thank you both for your testimony.

Mr. Shimkus. The gentleman's time has expired. The chair now recognizes the gentleman from Texas, Mr. Green, for 5 minutes.

Mr. Green. Thank you, Mr. Chairman, you and the ranking member, for holding this hearing. Per or polyfluoroalkyl substances, or PFAS, has been around for many years and has found a wide variety of uses in consumer products from our cookware to stain repellents to fire retardants. Due to the widespread use, most people have some exposure to PFAS. While scientific data shows minimal amounts of exposure do not pose substantial risk, higher levels of exposure could lead to a wide array of adverse health effects. I would like to thank our witnesses for being here today to testify and look forward to your opinion.

Dr. Grevatt, in 2016, EPA revised its nonbinding lifetime
health advisory level for PFAS down from 400 parts per trillion to 70 parts per trillion. What was the impact of this decision?

Mr. Grevatt. Thank you, Congressman, a very important step in terms of having a final lifetime health advisory. We provided this to the states and members of the public in terms of not only the value of the health advisory but steps that communities could take to address concerns with PFAS. And this health advisory came out as we were completing the UCMR process, the national monitoring study that I mentioned, and so together they were able to help to identify communities that may have concerns related to PFAS in their drinking water supply. So it was a very important step.

Mr. Green. What does it take to go from a nonbinding to binding?

Mr. Grevatt. That would be, and as you noted, sir, the drinking water health advisories are really guidance values. They are not requirements. It would take us a national drinking water regulation, an MCL for PFAS compounds to create a binding requirement in terms of meeting those levels.

Mr. Green. Well, I have a very urban district in Houston, a chemical industry, refinery industry, but in Texas like Ohio we have a number of military bases. In fact, Fort Hood is probably the biggest base in the world. We have air bases. Has there been a partnership with the bases in Texas as you said that in Ohio?
Mr. Grevatt. Yes, sir. We are working closely with DOD on these issues all across the country. And perhaps Ms. Sullivan would like to respond.

Ms. Sullivan. Thank you, sir. The bases in Texas are subject to the same processes across that we have established across the nation. They had to go and look where they had known and suspected releases and if there were any they had to determine if there was exposure through drinking water and address that. I can provide you detailed information if you would like on the bases in Texas.

Mr. Green. I would appreciate that so I can share it with my other colleagues in Texas. Does EPA currently have the technical expertise to set MCL that protects public health?

Mr. Grevatt. Yes, sir. I believe we do.

Mr. Green. How do you reconcile that the Agency for Toxic Substances and Disease Registry released a draft study of the public health risk of PFAS that showed maximum safe levels of chemicals are seven to ten times less than the health advisory set by EPA? Is EPA ignoring this mission or how do you reconcile that between the Disease Registry?

Mr. Grevatt. Thank you, Congressman. So I would say a couple of things about that. The first is that the purpose of the document that ATSDR developed is different from our drinking water health advisory. They used these toxicity profiles as screening values for sites and then also they chose to view the
science somewhat differently than we did. We are working very closely with them on these issues to make sure that we are sharing the best information we have as we go forward.

Mr. Green. Well, obviously there is some concern because, you know, we know what happened in Flint, which was not that issue, but what former Chairman Upton talked about in his area and again in an industrial area we could have the same thing.

Given the action that is seen at the state level to set maximum containment levels, or MCL, what is EPA's expected timeline for setting federal MCL for PFAS under the Safe Drinking Water Act?

Mr. Grevatt. Thank you, Congressman. So this is one of the key actions that we identified earlier this year that we were going to be exploring throughout the year. We expect this to be included in the National Management Plan and we hope to have that completed by the end of this calendar year.

Mr. Green. Okay. Well, I would hope EPA would quickly move and address the issue in a competent manner relying on the solid peer reviews data and allowing public input throughout the process. And like I said, I don't think any member on the dais would not be willing to partner in our communities if that was the issue.

I will yield back my time, Mr. Chairman.

Mr. Shimkus. The gentleman yields back the time. The chair now recognizes the gentleman from Texas, Mr. Flores, who with
my apologies for skipping you, you are recognized for 5 minutes.

Mr. Flores. That is okay. You just let the other gentleman from Texas ask my question. But I would like to thank you, Mr. Chairman.

Dr. Grevatt, a couple of questions for you really quickly. Continuing Mr. Green's line of questioning, did the EPA learn anything from the ATSDR report that was dramatically different from what it had developed internally with respect to maximum levels?

Mr. Grevatt. Thank you, Congressman. So as I noted, we have worked closely with ATSDR on the communication of their report and in the development of their report. We provided comments to them and have worked throughout this process. I think one of the things that we have learned and perhaps these reports reinforce is the importance of focusing on risk communication with the public so we don't lead people to a place where they are confused about what do these different values mean.

And as I noted, they have different purposes, the toxicity profile from our health advisory, but that has been a really important message. Also throughout the national engagement that we have done risk communication is something we need to continue to focus and try and advance.

Mr. Flores. Let's go ahead and move to the communications question. Mr. Upton brought this up during his opening testimony. Would you say that the current communication efforts
with respect to PFAS are effective?

Mr. Grevatt. I think, sir, that we always can improve and we need to focus on continuing to improve on our risk communication and this is a top priority for Acting Administrator Wheeler.

Mr. Flores. So what improvements would be needed? I mean what are your initial thoughts as far as improvements that could be put in place?

Mr. Grevatt. I think it is important for us to continue to work towards characterizing the context for these values, what they mean, what does 70 parts per trillion mean and what are the implications for a community that may have a level above 70 parts per trillion. I think it is natural that folks will become very concerned when they see levels approaching that. And we think it is important to focus on PFAS. We think it is important to focus at the local level on awareness of these compounds and taking steps to address them. But we want to try to continue to share this information in a way that doesn't create a great deal of anxiety and fear on the part of the public. I think that is a place where we can make further progress.

Mr. Flores. Let's drill into the 70 parts per trillion metric for a minute. Does today's technology readily measure concentrations of this contaminant at that level?

Mr. Grevatt. Yes, sir.

Mr. Flores. It does, okay. Thank you. I yield back the balance of my time.
Mr. Hudson. [Presiding.] The gentleman yields back. The chair recognizes the gentleman from California, Mr. McNerney.

Mr. McNerney. Well, I thank the chair. While I appreciate that the EPA is hearing from the public and engaging with communities impacted by PFAS, recent actions by the EPA have undermined public confidence and my confidence in the Agency's ability to address human health risks posed by these toxic chemicals.

In April of this year, the EPA proposed a rulemaking titled, Strengthening Transparency in Regulatory Science. Now, this was modeled after the secret science legislation drafted by the House Republicans. The proposal could require the EPA to ignore important scientific studies of human health effects because the data included private medical information.

Dr. Grevatt, was the Office of Water consulted before the rulemaking was proposed?

Mr. Grevatt. Thank you, Congressman. This rulemaking is an Agency rulemaking and so all parts of the Agency are engaged on this. It is being led from the Office of Research and Development but we are connected in this effort.

Mr. McNerney. Okay. Did your office assess how the proposal would impact your ability to address PFAS contaminations?

Mr. Grevatt. Sir, while the proposal has received many, many comments as I think you are aware and the Agency is in the
process of considering the comments as they move towards
development of a final rule, and I think it is difficult to
conjecture at this stage what those impacts might be.

Mr. McNerney. Well, in June of this year I joined Ranking
Member Pallone and Ranking Member Tonko in sending a letter to
the Agency requesting additional information on the issue, 2
months later the Agency responded to me personally. I would like
to submit my letter and the Agency's response to the committee
for the record.

Mr. Hudson. Without objection, so ordered.

[The information follows:]

**********COMMITTEE INSERT 3**********
Mr. McNerney. Thank you. Mr. Grevatt, are you aware of this letter?

Mr. Grevatt. I am aware that we have received the letter. I personally have not been engaged specifically on this issue in the response to that letter.

Mr. McNerney. Okay. Well, the letter requests that the EPA provide us with copies of all comments or feedback from the EPA staff on the Agency's proposed Strengthening Transparency in Regulatory Science rulemaking, including but not limited to members from the rulemaking's Action Development Working Group.

There were other requests as well as this.

This information is important so that we can better understanding what, if any, concerns were raised on how the proposed regulation would impact its ability to address human health risks associated with PFAS. Again it took the Agency 2 months to respond, but they haven't, the Agency hasn't produced the documents that were requested in the letter. Would you commit to providing those documents for the record?

Mr. Grevatt. Sir, I will certainly commit to working with our congressional staff to follow up with you and your office to make sure that we are having the conversations that you are wanting to have on this.

Mr. McNerney. Okay. I did mention earlier that the public has lost confidence. What do you think that you personally can do to help restore that confidence?
Mr. Grevatt. Sir, I think -- I appreciate your question and I would turn back on this PFAS issue to the national engagement that we are involved in. And through this process I personally have had the opportunity to meet with hundreds of impacted citizens across multiple states. I have heard statements from over 120 individuals talking about their challenges and we are taking this back and folding this into the National Management Plan.

I think it is very important for the public to be able to see how their comments to us are reflected and the steps we are taking and that is really what we are committed to here through this national engagement. I think it has been a very important step, a very valuable step for us as we are addressing this issue.

Mr. McNerney. Do you agree with the provision that would exclude information because it is from private medical information?

Mr. Grevatt. So this issue is under careful consideration by the Agency and we are thinking through the public comments that we have received on the transparency rule and that process continues.

Mr. McNerney. All right. Thank you, Mr. Chairman. I yield back.

Mr. Hudson. The gentleman yields back. At this time the chair will recognize himself for 5 minutes for questioning.

Dr. Grevatt, Administrator Pruitt has been here a number
of times and I have questioned him each time about this PFAS issue, about GenX in particular and the need to develop a comprehensive plan for containment and removal. The Agency responded in April to a letter I followed up with on that, those two testimonies, saying that a key priority for the EPA is to further the understanding of human health impacts of PFAS to support states and local communities.

The EPA is currently developing a human health toxicity information for GenX that will provide a scientific basis for states and communities to set that will refine public health goals. So I want to ask you a few questions about that and we only have 5 minutes so I would just ask you to be as concise as you can. Could you provide a timeline for when the toxicity value for GenX will be released?

Mr. Grevatt. Yes, sir. We are very close to this now. We expect in the coming weeks to have that available, in draft, for public review and comment.

Mr. Hudson. Okay, thank you for that. Once this toxicity value of GenX is released, can you commit to releasing a public health advisory specifically for GenX?

Mr. Grevatt. So thank you, Congressman. We will work closely with the states to determine what will be most helpful to them. And, for example, on GenX specifically with regard to North Carolina, we are working side by side with them and want to make sure that we are providing them the support they need.
And, sir, I might just add that we appreciate your invitation to come to Fayetteville. We appreciate your participation in that event and that in particular along with the others we found to be tremendously valuable. So thank you very much for your leadership on that.

Mr. Hudson. Thank you. I would just stress that I think the public health advisory is really the next step in the process once we get those toxicity numbers to really help the state understand what we need to do going forward. So I appreciate you working so closely with the state.

Based on my past discussions with EPA officials, I understand EPA is working very closely with the state and I get that feedback from the state. Are you aware of any outstanding questions or information that EPA still owes the state of North Carolina?

Mr. Grevatt. I think there are ongoing conversations with the state of North Carolina addressing all kinds of issues including stack testing at the Chemours facility, sampling the Cape Fear watershed and so I think those discussions are ongoing. So I am reluctant to say there is nothing outstanding because there is a lot that is going on and we will remain committed to supporting the state throughout this process.

Mr. Hudson. I appreciate that. Now my understanding is there are over 20 other chemicals besides GenX who were found in the Cape Fear Basin. Is that part of this ongoing discussion is looking at those chemicals as well?
Mr. Grevatt. Yes, sir.

Mr. Hudson. Can we expect to have those results this month as well in the draft form or is that going to be later?

Mr. Grevatt. So those results if you could, I want to make sure I understand specifically your question. So we are going to have the GenX toxicity assessment in the coming weeks available and then we will have the National Management Plan. Our goal is to have that completed by the end of the calendar year. That will be a comprehensive view across EPA's actions in conjunction with the state to address these issues.

Mr. Hudson. Great. Again I appreciate you accepting our invitation to come to Fayetteville for the community engagement, but I understand you are doing those around the country in other communities. Can you provide us just a few brief takeaways from our community engagement summit?

Mr. Grevatt. Yes, sir. Thank you. So as I mentioned, in the case of Fayetteville I heard from over 50 citizens about the concerns they face and the concerns are very significant and they range from concerns about protecting families, their children, to economic impacts of the decisions.

We heard from folks in Wilmington as well who came up and talked about the economic impact on the very important work that the drinking water utility is doing to put in drinking water treatment and concerns about they are going to pay for these actions. And so extensive concerns addressed and we will remain
committed to working closely with the community in Fayetteville, the state of North Carolina, community of Wilmington, on addressing those issues going forward.

Mr. Hudson. We appreciate that very much. Is there any information you learned that you think helped move you forward in terms of examining the chemical?

Mr. Grevatt. I think again reiterating the point on risk communication in the case of North Carolina because they themselves have been working towards a health value on GenX. We heard from them very clearly how important it is to be closely coordinated and we are working side by side with them in every step of this process.

Mr. Hudson. I appreciate that. One other issue I am trying to wrap my brain around maybe you can help me with is, in your opinion, what is the lowest allowable and scientifically reliable level at which PFAS can be detected and monitored?

Mr. Grevatt. Right. So in terms of the reliable level where it can be detected, I think we are down into the single digits of parts per trillion that can be monitored. And in part that is a result of the national study that we did to build lab capacity across the country, so this continues to advance. But I think we are in the single digits of parts per trillion for these compounds.

Mr. Hudson. Great, thank you for that and my time is expired. At this time I will recognize the gentlelady from
Michigan, Mrs. Dingell, for 5 minutes.

Mrs. Dingell. Thank you, Mr. Chairman. I think you can tell that Republicans and Democrats are pretty unified here on the concern about the PFAS chemicals.

And I want to build, the Flint water crisis is something that every member on this dais has in their head and every American across the country is worried about. And PFAS in Michigan is scaring people more than the Flint water did, but I also think that it is across the country as you have heard from my colleagues here.

I have several points I want to make, but I will build right on the last questions first. And I am very glad that you went to Fayetteville. North Carolina wanted to see you, but so did Michigan and Michigan had originally been scheduled to be one of those community forums. People wanted you from one side of the state to the other and you didn't come. Why did you cancel Michigan and could we get you to still come?

Mr. Grevatt. Right. So we have been working very closely with Michigan and all the states in determining the locations for these events, and if in fact Michigan now wants us to do an event in the state we will be glad to talk with you and talk with them about how we might do some kind of an event.

Mrs. Dingell. This is a formal invitation on behalf of a whole lot of people. I know Fred joins me on the other side, don't you, Fred?
Mr. Upton. Unanimous, yes.

Mrs. Dingell. So you have an Upton Walberg Dingell invitation for a community forum in Michigan and we take that you have accepted it. And I think our czarina would support it too.

Mr. Grevatt. So we will be very glad to follow up with all of you and your staffs about this as well as with the state. And as I mentioned, we have been working closely with Michigan and if they in fact now have decided they want us to come then we will be glad to come.

Mrs. Dingell. I know a lot of people have. I was asked by many people to raise that.

I want to go back again, and I know we all keep asking the same question. But I think what has really got everybody worried is we don't -- we need to change the national standard for what is a safe level and you are telling us that you are going to, I think you are telling us. You are not saying you are going to determine whether we need it. I think, I hope that you are saying that we do need to revise the standard. You are going to put out a National Management Plan by the end of the year. What is going to be in that plan? Are you going to give us what the new standard should be and how long is that going to take? How do we create that sense of urgency that cuts through bureaucracy and keeps Americans safe drinking their water?

Mr. Grevatt. Thank you very much for those questions. So
a couple of things I want to respond with, first, to be clear, we have a guidance value now not a regulatory standard and one of the key items we are committed to at EPA by the end of the year in the Management Plan is to consider whether we should be developing an MCL for PFOA and PFOS or other compounds. So we are still engaged in that process.

If we were to, in the context of a drinking water health advisory, think about lowering that level, we would subject that to scientific peer review before we took that kind of a step. So we are working through these issues now. We expect these to be addressed in the National Management Plan and our goal is to have that done by the end of the calendar year.

Mrs. Dingell. So I am going to push on that a little. So are you telling us you are still -- I mean, I think that all of us on this dais have seen enough in scientific studies that we have got a problem. I think the children in Flint that got poisoned wish somebody had cared enough. So are we talking about another 2, 3, 4 or 5-year bureaucracy or are we looking at something that is really going to get at this quickly to keep the American people drinking safe water?

Mr. Grevatt. I thank you. And making sure Americans' drinking water is safe is a top priority for EPA and we will continue to focus on this issue.

You asked about the National Management Plan. This will be a comprehensive view not only in the drinking water area, but
across all of our statutory authorities about steps that we can take now to make sure that we are protecting Americans in their communities. And so that will be the focus of the National Management Plan and the goal is as I noted to have that done by the end of the calendar year.

Mrs. Dingell. I have more questions for you but I don't want Ms. Sullivan to feel lonely. So we have got five sites in Michigan that are sites that have been contaminated because of military presence. What is DOD doing to help us clean up in Michigan?

Ms. Sullivan. Well, thank you, ma'am, for asking. At all of those sites we have gone out and identified where we have known and suspected releases. We have tested many drinking water sources. Every drinking water source that has tested above the EPA's advisory level --

Mrs. Dingell. Five of them.

Ms. Sullivan. -- we have worked with the communities to provide those citizens, because some of them are private wells as you can appreciate, alternative drinking water sources. It is up to them which of these options are available. Then we are embarking on the entire CERCLA process to really fully analyze the situation. What are the sources, what are the pathways, and working with the state and EPA on what the remedy solution would be in strong partnership.

Mrs. Dingell. Obviously there are a lot more questions but
I am out of time.

Mr. Shimkus. The gentlelady's time is expired.

Just for our information we have Navy bases, Air Force bases, Coast Guard bases, and Army posts. So just in definitional terms as an Army guy we have posts. The chair recognizes the gentleman from Michigan, Mr. Walberg, for 5 minutes.

Mr. Walberg. Thank you, Mr. Chairman, and thank you to the panel for being here. It was good to have Acting Secretary -- Administrator Wheeler in Michigan in my district on the banks of Lake Erie and other places and it was good to be able to talk to him about this PFAS/PFOS issue and to understand very clearly that it is being taken seriously and that there is, and I want to follow up on my friend and colleague from Michigan as well.

It is good to know that you are willing to come, but it is also good to know that you remain in contact with our state as well on this issue on a regular basis.

Mr. Grevatt, you mentioned you are working with states like Michigan and North Carolina. What do you think are the things of greatest value that you could offer them at this time?

Mr. Grevatt. Thank you very much, Congressman. So a number of the things that the states have communicated to us that they really need help on include assistance with risk communication in talking to the impacted public in their states about these issues, support with analytical methods, development of additional tools to sample for these compounds in the environment,
the toxicity values are also important, and then consideration of treatment techniques that are available. And, in fact, all of those things are things that we are currently working on with the states to support them in addressing these challenges.

And so we are staying very close to the states and focused on what tools we can provide to help them to address these challenges and how do we best address these challenges and how do we best support local communities.

Mr. Walberg. With these challenges if the states struggle in some of these areas like Michigan, North Carolina, other states, if they struggle where do they struggle the most?

Mr. Grevatt. I think there have been challenges certainly around technical questions, around sampling and analysis of compounds. Those are issues that we have talked about extensively with Ms. Grether in the state of Michigan. With questions around characterizing levels of these compounds in the environment and how to do so, those are issues that we worked on very closely with the state of North Carolina.

And toxicity as well, you know, there are questions around the broad set of compounds, PFAS compounds, where we talk a lot about PFOA and PFOS, but there are many other compounds that we need to stay focused on. And I think those are issues that have been concern to states as well.

Mr. Walberg. Okay. Section 1453 and 1454 of the Safe Drinking Water Act create a framework for states to do source
water planning and voluntary response efforts. H.R. 3387, the Drinking Water System Improvement Act, the bill our committee, thankfully, unanimously supported, would allow new and updated states' source water plans to qualify for assistance. Would these source water plans permit states to address PFAS contamination?

Mr. Grevatt. Yes, sir. I think they would help to address PFAS contamination. And it has been very important the work that Ms. Sullivan has talked about at DOD. We see that many of the instances of drinking water contamination are related to known sources. Those might be DOD facilities, but there are certainly many others as Ms. Sullivan indicated. And I think the source water protection focus can really help local communities to understand their vulnerabilities for PFAS and other compounds.

Mr. Walberg. Okay. Would these plans and responses also be eligible from the resources of a state SRF under Section 1452(k)?

Mr. Grevatt. And certainly in particular through the set-asides and the technical assistance these are activities that can be covered in that area, yes.

Mr. Walberg. In your response to the chairman you mentioned that DWSRF funding could be used for PFAS. Could it be used for other emerging contaminants as well?

Mr. Grevatt. Yes, sir.

Mr. Walberg. Do you know how many states are already doing
Mr. Grevatt. I think a number of states are providing support to drinking water systems in their state, particularly through the set-asides, the technical assistance and I think that is going to continue to be a focus. But there are broad opportunities through the drinking water SRF to support both infrastructure investments and also to support technical assistance and operator certification and strengthening in terms of the capacity of drinking water systems. So there are broad eligibilities that are provided through that tool.

Mr. Walberg. Okay, thank you and I appreciate your responses. I yield back.

Mr. Shimkus. The gentleman yields back his time. The chair recognizes the gentleman from California, Mr. Peters, for 5 minutes.

Mr. Peters. Thank you, Mr. Chairman, and thanks to the witnesses for being here. I had two questions, one for Mr. Grevatt. Dr. Grevatt, studies tracking PFOS in marine organisms and ocean waters, PFOS was added to the Stockholm Convention on Persistent Organic Pollutants in 2009, and we are not party to that Convention but is EPA doing anything to monitor coastal waters for these compounds and are you working with other countries to control the spread of these contaminants?

Mr. Grevatt. Thank you. So EPA is engaged as I noted in the broad characterization of drinking water supplies. We also
have ongoing monitoring activities in watersheds. As I mentioned, the Cape Fear watershed has been an important area of work. And so I think as we get into estuarine environments, those are areas where we are thinking about the presence of these compounds. I think our primary initial focus has been around issues that immediately affect public health in making sure that we are addressing the needs of communities.

Mr. Peters. Okay. I would love to be updated on any activity on that.

Mr. Grevatt. We would be glad to follow up with you on that.

Mr. Peters. Thank you.

And, Ms. Sullivan, I had a question about firefighting foams. You noted that it was a small part of the problem in terms of overall volume, but it looks to me like the military specs require fluorine compounds and I wanted to know kind of how you see progress in moving away from that and does that requirement interfere with your work in dealing with the toxicity of these particular chemicals?

Ms. Sullivan. Thank you for that question. The current military specification requires a certain performance as well as a makeup and part of that is driven by the need to be able to fight fires associated with aircraft quickly and efficiently. It is managed by the Department of the Navy because it is highly important that when we have shipboard fires that we have the ability to fight those fires very rapidly. We are working
carefully with the current suppliers to determine what levels are in those compounds, the current formulations.

In terms of research that we are investing in on a fluorine-free, it is basic research at this time, bench scale research. But we are committed to continuing that research to ultimately, hopefully, produce a product that does in fact meet our critical mission needs and is in fact fluorine-free.

Mr. Peters. Good. I think that will be helpful throughout the economy and in a number of applications as well. So thank you very much for being here, and I yield back.

Mr. Shimkus. The gentleman yields back his time. The chair now recognizes the Birthday Boy, Dr. Carter, for 5 minutes.

Mr. Carter. I appreciate that, Mr. Chairman.

Ms. Sullivan --

Mr. Shimkus. You are very red.

Mr. Carter. Yes, I am. I am. Sorry, I got my notes mixed up here.

Ms. Sullivan, you mentioned in your testimony about the actions that the Department of Defense is taking not only in providing the clean drinking water, but also in the remediation efforts. And I was just wondering, I am interested in learning more about how you actually go about notifying the individuals on these installations and what the communication structure looks like.

Ms. Sullivan. Well, first of all, happy birthday, sir.
Mr. Carter. Thank you.

Ms. Sullivan. Each of the military installations this is voluntary on their part. We encourage military installations and the communities to establish what we call restoration advisory boards and these boards are populated by local citizens who want to learn about the cleanup going on on those bases. It is voluntary on their part, but we support then and fund that activities.

As far as on our bases, we have sophisticated notification systems for the populations present on the installations to make sure the information gets out and in full consistency with the Safe Drinking Water Act where we are in fact the purveyor. We do the routine monitoring and issue the consumer confidence reports on top of routine correspondence with the citizens on the base.

Mr. Carter. So you are providing them with bottled water; is that right?

Ms. Sullivan. It depends on the situation, sir, and what their choices are. In some cases we may hook them up to an alternative water supply or if in some cases they want bottled water, or we may install some sort of granulated activated carbon solution. It depends on the circumstance.

Mr. Carter. But whichever way you do it, you do it until the remediation is completed.

Ms. Sullivan. Correct.
Mr. Carter. Okay, good. What types of sites? Is there a particular type of site that you see the most contamination on?

Ms. Sullivan. It is interesting it is a range of sites. A lot of it is associated with as you can understand firefighting activities, training mostly. The newer sites for us that we have to go and explore are crash sites. So usually with the firefighting sites there has been some other chemical or compound that has been used, so we have already done a certain amount of investigation. However, the crash sites are now newer that it is a challenge for us to go out and identify where those sites were and understand the circumstances around them.

Mr. Carter. Good, thank you very much.

Dr. Grevatt, you mention in your testimony that there were four significant actions that you were considering when you were making these recommendations for PFOS and for the contaminated areas. Can you explain those four to me very quickly?

Mr. Grevatt. Yes, certainly. So the first is to explore the development of a national primary drinking water regulation for PFOA and PFOS. There are important considerations that we have to work through. That is ongoing right now. The second is exploring the listing of PFOA and PFOS as hazardous substances under CERCLA. There are many statutory mechanisms for achieving that goal that is very important in terms of our ability to order cleanup actions and to recover costs that EPA may expend for those
actions. The third is development of groundwater cleanup goals under our waste cleanup programs for these substances, very important in terms of addressing contaminated sites. And then the final one is developing toxicity values for two additional PFAS substances, those are GenX and PFBS. And we are hoping to have those draft values available for public review and comment in the coming weeks.

Mr. Carter. Do you have a timeline on all four of these or on the different steps?

Mr. Grevatt. Right. So as I noted, the toxicity values is probably the closest to being completed and we are looking towards the coming weeks to have those completed. The groundwater cleanup recommendations are currently undergoing interagency review so that process is actively underway. The last two will be addressed in the National Management Plan which our goal is to have the completed by the end of the calendar year in terms of identifying the path forward on these important actions.

Mr. Carter. Great. Well, thank you both in your work on this, very challenging.

Thank you, Mr. Chairman. I yield back.

Mr. Shimkus. The gentleman yields back his time.

Seeing no further members of the subcommittee, the chair now recognizes the gentleman from Vermont for 5 minutes.

Mr. Welch. Thank you very much, Mr. Chairman, a couple of
things. First of all, I just want to say that I believe the Environmental Protection Agency is a vital agency to protect the health and well-being of the American people and I want to thank you for your dedicated service.

Second, we have an issue in Vermont with PFOA so I want to talk a little bit about that and then ask whether you can help. But in 2014, PFOA was discovered in Hoosick Falls, which is just across the border, and in the town of Bennington on the Vermont side there was a Teflon plant, Saint-Gobain, and it turns out that hundreds of private drinking wells in Bennington are contaminated and we are trying to work through that to provide for the health and safety of the residents there.

But in June 2017 I wrote to then EPA Administrator Pruitt with a couple of direct requests and all as a result of what was happening in Vermont. One was that the EPA establish a national primary drinking water regulation for PFOA; two, that PFOA and PFOS be listed as hazardous substances under CERCLA; and three, that we take action under the Toxic Substances Control Act to review and regulate PFCs and I continue to request that those steps be taken.

And, in addition, I believe and many in Vermont believe that there are several additional steps that the EPA must take on this front: One, establish toxicity profiles for the entire class of PFAS compounds; two, establish a reliable testing methodology for PFAS contamination that is present in sources other than
water. For instance, how do we test milk produced from a cow drinking contaminated water or maple syrup from a tree drawing on contaminated water?

Three, establish a maximum contaminant level as a backstop while providing resources to states that wish to adopt a more stringent standard; four, develop reliable and sufficient testing laboratories to identify contamination; and five, develop a national listing of products that contain PFAS.

So the questions, Mr. Grevatt, I will ask you, can EPA commit to establishing toxicity profiles for the entire class of PFAS compounds?

Mr. Grevatt. Thank you, sir. That is a very important question. As you know, it is a broad set of compounds, actually in total many thousand compounds. And through our Office of Research and Development we are looking not only at how to develop toxicity values for individual compounds like PFBS and GenX, but how to start to look at the broader suite of compounds and look at them holistically. That is still a research area. It is going to take some time for that work to advance, but that is a focus area for us and we are working with other parts of the federal government on those questions as well.

Mr. Welch. Can you keep us posted on that?

Mr. Grevatt. Yes, sir. We would be glad to do so.

Mr. Welch. The clock is ticking on that.

Two other questions, as I mentioned we currently lack a
publicly available list of products that contain PFAS and related chemicals. We would like the EPA to compile that list. If you can't, what resources would the EPA need and what barriers are preventing you from doing that?

And, finally, is the EPA currently investigating ways in which to test for contamination of non-water products like the milk example, the maple syrup example I just mentioned?

Mr. Grevatt. Yes. Let me take the last question first, and absolutely yes, we are doing that. One of our commitments is to develop additional analytical methods for a media other than drinking water understanding how important that is in your state. And I had the opportunity to visit your great state just last week with the Environmental Council of the States meeting there and talk about these issues there. And our TSCA program is working right now comprehensively to get a broader view of the presence of PFAS compounds in different products. So that is an issue we will continue to work on and we will be glad to circle back with you and talk about that further.

Mr. Welch. All right. Well, I would like to have you stay in touch with us as progress is being made.

Mr. Grevatt. We would be glad to do so, sir.

Mr. Welch. Thank you very much. I yield back.

Mr. Shimkus. The gentleman yields back his time. The chair now recognizes the former chairman of the full committee, Fred Upton, for 5 minutes.
Mr. Upton. Well, thank you, Mr. Chairman. Again I appreciate this hearing and I have got a lot of questions. I want to thank my colleagues on both sides of the aisle as we explore this situation for sure.

But, Dr. Grevatt, I am going to start with you. As you know, the Safe Drinking Water Act that passed out of this committee was very bipartisan. We learned a lot of lessons from Flint. One of the lessons that we learned ended up in legislation that President Obama signed that killed the Upton bill which requires that the EPA when they know about situations of contamination that they are required within 24 hours to inform the Governor, develop to work with the state on a plan to implement that.

So my first question when I learned about Parchment, Michigan was is the EPA involved and the answer was yes. So I am very grateful for that and I brought that to the attention of the Acting Administrator Wheeler when I talked to him about it on the phone within a couple of days.

I am glad to hear about the National Management Plan coming to Michigan. It is something that we want in Michigan and I know that my colleagues on both sides of the aisle will very much encourage that to happen and I would urge that as part of that visit that you come to Parchment as well where we have had a lot of different meetings.

In mid-July, before we learned about Parchment, I would note that Congresswoman Dingell, Kildee, and myself and other members
of the Michigan delegation urged the EPA to review the toxicology profile and if, in fact, it needed to be adjusted below 70 parts per trillion that they do so in an expedited process. Quick question, is that happening? What can we do to expedite that process. What is the timing of that?

Mr. Grevatt. Thank you, Congressman. So we continue to look very carefully at all of the scientific information that is coming forward related to PFOA and PFOS. That is the focus of the drinking water health advisory and we will continue to consider that information going forward as we explore whether those values need to be changed.

At this time EPA does not have plans to change the drinking water health advisory, lifetime health advisory for PFOA and PFOS, but we will continue to watch the literature and stay focused on this.

Mr. Upton. I know that there is legislation that I am a cosponsor of that is going to encourage EPA to look at that so see what happens as that moves.

Ms. Sullivan, your role is very important here, appreciate you being here. I have to say that I was very troubled reading your testimony last night in that on page 3 you indicate that you will share information, the Department of Defense will share information in an open and transparent manner.

As you know, I wrote a letter back on August 1st relating to the National Guard Base in Battle Creek. Testing data had
been taken 3 months prior to that, so 4 months now, and MDEQ, Department of Environmental Quality in Michigan, had independently found that there were perhaps as much as 21,000 parts per trillion at that site.

In addition, our Governor Snyder sent a letter regarding Wurtsmith and I think Selfridge as well, which I will put into the record. Again prior to August 1st, there was a public meeting held on July 30th. Yesterday, last night, I received a draft report of which I will put this page into the record. I will note that it is a draft, but on page ES-4 they tested 14 different sites at Battle Creek. Nine of the sites were over a thousand parts per trillion. Four of the sites, one was 3,800 parts per trillion; 4,300 parts per trillion; 25,000 parts per trillion; and 53,000 parts per trillion.

So I would say as a non-engineer, I think Mr. McKinley would acknowledge that there is little doubt that it came from that site. So the questions are where is it moving? There are rivers that are close by. I don't think that there has been a real identification of private wells that are close by, but what is the impact on those? What is the impact on the community itself?

But how is that full and transparent when it is now 4 months after the testing? As we saw in Parchment, it was 4 days after the testing that we made it public.

Ms. Sullivan. Sir, thank you for the question. I am not familiar with the specifics in Battle Creek. I actually lived
there for a period of time so I am familiar with the area, but I will have to get with the Department of the Army and get the specifics.

Mr. Upton. Well, did they share this with you before today?

Ms. Sullivan. No, they have not. But I will --

Mr. Upton. I mean this was literally dropped off at my office late yesterday afternoon as I understand it. I didn't see it until this morning.

Ms. Sullivan. I have not seen it, sir. But I will get with the Army and we will get the answers for you.

Mr. Upton. I look forward to that because I want to, you know, I agree that we ought to be -- that information ought to be in an open and transparent manner as you indicated in your testimony, and it is not when it is 4 months late, let alone, you know, how do we deal with this in the long-term way for those individuals that are certainly impacted? Not only the servicemen and women, but also the folks that are living close let alone those that are along the Kalamazoo River.

Ms. Sullivan. Yes, sir.

Mr. Shimkus. The gentleman's time has expired. It is an Air National Guard Base so not an Army's.

Ms. Sullivan. I apologize, sir. Yes.

Mr. Shimkus. Not an Army post.

Ms. Sullivan. I always think of Fort Custer. I am sorry.

Mr. Shimkus. All right. The chair now recognizes the
gentleman from California, Congressman Cardenas, for 5 minutes. 

Mr. Cardenas. Thank you very much. I may be on the other side of the country from my colleague, Ms. Dingell, next to me, but we share many of the same concerns, water and the effects of chemicals. And our water systems in California and Los Angeles are in some cases very dire so the EPA's activity and determination is very critical to every American all across the country.

I note that Mr. Pruitt may be gone, but I wonder if the disinterest that I felt from him and his when he was there in human and environmental health still remains. Hopefully the commitment has changed. I didn't have much confidence in him and his ability to make sure that what is important to the EPA and to American citizens is consistent.

Dangerous chemicals are contaminating our drinking water and we have known about it for years. We also know the extremely harmful effects that chemicals have on people especially our children and seniors. Even this EPA has determined that chemicals like perchlorate and PFAS are dangerous to human health at levels found in our drinking water.

Perchlorate, for example, disrupts the normal function of the thyroid which is necessary for regulation of the heart rate and blood pressure. For babies, thyroid health is crucial for the development of the central nervous system. Yet, EPA has not established a national drinking water standard for perchlorate despite established research and proven science.
Dr. Grevatt, can you tell the committee what the mission of the EPA is?

Mr. Grevatt. Yes, sir, protecting human health and the environment.

Mr. Cardenas. I love the fact that it is human health and the environment in that order. And I don't personally believe that there should ever be a disconnect between those two. I think we can do justice by minding both and doing what is right in both instances. So it is not, there is nothing in the EPA that says the EPA's mission is to protect industry or make compliance easier for industry, does it?

Mr. Grevatt. Sir, the focus is on protecting human health and the environment and working broadly across the country to achieve that goal.

Mr. Cardenas. Okay, good. And being the largest economy in the world I understand, and being a former businessman myself I understand how important it is that we try to strike that balance of responsibility and regulation and laws, et cetera, so that we can have a healthy environment, healthy human beings, and also have the healthiest economy in the world. So I appreciate your clarity on that.

Dr. Grevatt, when did EPA determine that a drinking water standard for perchlorate would meaningfully reduce risk for customers of public drinking water systems?

Mr. Grevatt. This was a number of years ago in 2012.
Mr. Cardenas. 2012. So why was that determination made or where did that come from?

Mr. Grevatt. Sir, that was made following the key factors under the Safe Drinking Water Act that this is a compound that was determined to present a threat to the health of persons, that it occurred at a level and frequency in the nation's drinking water supplies, and that in the sole judgment of the Administrator that a national primary drinking water regulation was necessary to protect public health.

Mr. Cardenas. Do we have a national standard today?

Mr. Grevatt. We do not yet. We are engaged in that process of developing the proposed rule.

Mr. Cardenas. Okay. You are engaged in that and what is your hope timeline wise? I know you don't have a crystal ball, but I am sure there is a lot of moving parts and there is a lot to be done before we set that or excuse me, you set that. So what do you think?

Mr. Grevatt. Yes, sir. We are under consent decree for this process right now and we have interacted with the court to request a bit more time to address the latest science that came in through our process and so we are hoping to have a proposed rule available in the coming months.

Mr. Cardenas. Okay. Oh, so a bit more time, you are talking about your hope is in the coming months.

Mr. Grevatt. Yes, sir.
Mr. Cardenas. Not in the coming years.

Mr. Grevatt. Yes, sir.

Mr. Cardenas. That is awesome. This administration has been asking courts on various issues for more time, more time, more time, so I am glad to your response and hopefully you will meet your expectation and ours as well.

How long has the EPA known about the risks of PFAS in drinking water?

Mr. Grevatt. So we have known about the potential risks of PFAS in drinking water for a number of years and that is why we engaged with the manufacturers in the phase-out of these compounds over the last decade or so. And so that phase-out has been achieved, we followed that up with significant new use rules under TSCA to make sure that we weren't relying on the voluntary agreement, but we actually had the ability to require notification of EPA before these compounds would be reintroduced.

So it has been a number of years that we have been actively engaged in this. And then I think you are aware that we completed this national drinking water survey of the presence of PFAS compounds in the nation's drinking water supplies over the last several years as well.

Mr. Cardenas. Thank you, Doctor. I appreciate it. And I yield back.

Mr. Shimkus. The gentleman yields back his time.

Just a side note, you want to know that Dr. Grevatt's
Mr. Grevatt. That is correct.

Mr. Shimkus. Thank you. The chair now recognizes the very patient Congressman Sarbanes from Maryland.

Mr. Sarbanes. Thank you, Mr. Chairman. Thank you all for being here.

As you know, in 2018, ATSDR had prepared this study which showed the safe level of PFAS may be closer to 7 parts per trillion not 70. And at that time, officials at EPA and the DOD contacted the White House to express concerns about that report being released and what the public relation fallout might be and there is some emails related to that that were released in response to a FOIA request from the Union of Concerned Scientists.

I wanted to ask a couple of questions about that because to be candid I have grown increasingly concerned about lack of transparency within the Trump administration and its various agencies. So this goes to that concern.

So, Ms. Sullivan, in these emails that were released pursuant to the FOIA request somebody wrote, We, EPA and DOD, cannot seem to get ATSDR to realize the potential public relations nightmare this is going to be. At the time those emails were sent, were you aware of any DOD officials who shared those concerns?

Ms. Sullivan. Sir, I am so glad you asked that question.

When this process was going on my communications with the Office
of Management and Budget were solely to ask when it was going to happen and what the communication plans would be. I did not provide any assessment of whether that was good or bad, it was simply asking when would it be released and what would the risk communication --

Mr. Sarbanes. So I appreciate that but were you aware of any DOD officials who were sharing the concerns expressed in that email?

Ms. Sullivan. No, I was the voice, sir.

Mr. Sarbanes. Okay. And I take it then you were not aware of efforts by DOD officials to impede the release of the report?

Ms. Sullivan. No, I was not aware of any efforts.

Mr. Sarbanes. Were you aware of any, or are you of any internal DOD review or response that relates to the matters discussed in the email?

Ms. Sullivan. We have reviewed the draft document and submitted comments to the ATSDR and will respect the process that ATSDR goes through to develop the final document. I want to emphasize that we, and Dr. Grevatt has mentioned this before, we believe it should be peer-reviewed based on sound science, developed in a transparent manner, and we support the outcome of that.

Mr. Sarbanes. Well, I appreciate it and I just worry that concerns about public relations can lean on the scale in a way that could undermine the scientific conclusions and judgments.
Dr. Grevatt, we have seen some lack of transparency issues at the EPA as well. Under the previous administrator, Scott Pruitt, there were secret calendars hiding meetings with industry leaders, there was an undermining of career employees and scientific advisors. I know you are a career employee. I wonder if you have experienced any pressure from political folks at EPA or other administration officials to make decisions on a basis other than a scientific basis.

Mr. Grevatt. I personally have not.

Mr. Sarbanes. And are you or were you aware of the emails I just referenced at the time that they occurred?

Mr. Grevatt. At the time I wasn't aware of the specific emails, but I was aware as Ms. Sullivan indicated of the strong interest in making sure that we had a coordinated communications effort across the federal government on these issues.

Mr. Sarbanes. And I guess that is the concern, because you could dress up what might be a reflex to stop the release of something or slow it down significantly, notwithstanding the scientific basis for getting it released. That could be dressed up as just wanting to kind of get all the ducks in a row and so forth and that is a fine line. And I am concerned based on some of the exchange of those emails that it may have tipped into a place where concern about PR, the public revelation of these new standards might have taken over the scientific judgment that
should have been in place.

So I will continue to bring some interest and attention to this, but I thank you for your testimony. I yield back.

Mr. Shimkus. The gentleman yields back his time.

Seeing no further members wishing to ask questions, I want to thank the first panel for their time, their due diligence, and their answering of the questions. I think you can get an impression that this subcommittee and this committee they are pretty smart folks up here and have done their homework.

So this is -- I can't even pronounce some of these chemicals, but at least I think it was a good hearing on this and we look forward to addressing things again. So with that thank you very much and we will sit the second panel down.

[Recess.]

Mr. Shimkus. We want to thank our witnesses for being here today and take the time to testify before the subcommittee. The second panel consists of the following members: Ms. Lisa Daniels, Director of Bureau of Safe Drinking Water, Pennsylvania Department of Environmental Protection on behalf of the Association of State Drinking Water Administrators; Mr. Sandeep Burman, Manager of Site Remediation and Redevelopment, Minnesota Pollution Control Agency on behalf of the Association of state and Territorial Solid Waste Officials, both organizations I have worked with closely; Ms. Carol Isaacs, Director of Michigan PFAS Action Response Team, the czarina as was referred to earlier;
and think soon to join us, Ms. Emily Donovan, Co-founder of Clean Cape Fear; and Mr. Erik Olson, Senior Director of Health and Food, Healthy People & Thriving Communities Program with the Natural Resources Defense Council.

We appreciate you all being here today. We will begin the panel with Ms. Daniels, and you are now recognized for 5 minutes to give your opening statement.
Ms. Daniels. Good morning, Chairman Shimkus, Ranking Member Tonko, and members of the subcommittee. Thank you for the opportunity to talk about PFAS in drinking water. My name is Lisa Daniels and I am the president of the Association of State Drinking Water Administrators whose members include 50 state drinking water programs, five territorial programs, the District of Columbia, and the Navajo Nation. Our members have primacy for implementing the Safe Drinking Water Act and they are on the front lines every day providing technical assistance, support, and oversight to our public water systems which is critical to protecting public health.

I am also, so my other full-time job, I am also the director of the Bureau of Safe Drinking Water within the Pennsylvania Department of Environmental Protection.

Today I would like to discuss ASDWA's concerns about PFAS
and then really delve into three key recommendations we would like to make. PFAS compounds of course have been a growing concern for the drinking water community for more than a decade. To date, PFAS has been found in groundwater in at least 38 states, and I think that is an important number to remember, 38 states.

The solubility, mobility, and bioaccumulative properties of PFAS continue to heighten concerns about the potential adverse health effects and there are many unanswered questions. For example, where are these compounds being manufactured and used in commerce, what are their toxicity levels, how are they impacting the environment and public health, and these are just to name a few.

In 2016, EPA finalized the lifetime health advisories for two of the most common PFAS compounds, PFOA and PFOS. In June of 2018, as folks have remarked, ATSDR released a draft tox profile that proposed minimal risk levels and they proposed it at different levels than the EPA's health advisory number. The lack of a federal standard and, really, this inconsistent health risk number have really led to increased public concern and driven some states to establish their own PFAS action levels. However, there are also other states that cannot take any independent action because they are prevented from being any more stringent than EPA.

With all of this together it is really no wonder that the average American is left questioning whether their drinking water
is safe. In my own state of Pennsylvania, our Environmental Cleanup Program is conducting site investigations at about 11 sites across the state. The investigations that we are doing are where there are levels above EPA's health advisory of 70, because we are fortunate that we can recognize health advisory levels in Pennsylvania and we do have authority to look at unregulated contaminants at those levels.

However, certainly the adequacy of our actions are being called into question because of differing numbers that we see coming out from ATSDR and potentially some other states. We do recognize the science is still evolving PFAS and risk to human health. There is a whole host of analytical and technology challenges and data gaps surrounding this issue. And, really, what folks need are more robust information on health effects, analytical methods, and treatment efficacy. So clearly more work is needed, more research and data are needed to really help support a consensus-based standard and tox values. ASDWA partnered with several organizations including ECOS, Aqua, and EPA to help chart a path forward for states and federal agencies.

We have provided extensive written comments and recommendations to EPA and other federal agencies on two different occasions. The first one was back in January of this year, and then a second set of comments was submitted in July. Essentially we are asking these folks to work together to help solve this issue. Anybody that is interested in seeing the comments that we wrote, all of
that information is on our website as well as information that we continue to gather and pull together based on other states.

ASDWA absolutely supports the commitments the EPA made during the National Leadership Summit and we think that is a solid step forward but more work is needed. In terms of ASDWA recommendations, states' water systems and the public need national leadership now to address this issue. And for us, the question is not whether to regulate but when and how, but make sure it is done using sound science.

The three key areas we would like to suggest: We believe PFAS must be addressed at the national level using a holistic approach and we ask Congress to direct all the federal agencies to develop a unified message for risk.

Number two, we ask Congress to provide additional funding to EPA and the states to deal with this issue. Currently we do think folks are diverting money away from the core program in order to address this issue which is causing problems there.

Third, Congress should recommend EPA to expand and coordinate across all of the programs and media. And with that we look forward to continuing to work with you to solve this issue.

Thank you.

[The prepared statement of Ms. Daniels follows:]

**********INSERT 4**********
Mr. Shimkus. Thank you.

The chair now recognizes Mr. Burman for 5 minutes.
STATEMENT OF SANDEEP BURMAN

Mr. Burman. Good morning, Chairman Shimkus, Ranking Member Tonko, and members of the subcommittee. Thank you for the opportunity to speak at today's hearing. My name is Sandeep Burman and I am the manager of Site Remediation and Redevelopment for the Minnesota Pollution Control Agency. I am also a member of the board of directors of ASTSWMO. While Minnesota is a member of ASTSWMO, I am here today speaking on behalf of the Association.

As you know, ASTSWMO is an association representing the waste management and cleanup programs of the 50 states, five territories, and the District of Columbia. As you know and as you heard from prior testimony today, per and polyfluoroalkyl substances, PFAS, have emerged as one of the most complex and challenging environmental and public health issues to have confronted the country in recent times. Many of ASTSWMO's member states are reporting widespread impact and risks from PFAS. Alabama, Colorado, Minnesota, New Jersey, Vermont are a few states who have provided summaries that are included in ASTSWMO's written testimony, but many states have similar stories to share.

As states conduct additional sampling and response to the continually evolving understanding of PFAS and associated risks, it is expected that more releases and impacts will be discovered from both historical and current sources. The problem is therefore likely going to assume even greater magnitude and even
more serious implications for public health and the environment.

The current absence of established federal regulatory standards for these compounds is creating uncertainty as public drinking water systems, wastewater treatment systems, regulatory agencies, responsible parties, and communities are attempting to address risks to public health and the environment. There is an urgent need for federal standards including reference doses, drinking water standards, surface water standards, and remediation standards that can be used to reliably address ongoing public health concerns.

A comprehensive system of national standards will provide a level of certainty and consistency for environmental permitting, compliance, and cleanups. For instance, when it comes to drinking water, PFOS and PFOA are the only two chemicals from the PFAS family that currently have a federal guidance value. These were issued in 2016 by the EPA in the form of a non-enforceable lifetime health advisory of 70 parts per trillion.

However, many states that are investigating PFAS impacts in drinking water cannot limit their efforts to just PFOS and PFOA. This is because they are detecting a mix of PFAS in the groundwater and drinking water. As a result, some states have had to develop their own standards and guidance for the various PFAS that have been detected in their drinking water and groundwater while other states have adopted the EPA lifetime
health advisories for PFOA and PFOS.

However, there are differences between the various state standards and many of the state standards for PFOS and PFOA differ from the EPA advisory values for those two chemicals. As you can imagine, this causes questions and confusion for the public as well as for regulated parties and regulators themselves.

National groundwater standards are therefore urgently needed for the PFAS family to promote consistent and comprehensive cleanups across the country. This will assist states that do not currently have promulgated standards as well as those that may lack the resources to ever have their own standards. At the same time there will be the need to recognize the PFAS standards that are promulgated by states especially if they are lower than the corresponding federal ones.

States are also unclear on how responsible parties can be required to remediate PFAS contamination. Therefore, a national regulatory framework not just guidance or recommendations is needed for the cleanup of PFAS in groundwater and drinking water.

In May of 2018, EPA hosted a National Leadership Summit in Washington, D.C. to take action on PFAS. EPA announced several significant actions the Agency would take on PFAS primarily focused on PFOS and PFOA. ASTSWMO acknowledges these EPA proposed actions has been important first steps and appreciates the collaborative efforts EPA has made since the summit on these actions.
However, ASTSWMO is still recommending to EPA that in addition to the action plan outlined at the summit EPA should closely examine an approach that will treat the multiple PFAS as a class or a mixture of chemicals for the purpose of designating them as CERCLA hazardous substances or RCRA hazardous waste. This will ensure that there is clear regulatory authority to require responsible parties to investigate an immediate contamination from the multiple PFAS that are already being discovered as contaminants of concern across sites around the country beyond just PFOS and PFOA. There is also a clear need to coordinate efforts at the national level on all scientific and policy issues pertaining to PFAS. ASTSWMO has taken and will continue to take many steps to assist with this national collaboration. With that I thank you again on behalf of ASTSWMO for this opportunity to offer testimony and I will be happy to take any questions later.

[The prepared statement of Mr. Burman follows:]

**********INSERT 5**********
Mr. Shimkus. Thank you very much.

The chair now recognizes Ms. Carol Isaacs, the director of Michigan's PFAS Action Response Team. You are recognized for 5 minutes.
Ms. Isaacs. Thank you so much. Good morning, Chairman Shimkus and Ranking Member Tonko, other members. I also want to recognize our Congressman Upton and Walberg and Congresswoman Dingell from Michigan and recognize them for their steadfast bipartisan focus on this issue. Michigan appreciates that.

My name is Carol Isaacs. I am the director of the Michigan PFAS Action Response Team, better known as MPART. I represent a single state, Michigan, this morning, but our experience is national and all states are experiencing some or all of what we are experiencing. Michigan is one of a growing number of states throughout the country dealing with a suite of chemicals collectively called PFAS.

To address this public health threat, on November the 13th, 2017, Governor Rick Snyder issued a executive directive forming MPART. This unique structure integrates ten state department agencies' departments work effectively to enhance cooperation and coordination among local, state, and federal agencies. And all of those, all of those are our partners. The Response Team has been instrumental in creating investigation and response protocols to identify and protect regions of the state with known or possible PFAS contamination, threatens the drinking water of our residents. The many proactive steps MPART has taken since the formation in November of '17 include the following:
We established a new cleanup criteria of groundwater within a few weeks of the establishment of MPART. I have been present for 9 months in my state in this capacity.

MPART has identified 35 PFAS states which include public water supplies and military bases and industrial sites and landfills. We have done more than 6,000 tests and overseen the delivery of alternate water to more than 1,600 households and overseen the installation of much larger than 700, it is 1,200 filtration systems for homes.

We have met with 200 wastewater treatment personnel in our landfill industry working cooperatively with them on this issue.

MPART has created an independent science board advisory panel to provide information to us and we will expect results before the end of the year. We have engaged 70 external state and national groups on PFAS and continue to meet with our local residents and local communities. We will meet two to three times a month in some community from Michigan.

Our legislature appropriated an additional 23 million at the end of '17 to allow us to do our proactive investigation on PFAS. We are characterized by searching for this contamination. Importantly, MPART has undertaken the most comprehensive state drinking water survey in the nation. It far exceeds the survey of large cities over 10,000. It includes all public water systems that serve more than 25 people and that includes our mobile home parks, so it is really, really extensive. We will have that
completed before the year is out.

The wisdom of a comprehensive survey of drinking water is important because this survey has resulted in covering the drinking water for the vast majority of our residents. Through this survey we were able to find and mitigate high levels of PFAS exposure in our drinking water with one of our communities, Parchment. You heard about Parchment a little bit earlier. Those levels were 20 times higher than the EPA advisory level.

In a matter of hours, the state was able to have a very effective response. We worked diligently with our federal and local partners. In that short period of time we were able to alert the community from our testing results, pay for bottled water to be distributed, and assisted in helping to provide a new water source from a nearby community.

We want to focus on our proactive and aggressive approach from PFAS that resulted in preserving the public health of more than 3,000 of the people in this city. We also thank this community for their cooperation and willingness to respond to this situation in such a unified manner. It was really a very wonderful effort and worked very well. We continue in this community to test their private wells now that we are aware that they have some contamination.

I am going to close by indicating why this is a national issue. We looked to EPA for guidance for all the reasons you have already heard. We need that guidance because DOD follows
that. We also need a uniform understanding of the relationship of these chemicals. When it comes to health care and cleanup standards we need a cooperation between ATSDR and EPA and we need to look to the FAA to work with us because they work with the DOD. When we have regulation from these entities then the state matches the military and the airports and we are all doing the same thing, the most effective thing.

In closing, USDA is needed for our food chain analysis. And we are going to say that clean water is essential to all Americans and we appreciate everything that Congress is doing for us at this point and we wish to have you consider in your budget priorities the funding necessary to do this. This is a national issue. The states can't do it all. We need our federal partners. We need our Congress. We need you to help us put this all together so that we can rapidly address this for the public health of the people in Michigan and across the country. Thank you very much.

[The prepared statement of Ms. Isaacs follows:]

**********INSERT 6**********
Mr. Shimkus. The gentlelady's time is expired.

The chair now recognizes Ms. Emily Donovan, co-founder of Clean Cape Fear. You are recognized for 5 minutes.
Ms. Donovan. Thank you, Mr. Chairman and members of the subcommittee for elevating the issue of PFAS water contamination to the highest level possible. My name is Emily Donovan and I wear multiple hats. I am a youth director at a Presbyterian Church on Wrightsville Beach. I am a wife and a mother raising 9-year-old twins, and I am also co-founder of Clean Cape Fear. We are a water advocacy group that formed after learning DuPont Chemours was dumping large quantities of highly toxic PFAS into our primary source of drinking water, the Cape Fear River. Today I would like to speak to you as a mother who has spent the last 15 months getting a crash course in biochemistry. Imagine waking up to headlines that the same company who spent a historic $670 million to settle over 3,500 lawsuits in another state for poisoning their drinking water was doing the exact same thing to yours. That is exactly what DuPont's spinoff Chemours did with GenX, their C8 replacement for making Teflon, and GenX was only 12 percent of the total PFAS found in our finished tap water. I am largely here today because of a handful of dedicated scientists from North Carolina who stumbled upon something in the Cape Fear River at alarmingly high quantities and decided to investigate it. Due to their tireless research, we know now at least 25 different PFAS have been discovered in our finished tap water and in private wells around
DuPont Chemours' facility in Fayetteville. We learned early on through court documents that DuPont Chemours has mastered the art of deception and I believe this chronic polluter has no problem exposing millions of citizens to these toxic chemicals.

It has been a year since we learned about GenX and we still know nothing about the majority of chemicals in our finished water. Not a single health official, scientist, or policymaker can tell me if the 16 mystery PFAS I found in the tap water at my children's public school are safe to drink. There are no recommended dose levels. There are no toxic mixture studies to guide me on how these chemicals interact with each other or could potentially harm my children as they grow up.

It sickens me to think that I may have harmed my children by simply raising them to drink the tap water. I will forever wonder if that choice will one day cause them major medical harm.

I now send my children to school with water bottles filled with reverse osmosis water because it seems to be the only reliable filtration method to remove these toxins and our RO filters are incredibly expensive. I pray daily it is enough to keep them hydrated the whole day. I worry constantly about the children drinking from the school tap water because their parents are either unaware or can't afford to access properly filtered water.

It is not just parents who are worried about their children. We as adults are also worried about our own health. These toxic chemicals do not act equally in our bodies. Some people may never
develop serious health problems while others aren't so lucky.
Our state's leading PFAS toxicological researcher publicly stated the true impacts of GenX may take years to become known because cancer takes its time to reveal itself in humans.

I am here to testify that Wilmington and Fayetteville area residents are already showing signs of obscure and rare cancers, immune disorders, and diseases in populations far too young to pass off as normal. How many of your friends are battling cancer?

I am 41 and my friend Sarah is battling stage 3 colon cancer. My friend Tom has terminal brain and bone cancer. My friend Kara, an Operation Iraqi Freedom veteran, has stage 3 breast cancer and had her gallbladder stop working. My friend Margaret has a rare bone cancer and my friend Robert has leukemia and bladder cancer. And my own husband had a benign brain tumor and almost lost his eyesight. I am frightened. We already know testicular cancer is on the rise in our region. We know thyroid cancers are nearly double the state and national averages in Brunswick and Pender and New Hanover Counties.

We need you to act swiftly now. We want a nationwide PFAS human exposure study that includes all known PFAS not just the already well documented PFOA and PFOS. We need to move beyond GenX, PFOA, PFOS, and PFBS and regulate all PFAS as a class of highly toxic chemicals, because I know and you know that you don't have time or money to individually regulate the estimated 10,000 PFAS in our water today or in use today.
We need to get these nasty toxins out of our drinking water now so no one else suffers the way we are in North Carolina. Look to the Madrid Statement for guidance that debunks the long-chain myth. Require all chemical makers provide standards for all PFAS produced including byproducts. Make the EPA begin rodent toxicology studies on all these chemicals. Mandate that public utilities nationwide conduct mandatory, comprehensive PFAS testing with the method detection limits set at 1 because the American people deserve to know every drop of these nasty chemicals that are in their drinking water.

Congress should deny all federal contracts including defense contracts to chronic PFAS polluters like DuPont and Chemours. If they can't play by the rules, they don't deserve a single federal taxpayer dollar. Set parameters for an adequate period of time and require these chronic polluters pay for remediation and cleanup. And we demand the maximum contaminant level for all PFAS be set to 1 part per trillion in light of the recent CDC study citing again the Madrid Statement.

Thank you so much for your time. It has been an honor to testify before your committee.

[The prepared statement of Ms. Donovan follows:]

**********INSERT 7**********
Mr. Shimkus. Thank you very much. We are happy to have you.

Last is Mr. Eric Olson, senior director of Health and Food, Healthy People & Thriving Communities Program from the Natural Resources Defense Council. You are recognized for 5 minutes.
Mr. Olson. Thank you Mr. Shimkus and thank you Ranking Member Tonko and members of the committee. You just heard about the real-world impacts of these chemicals in our water supplies across the country. In fact, probably every person in this room, every member of this committee has these chemicals in their body. Over 98 percent of the public has these chemicals in their body. I view these as the new PCBs. Members may remember many years ago that it took an act of Congress, literally, to ban PCBs. We are very concerned that this is a very broad class of thousands of chemicals that have not, frankly, been meaningfully regulated. We have a little bit of action on a couple of them, but the vast majority there has been virtually nothing done at the federal level in most states.

I also want to say that we know that there is six million people from a Harvard study that are drinking two of the PFASs in their water at levels above EPA's action level. Six million people. When those numbers come down as a previous questioner suggested, there are going to be a lot more people that are shown to have excessive levels of these chemicals in their water supplies. It is going to happen, I guarantee you, in every single state, probably in most congressional districts.

As we get the new data coming in we are going to see this across the country. These impacts we heard about a variety of
them. They include cancers of the kidney, cancer of the
testicles, other adverse effects including immune system impacts,
impacts on the thyroid, impacts on fetal development.

And I just want to share a story that I -- I just got a phone
call yesterday from a citizen who is in Cape Fear, very similar
to the story that you just heard, and she had actually lost her
baby. She found out afterwards that she had been drinking
excessive levels of these chemicals in her water. She was a
marathon runner. She routinely drank a lot of the water.

She wants to know, what are the impacts of the people in
her community? What does she tell her kids? What does she tell
the rest of the community? There are 11,000 people in her
organization and I know Ms. Donovan's group has a lot of members
really trying to fix this problem. It is across the country.

We need action. And I ask that a letter that has about 50 groups
signed on to it asking for action be entered into the record which
addresses some of the needs.

There are obviously concerns about setting an EPA drinking
water standard. We would like to see EPA move forward.
Unfortunately the Agency has known about this problem for more
than a decade and hasn't even made a determination that a standard
is necessary. And I didn't hear EPA commit to making a
determination in the earlier testimony today.

I don't think we got a commitment from the Agency to even
determine that a standard needs to be made. And as we heard
earlier, even where EPA makes such a determination which they
did for perchlorate, the only chemical in 22 years under the Safe
Drinking Water Act 1996 amendments that EPA made a determination,
EPA is still a decade later has not even proposed a standard.

In addition, obviously in addition to a standard, we need
states to be taking action because EPA isn't going to be doing
anything very quickly. States need to be stepping into the void.
Some states are doing it, New Jersey, Vermont, New York,
California, other states are looking at action. We need to stop
the further contamination.

We need to have cleanup standards. We need to have a
phase-out of the uses that are causing all this contamination.
We need polluter pays requirements so that the polluters are
paying to clean up, not citizens who have contaminated drinking
water. Why should they have to pay for the cleanup? It really
ought to be the polluters paying for it. We need an authority
for citizen action, for medical monitoring and enforced cleanup.

We also need, clearly, action on food uses of these
chemicals. Your pizza boxes, a lot of your other food packaging
contains these chemicals in them. You are being exposed through
your food and we need to take action to address those. And, in
addition, we clearly need EPA to take action under the Clean Water
Act and the Toxic Substances Control Act to address new uses and
new PFASs.

And, finally, we certainly need action under the Safe
Drinking Water Act to ensure that we have more funding through the State Revolving Fund and through a cleanup fund to start cleaning these problems up before they just causing nationwide disaster from the public health perspective. Thank you very much.

[The prepared statement of Mr. Olson follows:]

**********INSERT 8**********
Mr. Shimkus. The chair thanks the gentleman. And now I will recognize myself for the opening of the round of questions and I will recognize myself for 5 minutes.

I want to go to Ms. Daniels. Your testimony calls for, quote unquote, a holistic national approach keying off a unified message. Why don't you think that the federal government is doing that right now and are there technical barriers to it being done that way?

Ms. Daniels. So yes, thank you for that question. So I think the federal government is doing a better job of it now but I would argue that I don't think there was much of that going on for the last 10 years. So I think possibly since signaling through the summit, you know, action moving forward, I think they have been doing a better job.

But, for example, I still see the silo effect that we have between EPA and ATSDR. So why do we have two different agencies doing essentially the same amount of work or the same type of work which is risk assessment work, you know, why aren't those two agencies working together on that very important topic?

And I think when I see things that EPA is doing, I think they are probably doing a better job talking to their counterparts in wastewater and in drinking water, but I haven't seen FDA necessarily pull to the table. So I think that is a partner that has sort of been missing at least from my perspective. So I think they are doing a better job since May, you know, that I don't
think that was happening much before that.

And I think so there has been a lot of conversation about the UCMR rule, you know, to me if a chemical reaches the level where it is going to be part of the UCMR rule, way back in those phases folks should already be looking at how to reach out to the other groups that have a part in this. So why didn't we have standards from wastewater and waste back then, because it is natural for states to want to try to find where those things are coming from and we still don't have standards in those areas.

Mr. Shimkus. So just for correction, I kind of use the word technical for a reason, but you kind of explained more administration and legal hurdles. I mean just leadership, I am a big leadership guy and someone has to be in charge and someone has to keep people, so that is really your response is more legal and administrative.

Ms. Daniels. Well, there are some technical challenges too. So in drinking water we can take action with an MCL. We can take action with a HAL. In Pennsylvania, our wastewater folks are having a challenge addressing PFAS and discharges because some of them can represent, recognize a HAL but others need an MCL or a water quality standard in order to take action. And in our waste program we have the luxury that they can recognize a HAL as well but not all states can do that.

So there are different trigger levels for these different agencies in terms of when they have authority to take an action
and that is where we have some inconsistency.

Mr. Shimkus. Let me go to Mr. Burman. What technical or economic barriers that states face with respect to responding to PFAS contamination?

Mr. Burman. Thank you, Mr. Chairman. For the states from the cleanup perspective, the biggest challenge, really, is the uncertainty about which of these compounds do we really go after. They do not occur as just PFOS and PFOA in isolation. It is a mixture and states are rapidly finding more and more of these.

The question is in the absence of established and formal health standards which ones should the state focus on, how do you sample for them, and how do you clean them up. So there is a lot of uncertainty about the nature and occurrence, standards, and just the basic fundamental nuts and bolts of how do you sample for them, how do you detect them, and what technologies can really get them out of water and soil.

Mr. Shimkus. So what are states and territories doing to address the uncertainties that you just mentioned?

Mr. Burman. Thank you, Mr. Chair, for that question. And as in my previous testimony, what is happening is states are driven by what they are finding and they are evolving their own risk assessments and they are coming up with, in some cases, promulgated standards and in some cases values for additional PFAS.

A lot of states now, I shouldn't say a lot, but a handful
of states have another six to eight PFAS that commonly have standards now and states are finding another dozen or two dozen commonly in soil and water. So that has been the biggest, the ability to conduct these contaminants and to find them has outstripped our ability to actually offer health advice to people. So that is the biggest conundrum that states have that they have sort of created for themselves by the drivers that they have to go out and find these because we know they occur.

States are also trying to do the best they can with remediation technologies. It is a lot of, frankly, old school technologies that are coming back. It is your basic excavation and putting them in landfill, capping them, incinerating them, and for groundwater, really, activated carbon, old, you know, solid old and tried technology. These are all that is really available to the states.

But there are efforts to try and find some more cost-effective methods that are happening at the states, again driven by the need that they have.

Mr. Shimkus. Thank you much. I am going to end there in lieu of time, but it was just a point that I was going to follow up with Ms. Isaacs is that I am wondering with the czar aspect, czarina aspect, do you have -- I am not going to give you time to answer because of my limited time, but is that working better than, you know, because you have got all the agencies of Michigan together and you are like, I can tell, the marching them in a
So we will talk later or we will add that to a question for the record. I now yield 5 minutes to the ranking member, Mr. Tonko, for 5 minutes.

Mr. Tonko. Thank you, Mr. Chair. And thank you to our witnesses for what are very powerful testimonies that you shared, so much appreciated.

A lot of discussion with the previous panel about designating a hazardous substance with the PFOAs and PFOS. What in your determination, and I will address this to Ms. Daniels, Mr. Burman, and Ms. Isaacs because of your relationship with the respective states, what would the impact on states be if EPA were to determine PFOA or PFOS as a hazardous substance under CERCLA?

And I heard some of Mr. Burman's comments about that but in a more direct way what would states be enabled to do?

Mr. Burman. Thank you, Mr. Tonko. For states that would probably be the single biggest impact because it would bring the full weight and power and formality of CERCLA to bear on this contaminant. We have heard Ms. Sullivan talk about DOD using the CERCLA process. We commend you in doing that but it is essentially almost a voluntary process and very few responsible parties are voluntarily going to choose to apply a CERCLA-like process to this contaminant. So having CERCLA formally being introduced to the playing field would take care of that. It would provide a consistent framework that has been perfected for almost
Now having said that this subcommittee has held hearings on modernizing Superfund and that is always, you know, there is always room for improvement, but the baseline that CERCLA would provide would enormously contribute to stripping of the lot of the uncertainty both in terms of the technical aspects and the policy aspects that currently states face.

Mr. Tonko. Anyone else want to add to that?

Ms. Isaacs. Yes. Michigan, in full partnership with EPA, it would provide an additional tool that we could use together in looking at holding responsible parties responsible. We currently are working with the EPA on enforcement actions. If we had this new tool it would be more effective, I think, and might not need to go to court often if we had established processes that everyone knows about.

Mr. Olson. Mr. Tonko, may I speak to that just briefly? Quickly, without having these chemicals listed under Superfund, CERCLA, there is a real problem that an obstreperous defendant will simply refuse to clean up. And, you know, just listing two of them may help at some sites, but as you just heard there are actually dozens of these showing up. So there needs to be a broader designation that would cover a broader array of PFASs.

Mr. Tonko. And, Ms. Daniels, quickly, if you could just share a little more.

Ms. Daniels. Sure. So in Pennsylvania we can use a health
advisory for our cleanup folks to take action, but I think in other states that determination would be very helpful. The only other thing I wanted to mention is we don't always find a responsible party for all of these sites. We have two right now working in Pennsylvania that we have no idea where it is coming from. So right now the cost of that cleanup is certainly being borne by the state, so just keep that in mind.

Mr. Tonko. Thank you.

And, Ms. Donovan, if I could go to you, I know we spent a lot of time focusing on PFOA and PFOS. Those are the contaminants that I am most familiar with in my home state of New York. But we know that there are thousands of similar and toxic variants like GenX. How important is it for EPA to evaluate and provide meaningful risk information to take regulatory action on PFAS more broadly?

Ms. Donovan. Well, I think North Carolina is the perfect example where there is nothing. There is still no information. There is no risk assessment for GenX. And GenX again was just 12 percent of the total of PFAS that were detected. Right now, North Carolina is looking at, I believe DEQ said 25 different PFAS.

These chemicals are also byproducts as well and I think that is important to understand. When we don't have any information, we don't know how to assess them and address them so they don't get talked about. And I think that has been a big letdown to
the community and to the American people is that we know they are there, the scientists can see them. But the scientists don't have test standards for them so the scientists can't come back to public officials and tell them accurately this is how much is in the water.

And then EPA with test standards could begin rodent toxicology studies and give us those risk assessments on the PFAS that we are looking for. So I think it is really important for us to consider requesting that the EPA begin doing rodent studies on all of the PFAS, but they can't do it until they get test standards. And those test standards come from the manufacturers because they know exactly what they are making. They know what chemical byproducts are coming out too.

So if we had all of that information and could start the process there that would have really helped North Carolina move along a lot further than we are right now, because we have wasted a lot of time.

Mr. Tonko. Thank you. With that I yield back. I have exhausted my time so.

Mr. Hudson. [Presiding.] I thank the gentleman. At this time the chair will recognize himself for 5 minutes for a question.

I would like to first again to thank Ms. Donovan for being here, very compelling testimony. Appreciate you sharing your personal story and the story of our neighbors. And, Ms. Isaacs, I was encouraged reading your testimony and hearing from
you today. I think one of the underscores I would like to make is the bipartisanship that we have seen in Michigan that I believe we see in North Carolina that I think is very important here. This is not a Republican or Democrat issue. It needs to be bipartisan. We need a bipartisan approach and that is something that in North Carolina we have certainly tried to do.

You state that your state is one of many that has adopted guidelines or guidance values or standards for PFOS and PFOA chemicals based on the EPA's toxicity value and the EPA-issued 2016 health advisory level. Was there any information that was missing from the toxicity value for health advisory level that hindered your ability to develop your own standards in Michigan?

Ms. Isaacs. We developed our standard at the beginning of 2018. We did not receive, we requested as everyone else did, information from ATSDR. The 852-page report did come out and that is another source of information that informs us. When you are a state and you are looking to set a standard of course you are having your own scientists review the information. You are looking at the toxicology report from ATSDR. You are looking at the lifetime health advisory. You are putting it all together and you are trying to determine the most protective standard for your people.

We know it has changed. We know it changed in '09, we know it changed it '16, and now we have new information. So this evolving contaminant and the research evolves, clearly we would
like more research. And we are actively engaged at looking at the correct standard for Michigan. So did we need more information? We did, and we did get more information and we think still yet there is more to come.

And we realize that there are many analytes, but I think we are focused on the ones that would produce the most risk to our public health, sir. Thank you very much.

Mr. Hudson. Thank you. Ms. Daniels and Mr. Burman -- Ms. Donovan. I am sorry, can I interject?

Mr. Hudson. Briefly, a little bit of time here.

Ms. Donovan. Okay. I think there is a misconception and if you look at the statement you will see that we have no idea what is considered highly risk and not at risk. Short-chain, I think EPA is working under the assumption that short-chain chemicals, PFAS, are not as toxic as long-chain. However, you have to use more short-chain.

So we have no idea at higher levels, higher quantities, they are still acting the same way in the body it just takes more of them and we are finding more of them in our water in North Carolina. So I don't think we can decide to catalog that a couple are more toxic than others, we simply don't know. There are zero scientific information to prove that some are less toxic than others at the moment. Thank you.

Mr. Hudson. Okay, appreciate that. Ms. Daniels and Mr. Burman, you are both responsible for cleanup and remediation of
these chemicals and I appreciate your testimony. Based on your experiences, once the toxicity value is released does that give states enough information to develop a cleanup plan?

Ms. Daniels. So I can tell you in Pennsylvania we need a health advisory level, so we need that number and we need EPA to establish that number for us to be able to take action. A tox value doesn't give us what we need from our legal authority.

Mr. Hudson. Mr. Burman?

Mr. Burman. Thank you, Mr. Chair. What I can tell you is from the perspective of the states it varies. Some states have robust public health agencies who can take that tox value and come up with a state number for it, but then the problem even for those states is in the absence of that being a federal number can they really apply it.

A lot of states simply do not have the resources to take the EPA baseline information and create their own values so they are reliant entirely on a federal value.

Mr. Hudson. Got you, I appreciate that.

Ms. Daniels, during the first panel today, Dr. Grevatt from EPA mentioned the states could use their SRFs if they choose to address PFAS contamination. Do you know how many states already do this?

Ms. Daniels. So, thank you for the question. Absolutely states can use it, but there is tremendous, I guess, work that needs to be done in lots of different areas. So you are also
competing with projects for lead, projects for aging infrastructure. I think folks will be moving forward with new treatment for hazards. There is a whole list of things that that money needs to address.

So yes, PFAS is just one more of those things that could be used for projects. In Pennsylvania we have one application in-house right now for somebody that wants to install treatment for PFAS.

Mr. Hudson. But you are not for sure how many other states are actually --

Ms. Daniels. No, but we would be glad to do a survey and get back to you on that one.

Mr. Hudson. That would be great.

Ms. Daniels. Absolutely.

Mr. Hudson. If you could report that back for the record I think that would be important for us to know. I really appreciate that.

As my time has expired, I will now recognize the gentlelady from Michigan, Ms. Dingell, for 5 minutes for her questions.

Mrs. Dingell. Thank you, Mr. Chairman. I have a lot of questions so I am going to ask you to be concise. As we have discussed, Michigan has 35 sites that have already been identified. I know that you are really leading the effort with the state of Michigan as one of the states that is doing more than anybody does but we need to be doing a lot more.
I want, in your testimony you state that Michigan supports establishing a national standard for PFAS. Briefly, can you state the benefits of setting that standard and is there a specific standard that the state of Michigan would like to see set for PFAS chemicals and do you think that where the national standard is now is where it should be?

Ms. Isaacs. I think that I have seen the movement by EPA to change this. If we look into '09 it was 400 and 200. We look in '16 it came down to 70 parts per trillion combined for those two long-chain PFAS. And again we see now ATSDR having a new focus on research that now brings children into this issue and we are looking at the effect on children. Minimally, we need to take into consideration a standard that addresses children.

So yes, we have asked EPA to set that standard and more than that we have asked them to work with ATSDR so that we can coordinate the health assessment along with EPA's enforceable cleanup standards for the states.

Mrs. Dingell. Thank you. I want to go to the most recent, Parchment, in Fred's district, or Mr. Upton's district, and the Huron Valley watershed. One of my concerns is that there have been three announcements now in the last 6 weeks about not eating fish and it has gradually gone down river to Lake Erie. But my understanding is that the first fish was actually caught in May of 2017, put in a freezer and was not tested until very recently and so it was 16, 18 months later that the do not eat fish
announcement was put out.

Why did that happen, do you have the resources you need, and how do we make sure that we are responding in a more timely way?

Ms. Isaacs. Thank you so much for that question. Let me say that as we moved as rapidly as humanly possible to do and search out sites of contamination in Michigan we started to look at doing surface water testing in our rivers that to inform us if we have sites of contamination bleeding into the river. And when we look at fish testing, we added PFAS to our testing a few years ago. We have been testing fish since 1970.

I actually called the lab director at the Health Department and asked him about the issue that you just asked me about and he said it is not unusual that we take fish and freeze them. And he also said we have done more than 700 samples this year. They are moving incredibly rapidly. They have been given money from the legislature to expand their ability to test and they are searching diligently for staff to be able to handle more testing of water, fish, deer.

And as we have looked at these industrial pretreatment processes in our water treatment plants and our disposal plants that affect our waters, we use those areas of investigation to go back, look at make sure we tested the fish, make sure we know where the contamination is coming from. And I will address Huron if you want.
Mrs. Dingell. Well, I mean, I think you will acknowledge that one took too long and you are trying to make it quicker. I only have a minute and I have so many questions, but I think it is really important that people know it did take that long and you are trying to cut that time now.

Ms. Isaacs. Yes, ma'am.

Mrs. Dingell. Is Michigan testing for what we have been talking about today, the GenX?

Ms. Isaacs. We are not testing for GenX. There is very little known.

Mrs. Dingell. Why?

Ms. Isaacs. We are using two testing methodologies, and an analyte test and that brings us to 24 different chemicals that we are searching for. You heard that we have a suite of about 3,000-plus and those two water tests are the acknowledged tests, requested and required by the EPA. And the additional test that we run with more analytes, we run because we get more PFOS.

Mrs. Dingell. I am out of time. I yield back no time.

Mr. Hudson. I thank the gentlelady. I just want to recognize the gentleman from Michigan, Mr. Walberg, for 5 minutes.

Mr. Walberg. Thank you, Mr. Chairman.

And I would like to start off by adding my welcome to Ms. Isaacs who is the director of Michigan PFAS Action Response Team. And possibly as our chairman had indicated, the czar setting
that has taken a more comprehensive look at what is going on, certainly not with perfection but moving that direction as much as possible, I am glad that you are here to talk about the issues facing Michigan and the comprehensive response Michigan is putting forward.

Mr. Chairman, I would also like to take the opportunity to thank you and this committee for placing a priority on the issue by holding this hearing today. Safe drinking water should never be a worry for any person. I am glad this committee takes this issue seriously, as has real live people here too that have had to address it in their families and communities also.

Unfortunately, Michigan is no stranger to a water crisis. The current PFAS situation impacting Michiganders is one that most certainly should be taken very seriously and be handled with all hands on the deck approach. I want you to know, Ms. Isaacs that I will continue to work with you and the state of Michigan and my colleagues to tackle this issue in any way possible. Safe drinking water is critical and the current PFAS issue facing Michigan ought to wake us up across the nation and still further.

Let me ask this question, Ms. Isaacs. Can you explain how the state of Michigan is addressing and approaching the current issue in Michigan and specifically what do you consider to be the most important features of the way our state is addressing this situation including maybe talking about the so-called czar status approach.
Ms. Isaacs. Yes. The structure of combining ten state departments, you know this from your own federal level of government that bringing those departments together is sometimes different, sometimes difficult, different cultures. When you bring them together under an umbrella it is placed out of the Governor's Office and you have this intense communication. It makes everything quicker, everybody understands the issue.

Ten state departments that talk multiple times a week is a structure that is so unique that we have been able to accomplish amazing things in 9 months. And what characterizes this as different isn't just the organizational structure put in place by Governor Snyder. That is unique and effective, but when we strategize to look at everything at once.

If you are looking at landfills and you are looking at wastewater treatment plants and you are doing surface water testing and you are testing every single public water supply in addition to private wells, and we have almost a million of those, you are so comprehensively reviewing your entire state knowing what your situation is, mitigating against the public health risk, and then addressing the remediation of how we actually fix this.

It is characterized by being a comprehensive, very quick heavy lift of what is the situation in our state, again cannot be done without the support of our legislature and our Congress. I am grateful for all of the work that all of you have done.

Mr. Walberg. Almost a Marshall Plan approach, isn't it?
Not reinventing the wheel but all working toward the same outcome and hitting all the bases. Is it replicable in other states?

Ms. Isaacs. It is. It is. And our Governor wants us to do protocols, best practice, and he wants us to share that with the rest of the nation. And we would like to help any other state. We will provide any information. And we are working with our sister states and they are all doing good work.

Mr. Walberg. Have you had any issue in coordinating a response with the EPA? What might that be if there were?

Ms. Isaacs. We engaged in this in full partnership with ATSDR and with EPA. We maintain that. We continue that. And we do appreciate that partnership because they are very much needed. Again national issue, states can't do it alone and they certainly can't control everything so we need our federal partners.

Mr. Walberg. But they are coordinating with you well?

Ms. Isaacs. Yes.

Mr. Walberg. How would you characterize your cooperation with affected communities? What can we learn?

Ms. Isaacs. I would assume you mean our cooperation in communication. Part of what makes this effort successful is the transparency and the intense communication. We will communicate with our, any community that is really being tested. We want them to understand what this means. We want to address their concerns because they have them and they are really legitimate.
We will do two to three community meetings. They will range from 15 people, I think the largest one we have had is 1,200 people. We will stay and we will answer individual questions and we will allow people to come to the microphone for as long as they want. We think that is absolutely essential.

I want to say that Michigan has always wanted the EPA to come in and we want them to hear what we have been hearing from our communities. We want them to hear the process of what the people think. So I am not involved in that negotiation, I am understanding that it is logistical and that is still certainly going forward. So Michigan has always wanted EPA to come in and we look forward to that.

Mr. Walberg. Thank you. I yield back.

Mr. Hudson. The gentleman's time is expired. I want to recognize the other gentleman from Michigan, Mr. Upton, for 5 minutes.

Mr. Upton. Thank you, Mr. Chairman, and again I appreciate all the witnesses here on the panel as well as obviously the first panel. You know, and I particularly want to thank my Michigan colleagues here, Debbie Dingell and Tim Walberg, Chairman Shimkus and Walden for allowing this hearing to go forward. You can tell that there is quite a bit of interest to try and fix this problem not only in Michigan but around the country.

And I guess as I reflect back on the last 5 or 6 weeks there was a term that our local sheriff used, Rick Fuller, that this
is Team Kalamazoo. We got a problem and we have got to deal with it and let's take all the barriers down, partisan barriers, governmental barriers and let's work together.

    And as Governor Snyder said when he has been there on a couple of occasions -- remember, this is a very small town, Parchment -- this is a textbook example of about how we ought to work together. And as I talked to many of the residents delivering the water as they came to not only the high school but the church, people appreciated that. I didn't see a single disgruntled person. They recognize that there was an issue, on the short term we are going to roll up our sleeves and deal with it.

    And we have got a long-term problem as well, but again I am convinced that we are going to work on this as well. And, you know, frankly that was a big lesson that we learned from Flint. There were, you know, a finger could have and was pointed at all units of government and it was Dan Kildee, the congressman from there, myself, Debbie Dingell, Tim Walberg, and others, our senators that worked together to change the standard that forced EPA to acknowledge that they have got to be involved from the get-go from day one, and again that was my first question when we learned about Parchment.

    Votes are starting here on the House floor.

    A question I guess that I have for you, Ms. Isaacs, and again thanks for your work. You have been there a good number of times over the last couple of weeks. We have chatted on the phone.
We have met in my office. You helped as we talked about my letter that we had sent back on August 1st. We want to help the citizens everywhere where this can be identified.

And how frustrating was it for you to sit in the first row knowing that now we have these draft numbers, this draft report indicating that the numbers could be as high as 53,000 per trillion versus the 70 in terms of the standard? What do we have to do, where is Michigan on this standard at 70, and do you support EPA reviewing it to come down perhaps using the evidence there? How do you deal with an issue like this in terms of the state?

And I guess my last part of my question is I just want to announce to folks that I have been working with staff and with again my able colleagues, Dingell and Walberg, to introduce legislation that I hope to be able to introduce next week to include federal facilities dealing with PFAS so that everybody is on the same page.

I have talked to the chairman, Mr. Walden. I would like to see this legislation move in this Congress to get to the President's desk. Again I think we could see some strong bipartisan support to certainly move it out of this committee and into the floor and talk to the leadership. So look for that as a long-term issue.

But back to my question before my time expires. How frustrating is it to you to see these results that we frankly feared? We suspected when the numbers didn't come out right away
that we suspected that they may be way above the 70 parts per trillion. What is the state's response to this?

Ms. Isaacs. Well, we would characterize our response to that is that we are very disappointed in the pace of the DOD and bases to respond to testing. I know they have been asked and that was the right thing that they were asked by the DOD to test, but the response rate is slow. And that means to me, if I don't have results on a base then I am going to initiate testing around the base because I don't want to risk and wait for results, and I have done that multiple times already.

What I mean as testing, I am looking at exposure in private drinking wells and I wish that the pace was faster. I know they are obligated to use CERCLA, but there are no timeframes for those eight steps and you can remain in the investigation stage of CERCLA for a very long time. And so I would encourage them as I do, I do encourage them personally on the phone, we really need your results. I often hear that the bureaucracy is large and it takes a long time to get things through the system. I actually understand that. They don't have an MPART process.

And so we are still in partnership because we need to be. We need to get the bases unified in the state to understand where water flows, geology, output. Those results help us determine if we need to test a river, we need to test for public health issues. So it is important to us that we get the results in a timely manner.
Mr. Shimkus. The gentleman's time is expired. There are 3125 votes on the floor. I would like to turn to the gentleman from Texas, Mr. Green, for 5 minutes.

Mr. Green. Thank you, Mr. Chairman. I will be very quickly because I know we also have markups sometime scheduled at 1:00.

Mr. Shimkus. Well, then just don't ask any questions and we can move forward.

Mr. Green. Well, Mr. Olson, in your testimony you state that data shows that PFAS chemicals can have adverse health effects at low per trillion levels. At what level specifically is there evidence of health effects and how does that compare to the EPA's nonbinding 70 parts per trillion level?

Mr. Olson. Briefly, I was relying primarily on the ATSDR report, which is part of the Centers for Disease Control and Prevention, which would suggest that levels down in the single digit parts per trillion can have adverse effects. And I think the more we learn, the more we are finding that these effects occur at very vanishingly low levels.

Mr. Green. I think we have some commitment from some legislation, but should the Safe Drinking Water Act be amended to require the EPA to act within a certain timeframe? In fact, I will ask everybody on the panel. Just say yes or no.

Mr. Olson. Yes. And we would like to see the standard setting strengthened so that it can be done quickly rather than take 10 years.
Mr. Green. Yeah.
Ms. Donovan. Yes, agree.
Ms. Isaacs. Yes, agree.
Mr. Burman. Yes.
Ms. Daniels. Yes, and it has to be less than 10 years.
So I agree with that.
Mr. Green. Okay. Ms. Donovan, could you tell me how the residual PFAS contamination has affected your community?
Ms. Donovan. It has left us with uncertainty and distrust.
The issue that is happening in North Carolina is it has been very difficult to get the states to rein in the Chemours. They have spilled many times and we have issued notice of violations many times. If there had been stronger guidelines from the federal level I think we would have been able to act quicker and we could have had swifter justice.
I think we also in our situation have no information whatsoever. Everything that we are dealing with are chemicals that the federal government has not given any guidance on. So we are going it alone and we are figuring it out on our own and it has been incredibly time consuming in a state that is actually incredibly divided politically which has also mired us in some of this issue.
So I am really grateful that you are taking the bipartisan approach and I would love for our state legislatures to follow suit.
Mr. Green. Thank you. Well, I am from Texas and I understand. Mr. Chairman, I yield back my time.

Mr. Shimkus. The gentleman yields back his time.

Seeing no other members present, we would like to thank our second panel. We know this is a challenging issue but we are trying to figure it out as much as many of us are. Before I conclude I would like and ask unanimous consent to submit the following documents for the record: A letter from the National Groundwater Association; a letter from Culligan International Company; a letter from several groups including Safer Chemicals, Healthy Families; a letter from Purolite; a letter from the Water Quality Association.

I also have a letter from a guy named Fred Upton from Michigan; another letter from, well, by numerous members to the Acting Administrator of the EPA Mr. Wheeler from Kildee, Boyle, Dingell, Lawrence, Upton, Bergman, and Fitzpatrick; a letter from the State of Michigan Executive Office to the Acting Administrator of the EPA from the Governor of Michigan; and finally, also from the Governor of Michigan to, it looks like the Secretary of Defense from the Governor of Michigan.

Without objection, so ordered. The hearing is now adjourned.

[Whereupon, at 1:07 p.m., the subcommittee was adjourned.]