THE DEVIL THEY KNEW: PFAS CONTAMINATION AND THE NEED FOR CORPORATE ACCOUNTABILITY

HEARING

BEFORE THE

SUBCOMMITTEE ON ENVIRONMENT

OF THE

COMMITTEE ON OVERSIGHT AND REFORM

HOUSE OF REPRESENTATIVES

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THE DEVIL THEY KNEW: PFAS CONTAMINATION AND THE NEED FOR CORPORATE ACCOUNTABILITY

Wednesday, July 24, 2019

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

The subcommittee met, pursuant to notice, at 2:03 p.m., in room 2247, Rayburn Office Building, Hon. Harley Rouda, (chairman of the subcommittee) presiding.

Present: Representatives Rouda, Tlaib, Kildee, Dingell, Lawrence, Sarbanes, Levin, Comer, Gibbs, Armstrong, and Keller.

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

This subcommittee is holding this hearing examining the chemical industry's past and current production and emission of polyfluoroalkyl and PFAS across the United States.

I now recognize myself for five minutes to give an opening statement.

Good afternoon. This is the second hearing the Subcommittee on Environment has convened this Congress to address the critical issue of polyfluoroalkyls and polyfluoroalkyl substances, a class of manmade chemicals often referred to as PFAS.

Let us not beat around the bush here. The chemicals are toxic. They are known as forever chemicals. They do not easily break down. Instead, they accumulate in the environment and in the human body.

There is no way to avoid exposure to PFAS chemicals because they are found in regular household goods that we use every day such as nonstick cookware, waterproof clothing, takeout containers.

In fact, 99 percent of us here in the United States have these chemicals in our blood, and to give you an idea of the scope of the problem, PFAS chemicals have been found in the bloodstreams of polar bears living in the Arctic Circle.

At our subcommittee's very first hearing of the 116th Congress, we examined the crisis of PFAS contamination of drinking water in and around military installations largely due to the use of PFAS-containing firefighting foam for DOD training exercises.

Veterans who have already risked their lives for our country are being asked again to risk them again each and every day by drinking water filled with chemicals that have led to serious adverse

health outcomes in humans including low fertility, birth defects, suppression of the immune system, thyroid disease, and cancer.

At our meetings in March, the EPA's assistant administrator for the Office of Water, David Ross, agreed that PFAS contamination was, quote, "a national emergency."

We agree with Mr. Ross and that is why we are holding another hearing today, this time focusing on another major source of exposure to these chemicals, corporate pollution being the key.

Companies such as 3M and DuPont, which used PFAS to make household products that Americans used in their homes every day like Teflon and Scotch Guard knew for decades that these chemicals were toxic.

In the 1970's, DuPont began regularly testing the concentration of PFAS in employees' blood. In 1978, an internal 3M memo reported that PFOA and PFAS, the two most notorious PFAS chemicals, and I quote, "should be regarded as toxic," unquote.

You would think that in the United States when we know a substance is toxic we would take immediate action to prevent corporations from pumping those substances into our bodies and the environment.

But it was only earlier this year that the EPA now said it would consider regarding PFOA and PFAS, and in light of the EPA's decision last week that it would not ban the use of additional chemicals shown to damage brain development in children, forgive me if I am not especially confident that the Trump administration's EPA will do the right thing regarding PFAS chemicals in the necessary timeframe.

Let us really think about the full extent of what has been happening over the last half century. 3M, DuPont, and other industrial users knew that PFAS chemicals were bioacccumulative and toxic and yet they continued to use products that contained PFAS.

These corporations neglected to tell people what was in those products and suppressed the scientific evidence that these chemicals were hazardous.

And they didn't just use PFAS in industrial production. They discharge these chemicals into rivers and into landfills where they seeped into the groundwater.

Americans have basically been drinking Teflon and Scotch Guard for decades and the worst part is that they didn't even know it. This should not be happening. Americans expect that the products they use are safe.

We are rightfully outraged when, say, a toy company recalls a product because it contains lead or other toxic chemicals.

We feel betrayed because we feel that it is the companies' responsibility to ensure that its products do not pose a danger to our children. When companies violate that responsibility to our community, to society, we need to hold them accountable.

We, in the Federal Government, have stood by as industrial manufacturers polluted our households, our drinking water, and our food supply.

We have simply accepted it on faith when these—when those industrial polluters started using shorter carbon chain alternatives to PFOA and PFAS such as a chemical known as GenX.

GenX and similar compounds have not been shown to be safe. In fact, research indicates that they may be toxic.

One of our esteemed witnesses here today, Jamie DeWitt, a medical professor and researcher, will talk about her work on toxicity and GenX chemicals.

Contrary to what some colleagues on the other side might say, I have no problem with 3M, DuPont, and Wolverine, Saint-Gobain, and other companies turning a profit by making Americans want to buy their goods.

I believe in smart capitalism and good government. What I do have a problem with is when these corporations place their own bottom lines ahead of Americans' health. Because when you buy a product here in the United States the fundamental assumption is that the product is safe.

If you told someone, you can have nonstick cookware—you can have waterproof clothing, but it will come to you at the cost of your health, your children's health, your liver, your kidney, your thyroid, maybe your life, I imagine there is not a single person who would make that trade.

And corporations like 3M, DuPont, and others knew that Americans would never make that trade. That is why they suppressed and diluted the science that showed how toxic PFAS chemicals were because they didn't want Americans to know what they were being exposed to.

We have all heard the saying that with great power comes great responsibility. Well, these corporations have indeed achieved great power in America.

But it is time for the responsibility piece to kick in. These companies have evaded responsibility for far too long already and we are finally going to start holding them accountable.

Both Democrat and Republican state governments have already begun to do so, and representatives from Michigan, New Jersey, and New Hampshire are here today to talk about the steps they are keeping to keep their constituents safe.

But state action, while immensely valuable, is not enough. What we need to take action is at the Federal level immediately and I want to assure everyone here today and the American people that we in Congress are paying attention and that we will not stop paying attention until we are sure that every person in the country can drink water from their faucets, from their wells, without worrying that it someday might kill them.

We have already established another hearing on this issue for September 10th at which 3M Company and others, hopefully, will be here to testify in person.

We look forward to their appearance and we urge DuPont to follow suit and also commit to testifying before the committee in the fall.

Thank you, and I now invite the subcommittee's ranking member, Mr. Comer, to give a five-minute statement.

Mr. COMER. Thank you, Mr. Chairman, and good afternoon and thank you for today's hearing on a large group of chemicals collectively known as PFAS, and I join the chairman in thanking all the witnesses for appearing before us today.

Potential drinking water contamination is frightening for any community and I am glad we are holding a second hearing on this topic to both hear from impacted communities and consider appropriate responses.

PFAS substances provide strength, durability, and resilience in a broad range of applications. Since the 1940's, PFAS have been used in such products as medical devices, nonstick cookware, roof coatings, stain-resistant fabrics, food packaging, firefighting foams, waterproof clothing, and countless others.

Unfortunately, scientists have found evidence that at least some PFAS substances break down very slowly in the natural environment, travel easily through the water and air and soil, and can accumulate in the human body.

Scientists have also found evidence that sustained exposure to certain PFAS substances above specific levels can lead to adverse health effects.

Nearly everyone has some detectable concentrations of PFAS in their blood. It is worth noting that as U.S. industry has stopped manufacturing certain PFAS, including PFOA and PFOS, and started using alternative substances that are less likely to accumulate in the body, blood levels of those substances have declined significantly in the past few years.

In February of this year, EPA launched its first ever PFAS action plan. In it, EPA outlined and gave estimated timeframes for a number of short-and long-term actions to minimize risk, increase scientific knowledge about the broad range of PFAS substances, prevent exposure, and cleanup existing contamination.

The plan also outlines EPA's actions to coordinate with other Federal agencies and state, local, and tribal governments to address the issue.

I am committed to working with my colleagues on solutions that will contain any existing damage from legacy PFAS substances and reduce the risk of future harm.

But I also hope that we, as a body, make responsible evidence-based science-driven decisions. It is important to note that nearly 5,000 chemical compounds make up the PFAS family.

These compounds have different structures and characteristics, which means they also have varying health and environmental impacts.

Thorough research has only been done on a small number of these compounds. So we should be very careful about taking any sweeping actions that could have the unintended consequence of negatively impacting a broad segment of the economy including critical public entities like hospitals and airports.

Any legislative or regulatory actions we consider should be based on a solid scientific understanding of the toxicity of specific compounds.

Again, thank you to the chairman for convening today's hearing and I look forward to hearing from our witnesses.

I yield back.

Mr. ROUDA. Thank you, Ranking Member.

Now I would like to welcome our witnesses: Bucky Bailey, an affected resident and activist from Parkersburg, West Virginia; Emily

Donovan, co-founder, Clean Cape Fear; Sandy Wynn-Stelt, affected resident and activist from Belmont, Michigan.

If you could all please stand and raise your right hands I will begin by swearing you in.

[Witnesses are sworn.]

Mr. ROUDA. Please let the record show that the witnesses answered in the affirmative.

Thank you. Please be seated. Please note the microphones are very sensitive so make sure you turn the button on and lean in and speak directly into them.

Without objection, your written testimony—written statement will be made a part of the record.

With that, Mr. Witt, you are now recognized to give an oral presentation of your testimony for five minutes.

I am sorry. Mr. Bailey. Apology.

STATEMENT OF BUCKY BAILEY, AFFECTED RESIDENT AND ACTIVIST, PARKERSBURG, WEST VIRGINIA

Mr. BAILEY. Thank you, Mr. Chairman, thank you, Congressman Comer, for both of your opening statements.

Thank you for the opportunity to testify. Again, my name is William Bailey and I am here today to share the effect that the widespread industrial contamination has had on my family and myself.

I was born in Parkersburg, West Virginia, in early 1981 with numerous birth defects. I only had one nostril, a keyhole pupil, and a serrated eyelid all on my right side.

I struggled to breathe normally immediately after birth and the doctors told my family it was likely I wouldn't make it past the first night.

My mother, who was in shock at the time of my birth, had no idea what could have caused my birth defects. While pregnant, she was a full time employee of DuPont at the Washington Works facility in Parkersburg, West Virginia.

Her role at DuPont was to control the production of the Teflon, or PFOA or C8 in a combined area—confined area, excuse me—keeping the bubbling chemicals under control and pushing the excess chemicals, in her words, out back.

After my birth and recovering and from the hospital my mother recalls receiving phone calls from DuPont representatives inquiring about my health.

Upon returning back to work, she found evidence that other pregnant women were removed from the Teflon line. She also found studies from 3M, a former manufacturer of Teflon, which found the same birth defects after being exposed to the chemical.

Nevertheless, she was reaffirmed by DuPont that C8 was not the cause of my birth defects. After dozens of reconstructive surgeries between the ages of two and five, my family moved to Virginia as my parents felt the call to start a church in northern Virginia.

With no health insurance at that time, my parents went to court to demand that DuPont simply pay for the reconstructive surgeries.

However, door after door was closed to us by lawyers who refused to take cases against a corporate giant like DuPont.

Around the age of 25, I came into contact with Rob Bilot and I was made aware of the litigation, the settlement, and the scientific study that was happening.

I was so glad to hear this. I never thought the day would arrive, and I knew the results of the study would show the disposal and the contamination of the water and the air would be made known publicly.

I was disheartened to find out that some of the sicknesses and diseases that my mother was facing was because by this contamination and linked by scientific study.

Knowing that other friends and acquaintances who were battling these sicknesses and diseases including some who had lost their lives broke my heart.

My deformities were not determined to be a result of the contaminations despite admissions by DuPont scientists stating that evidence C8 could harm fetuses.

Upon further testing on myself, scientists concluded that my children would have a 50 percent chance of the same deformities that I had, and being newlywed, it nearly destroyed all hopes I had at building a family with my wife.

I knew there was no way that I could subject my children to the looks, to the ridicule, to the years of medical procedures, and other battles that I faced I knew they would encounter.

A decision to trust my faith in God took approximately 10 years before my wife and I pursued pregnancy. With my son, now three years old, and daughter, now three months old, completely whole and healthy, I am so thankful that they have been spared the issues that I have dealt with my entire life.

However, today I have another reason for trepidation. With my high levels of C8 chemical in my blood, will I have to endure kidney cancer?

Will I have to endure testicular cancer, ulcerative colitis, thyroid disease, and high cholesterol?

Will I have to endure those six—one of those six diseases that were linked to this scientific study? Will I lose my life to one of these diseases?

I am honored to testify before this committee today and I must express that action is as important as oversight. I feel that we, more so than any, have the means to provide everyone with clean water.

PFAS discharges should be subject to the Federal Clean Water Act. Polluters such as DuPont and 3M should not be allowed to simply discharge PFAS into our water supplies.

I strongly support the Capito-Gillibrand amendment to the Senate version of the NDAA, which requires polluters to report these discharges.

I believe that polluters like DuPont and 3M should be required to pay their share of the cleanup costs. The Dingell-Kildee amendment to the House version would ensure this.

And finally, we need to take further steps in monitoring our water. We must monitor the PFAS levels.

Again, I am honored to testify to this committee today and hope that my words will somehow initiate the change in the standards that we set.

Thank you.

Mr. ROUDA. Thank you, Mr. Bailey.

Ms. Donovan, five minutes for your opening statement.

STATEMENT OF EMILY DONOVAN, CO-FOUNDER, CLEAN CAPE FEAR

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 church—a Presbyterian church on Wrightsville Beach. I am a wife and a mother raising 10-year-old boy/girl 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 two years 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 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 a handful of scientists from North Carolina stumbled upon something in the Cape Fear River at alarmingly high quantities and decided to investigate it.

Due to their tireless research, we now know at last 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. I believe this chronic polluter has no problem exposing millions of citizens to these toxic chemicals.

It has been two years since we learned about GenX and our worst fears have been confirmed. We have detected over 50 different PFAS in our air, soil, and water, all coming from Chemours.

The FDA has found GenX and a slew of other PFAS in the produce at a farmer's market near Fayetteville. Wilmington residents have three times more C8 PFOA in their blood than the national average and two times more PFOS and these two chemicals were phased out a decade ago.

Residents also have a special chemical cocktail found in the blood not seen anywhere else in our state. Some of these PFAS were in 99 percent of the blood samples take. Ninety-nine percent.

Ask any scientist and they will tell you rarely does a study find 99 percent of a toxin in every person's—in every person studied.

We still know nothing about the majority of these chemicals in our finished tap water and local produce around Fayetteville and in Wilmington residents' blood. Not a single health official, scientist, or policymaker can tell me if the 16 mystery PFAS I found in the tap water at my son and daughter'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, and it sickens me to think that I may have hurt 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 the reverse osmosis water because it seems to be the only reliable filtering method to remove these toxins and 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 the school tap water because their parents are either unaware or can't afford to access properly filtered water.

And 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 impact of GenX may take years to become known because cancer takes time to reveal itself in humans.

I am here to tell you—to testify today that Wilmington-Fayetteville area residents are already showing signs of obscure and rare cancers, immune disorders and diseases in populations far too young to pass of as normal.

How many of your friends are battling cancer? I am 42 and my friend, Sara, is battling stage three colon cancer. My friend, Tom, who is here today, has terminal brain and bone cancer, and my friend, Cara, has stage three breast cancer, her gall bladder stopped working and recently developed hypothyroidism, and her mom has blood cancer and her dad over here has leukemia and bladder cancer. And my own husband had a benign brain tumor and almost lost his eyesight, and I am frightened.

We already know testicular cancer is on the rise in our region. We have a large thyroid cancer cluster, nearly double the state and national average in Brunswick, Pender, and New Hanover Counties.

Cancer is a reportable illness. We have 24 years of data available at the Federal and state level. We deserve to know if cancer clusters are associated with high levels of PFAS exposure in communities across the country. The ATSDR has excluded looking for cancer from their national PFAS exposure study. Why?

Every utility should be required to test and monitor for PFAS in their drinking water regularly. PFAS as a class should be added to the toxic release inventory so states like North Carolina can monitor their use.

The public needs to know which consumer products contain PFAS in order to make informed choices on how to reduce continued toxic exposures and, ultimately, we need to make it illegal for companies to discharge PFAS as a class into our air, soil, and water source.

We shouldn't have to be forced to sue Chemours in order to get them to pay for the damages they have done. We need PFAS to be listed as hazardous substances to unlock the EPA's authority under

Superfund law and to seek cleanup costs for our contaminated, municipal, and private wells, and we need you to act swiftly.

I have a community letter signed by a thousand of my neighbors begging you for action.

Ms. DONOVAN. Please, we need you to do whatever it takes to protect the public.

I am begging you to engage your humanity and find the moral courage to protect the most valuable economic resource—human life—because it is already too late for some of us.

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

Mr. ROUDA. Thank you, Ms. Donovan.

Ms. Wynn-Stelt?

STATEMENT OF SANDY WYNN-STELT, AFFECTED RESIDENT AND ACTIVIST, BELMONT, MICHIGAN

Ms. WYNN-STELT. Thank you all for letting me come here and speak. I am here representing the people of Belmont, Michigan, which is north of Rockford.

Our community has been devastated by PFAS contamination. My husband, Joel, and I were married in 1991. Joel was a Children's Protective Services worker and I work in mental health, and when we bought our first home in 1992 all we wanted was peace and quiet.

We found a home that we thought was perfect. It was across the street from a Christmas tree farm, and Christmas trees make great neighbors.

We thought it was the perfect location. Joel and I were best friends. I have never met anyone so smart and funny and passionate as he was, and we absolutely adored each other.

I am sorry.

In 2016, we were getting ready to celebrate our 25th anniversary and Joel had some stomach problems. He went in for what we thought was a minor hernia surgery. But he was diagnosed with stage four liver cancer and he died three weeks later, and my world was shattered.

And if you have lived through the pain of losing your partner and your provider and your protector you would know the pain that that feels. But I pray you don't know that pain.

A year later, two people from the Department of Environmental Quality came to my home and asked to test my water for PFAS. I had never heard of PFAS. But, again, my life changed.

My water was tested initially at 27,000 parts per trillion, well above the 70 parts per trillion that the health advisory level is at.

They assumed that was an error. It was tested again at 38,000 parts per trillion, and last week it was tested at over 80,000 parts per trillion in my water.

Over time what we learned was that my groundwater had been contaminated by Wolverine Worldwide, the manufacturers of Hushpuppy Shoes.

The Christmas tree farm that we loved so much was actually a dump site for tannery waste, and they would bring huge semi-trucks full of tannery waste, including Scotch Guard, and dump it

in giant troughs and when those troughs would fill they would dig another one and another one and another one.

And when that acreage filled they would dig down through the clay barrier until they hit the groundwater, and it has contaminated 25 square miles of groundwater now.

The dumping ended in the 1970's. But we did not move into the home until the 1990's and we were never told that this dumping occurred. We never knew that there were these forever chemicals that were in our water.

In November 2017 my blood was tested and it was found to be at 5 million parts per trillion, or 750 times the national average. My neighbors and I cannot fix this in any way. Our township, like many, has no money to put in funding for cleanup of this and we cannot afford municipal water.

Because of the contamination, we cannot put in new wells and we cannot expand the existing wells we have. So if our well dies, which has happened, we have no way of getting water.

I have people in Grand Rapids, Michigan, who do not have water. Children in our neighborhood cannot play in the sprinklers. They can't swim in their pools. They can't eat food from the gardens.

We are not a neighborhood that borrows sugar anymore. We borrow jugs of water from each other in 2019.

So I come to you today asking you to take swift action to ensure that your communities as well do not end up in this position. We need manufacturers and polluters to be held responsible for the contamination that they have done.

Taxpayers in no way should be burdened with this cost. We should not be the ones that are charged with doing this while corporations have profited for decades over this chemical.

We need PFAS to be designated as a hazardous substance under Superfund so that we can get the EPA to hold polluters accountable.

We need to require that people who use this report where they have put it and how those chemicals are disposed of, and we need this to be part of the Federal Clean Water Act.

And finally, we need to be proactive in the future. We cannot let new generations of chemicals just be used and sold and dumped without researching the health effects. They should be—it just shouldn't be allowed.

I have lost so much. I have lost my husband and my best friend. My home that we saved for and we paid off is now worth nothing. I have come to terms with the fact that this chemical that is in me will probably result in my demise.

But in my neighborhood there are 22 children under the age of 13 that live within a quarter mile of this dump site. They were raised on this water.

And you have a responsibility to protect them and I am asking you to do that and to do that quickly.

Thank you for your time.

Mr. ROUDA. Thank you, Ms. Wynn-Stelt, and all of the witnesses for your testimony.

At this time, I would like to have Congresswoman Tlaib have five minutes of questioning.

Ms. TLAIB. Thank you so much, and thank all of you so much for your courage to advocate on behalf of so many families that might not be here in this room but we are going to bring them in this room.

Just like so many of you did by having someone physically being here but in your spirit and I just want to thank you all so much.

I am sincerely very fearful as well of the human cost, and I want to thank so much Ms. Wynn-Stelt for your heartbreaking story, for sharing that, and for exposing what it looks like to do nothing with corporate polluters and what the serious human cost is.

People are suffering because of this carelessness, because of corporate greed, and I hope your story continues to help expose that and continues to help so many other families.

As we all know, the state of Michigan has initiated a lawsuit against Wolverine. But that is not nearly enough, and we all know that, to really truly stop this and prevent it from happening over and over again.

We desperately need Federal action, like you said, Ms. Wynn-Stelt. I think everything that you mentioned is things that we should be able to do easily.

But we not only have to investigate Wolverine, 3M, and DuPont and other companies for their egregious and reckless actions but also to ensure that other Americans are spared from the effects of these toxic chemicals being carelessly and irresponsibly dumped in their back yard, literally.

Ms. Wynn-Stelt, in your testimony you said that you lived in your home for 25 years before you found out through the Michigan Department of Environmental Quality that your well water might be contaminated.

Did you ever get a knock on the door, a phone call, or a notice from representatives from Wolverine or 3M which supplied the Scotch Guard that Wolverine used in its production telling you that the water around your home had been exposed to contamination or that they were concerned about the health risk of PFAS exposed to your family?

Ms. WYNN-STELT. Thank you for your thoughts and your comments.

No, we had not been ever notified that that was the case. We had heard sort of through the neighborhood that perhaps Wolverine had owned the land. But we were unaware that there had been anything dumped that was dangerous or toxic.

The challenge with this chemical is you can't see it. You can't taste. You can't smell it. You don't know it is there. So there could be, literally, millions of people in the same position that I was in.

Ms. TLAIB. And for over 25 years, no representative of 3M or Wolverine could even have the energy to walk across the street or even call you.

But yet, they had the energy to come to Michigan to speak with Wolverine executives and yet, not—that they—you know, yet they would not come to people like you to tell you that they are poisoning you and that, to me, is reprehensible.

There is a definition—there is a definition of putting corporations over people. You know, for me, that is essence what it is, and there are Michiganders like you and this little child, which I really am

so glad you brought it because sometimes we need to truly put a human face to this.

I have here a picture of a little boy living in your community who has PFAS level in his blood that is nearly 500,000 parts per trillion.

Ms. Wynn-Stelt, you are familiar with his family. Could you briefly describe some of the concerns that you have for this little boy's health?

Ms. WYNN-STELT. Well, he is just too cute is part of the problem but he is——

Ms. TLAIB. I know. I have my—I have my eight-year-old here in this—yes.

Ms. WYNN-STELT. Yes. Oh, hi. Yes. He is three, I think, now. He has very high levels. What has happened is we have—his family has discovered that his vaccines were not effective and so he has had to get booster vaccines because there is immunological issues that occur with this, especially in children.

And so I think as we hear about measles epidemics and things like that that go on that is terrifying for families that maybe have experienced this.

Ms. TLAIB. And I imagine this little boy's story is not unique, as we heard from some of you on this panel. Are there any of those children, to your knowledge, suffering from any problems that are currently linked to PFAS contamination?

Can you tell me of any stories about adults in your community that are also suffering from these health problems?

Ms. WYNN-STELT. I know of—I mean, like Emily talked about, we all know of people that have had cancers. We know of children that have had cancers, of thyroid conditions, of all of those things. The challenge is making that connection.

Ms. TLAIB. And, you know, for me I represent the 13th congressional District, which is Wayne County, Detroit, and surrounding communities. People always think this is a rural issue, that this is outside.

But we found PFAS in Del Ray near the construction of the new bridge to Canada. When they were there, they found PFAS. They found PFAS in Melvindale and Downriver, which I share with Congresswoman Debbie Dingell and the communities there.

That, I think, Mr. Chairman, it is very important for folks to know this is widespread—that this is not just well water. This is not just the community but we are finding it everywhere where there is high industry and high corporate polluters.

So I thank you so much for your leadership and thank you so much for my Michigan delegation being here and trying to lead this, and thank you all again for your courage.

Mr. ROUDA. Thank you.

And I want to reemphasize again that the EPA right now is 70 parts per trillion and I believe what you just said was that that young boy is 500,000 parts per trillion and you are at 5 million parts per trillion.

Okay. And there is some debate as to whether 70 parts per trillion is too high.

Let us move on and recognize Ranking Member Comer for his questions for five minutes.

Mr. COMER. Thank you, and again, thank you all for you—for your testimony.

The EPA has announced $3.9 million grant for two research—research grants, and the earlier—in April the CDC announced up to six grants for $3 million for studies on the human effects of exposures to PFAS through drinking water.

I want to ask each person on the panel what—how do you think that money should be spent in research? How do you think that money should be—should be spent?

What should the EPA and the CDC—what should they looking for to help try to determine a solution to the problem? And any of you can begin.

Ms. Donovan?

Ms. DONOVAN. Cancer is well documented. I mean, it is one of the only human diseases that has a national registry and state level registries.

It is not difficult to go and look at every cancer and then correlate it back to exposures, and take blood serum where needed in those contaminated communities. We are already the human guinea pigs.

We have already been exposed to these compounds. There doesn't need to be any more research. There doesn't need to be any more studies. You just need to go and start linking it because we know it is there. I mean——

Mr. COMER. Well, how—you know, and look, both my parents passed away from cancer. I mean, it is very prevalent in my family and a lot of families.

Ms. DONOVAN. It is not normal.

Mr. COMER. Let us just talk about the link and how would you link it, just——

Ms. DONOVAN. Well, I would leave that up to the scientists because I am not one. And so I am sure we should probably defer to them.

Mr. COMER. Right. Okay.

Ms. DONOVAN. But one thing I do know is I live in a community where I am tripping over people who are sick, and they are even willing to come here today. They are in the audience. So we know it is there.

The EPA can find it, put the money toward it. I don't know why cancer is not being added to the national PFAS exposure study. It should have been.

Mr. COMER. Okay. Ms. Wynn?

Ms. WYNN-STELT. I would agree. I am not a scientist and I am not a researcher, so I would leave that up to them. But I do worry that sometimes you can get into analysis paralysis here where we are just looking and looking and looking rather than acting.

If the research is saying that we believe there is a link then we should assume there is a link and act on that and not wait to just keep uncovering more and more research.

So that would be my suggestion.

Mr. COMER. Okay. Thank you.

Ms. DONOVAN. Can I add one more comment?

Mr. COMER. Yes, ma'am.

Ms. DONOVAN. I mean, there is a peer-reviewed article that is coming out almost daily about the dangers of these chemicals. The science is behind us on this one. It is there.

Mr. COMER. Okay.

Mr. Bailey?

Mr. BAILEY. Thank you for the question.

My first reaction was $3.9 million with an M seems quite low when the industry is by one manufacturer $25 billion a year. Leave it to the scientists, but we have a foundation already.

We have done a study of 70,000 people that have linked diseases. There is something to buildupon. I think it is, you know, giving them the ability to act more than anything.

Mr. COMER. Right. And I guess my next question would revolve around—because we want to be helpful here. We want to try to come up with a solution.

You know, when there are a lot of issues we face in Congress it is hard to get bipartisan agreement on very many things. But it is bipartisan that we want clean drinking water.

It doesn't matter if you are conservative or liberal or moderate; we all want clean drinking water. There is no question about that.

I assume you don't feel that the education levels are where they need to be in the communities that have higher concentration rates of PFAS and how do you better get that information out to the residents? Or do the residents already—are they well aware of the higher levels of PFAS in the water?

Ms. DONOVAN. I mean, in our community, you know, there is definitely more research—not research but there is definitely more communication that needs to be done. Our physicians——

Mr. COMER. Let me—who is communicating? Just for my knowledge, who is——

Ms. DONOVAN. Who is? Well——

Mr. COMER. Is the EPA doing anything? Is the local government——

Ms. DONOVAN. There is nothing. Well, because this is—these are unenforceable unregulated chemicals. There is no documentation. So we are grabbing at straws.

Our doctors that deal in endocrinology they are seeing large cases in our community and they know there is a problem, and when they go to the books that they are supposed to go to, to try and figure out what this is, there is nothing there. The EPA is not providing them with anything and the states are scrambling to try to provide us with things.

When we found out about GenX in our water, at the state level our toxicologists struggled to even find the studies to try and create a safe drinking water level and we were the only state to create 140 for GenX, and that was—that took two weeks to try and figure out what that was.

Mr. COMER. All right. Thank you.

Mr. Chairman, my time has expired.

Mr. ROUDA. Thank you, Ranking Member Comer.

This is a very important topic and I am thrilled that we have bipartisan support and you here today to help us understand how immense this issue is and how much work we have in front of us, and we also have several members here that have joined our sub-

committee, and without objection, I would like to have them authorized to participate in today's hearing.

And those four individuals include Representative Lawrence from Michigan, Representative Kildee from Michigan, Representative Dingell from Michigan, and Representative Sarbanes from Maryland.

Mr. ROUDA. And with that, I recognize for five minutes Representative Lawrence.

Ms. LAWRENCE. Thank you, Mr. Chair.

I want to start by thanking the witnesses today who had the courage to come, and without objection, Mr. Chairman, I would like to submit into record letters that have been sent from citizens of this country detailing their fears.

Mr. ROUDA. So moved.

Ms. LAWRENCE. Dr. Kyle Horton, a physician in Wilmington, North Carolina, wrote, saying, "I hope other physicians will never know the heartbreak of facing a patient with cancer, asking if their tumor was in part caused by poisoned water coming out of their taps, and the same water their children are drinking," and he states, "I cannot tell you the pain of having to always say, 'I don't know.'"

He also states, "May you never have to know what it is like talking to a breastfeeding mother who cannot afford filtered water in her home."

Also, I have from a resident of this great country, Karen Pignetti, a resident of Westfield, Massachusetts, who writes, "I am one of many who have been exposed to this poison in my drinking water.

I am one of many who turns on my faucet to make dinner for my children and wonder if I am hurting my child. I am one of many burdened by the cost of bottled water.

I am one of many being taxed out of my home and paying extremely high water bills to pay for someone else's mess."

These stories remind me of what we recently went through in Michigan, and I was with the leadership of Congressman Kildee. We were so engaged, and you know what started the fight? Were people just like you who said something is wrong.

They repeatedly told us something is wrong, even when the government said, oh, there is nothing wrong with it, and even the shenanigans of a Governor drinking the water—see, it is okay—and went home to his safe water.

So I want to thank you because we cannot have another Flint water crisis. I am so committed to it. I sit on Appropriations and I want you to know it may not seem like a lot but it wasn't there before. Eighteen million dollars has been appropriated for research and study of PFAS. It is just the beginning.

But I want you to know I am so sensitive to this—to this issue and I say repeatedly in America a basic human need to live as a human being is water, food, and shelter, and water must be clean, it must be safe, and it must be affordable.

To the panel in the brief time I have left, all of you have gone around the country telling your story, and I am sure you have met other people harmed by PFAS.

Can you tell us about your interactions to these communities and how widespread you feel it is? And also, you touched on it, Ms.

Donovan, that—I am sorry, it was with you, Ms. Wynn, that the local communities don't always have the money, and that is why you are sitting in front of us in Congress to fix this issue.

So whoever wants to comment on that.

Ms. WYNN-STELT. Thank you for your commitment to this. I greatly appreciate it.

I have spoken to some people by accident. I didn't realize it was this big of an issue. I am lucky in Michigan because Michigan has really stepped up trying to find this and I think we are frightened how much they did find it.

But we are finding it everywhere, not only in our state. I got a call yesterday from someone from Maine trying to find some help with this.

So I think to think it is just in one particular state or another would be foolish on—at the Federal level. I think this is a bigger problem than what we realize, and we just have to fix it.

Ms. LAWRENCE. Yes.

Ms. WYNN-STELT. We just have to fix it. We can't argue about it. We can't debate it.

Ms. LAWRENCE. I agree.

Ms. WYNN-STELT. It just has to be fixed.

Ms. LAWRENCE. I agree.

Yes, Ms. Donovan?

Ms. DONOVAN. EWG has a great tracking map and in the map it showed what Michigan looked like before Michigan did its full statewide testing, and then it shows what Michigan looks like after Michigan did its testing.

And so, locally, I would have friends go, "Well, don't move to Michigan," and I am, like, no, that is not it. Michigan tested. When you test for these you will find them, and if we started testing for these chemicals we will find them in every community. I feel we will find them in almost every community.

Ms. LAWRENCE. I also want to say when we—there is also a bill that I submitted that every public school should be tested for the water.

You would be surprised how many schools actually have plastic bags around drinking fountains because for some random reason they tested the water and found that water has been coming out of these taps for years that is contaminated with lead.

Just keep in the fight. You are making a difference. We saw it happen in Flint and we can do this.

Thank you so much.

Mr. ROUDA. Thank you.

The chair recognizes Congressman Gibbs for five minutes.

Mr. GIBBS. I thank the chair and thank you for the witnesses to your bravery to come here and, you know, no family should have to go through what you have gone through.

So I want, just for clarity, to start with Ms. Wynn-Stelt. You talked about the dumping. I assume this was a legal dumping or they had permits or tell—okay, just let me know. You know, because you shouldn't just be able to go out and just dump stuff.

Ms. WYNN-STELT. Yes. Thank you for the question.

I will try and explain it. I believe at the time it was a legal dump. However, I think there were some—I am not clear on all of it and I am actually involved in litigation.

And so I look at my attorneys and go, wow, and they seem to know all those answers. So I will tell you I think initially it started as a legal dump. I think——

Mr. GIBBS. As a legal—it started as a legal dump, did you say?

Ms. WYNN-STELT. I believe it did, but I think at the point it contaminated groundwater that was where it became problematic. But I would defer to others who have more knowledge.

Mr. GIBBS. The reason I just ask because I know the Clean Water Act, is you know, lots of regulatory processes, you know, and discharge permits and PDS permits and all that, and it just kind of raised a red flag when you said that.

I was wondering what is really going on there because, obviously, any entity that is going out and dumping like that should be held accountable. Okay. So I just wanted——

On testing—this is for any one of the witnesses, I guess—because my information I have there is—could be over 5,000 compounds of this—in this—these different classes of—this category you have, PFAS.

So do communities, I assume, are communities that, you know, supply water? Do they—do they test for these chemicals or generally when they test for, you know, other things do they test for these?

Mr. BAILEY. Thank you for the question.

Actually, what we have come in contact with, speaking with Environment Working Group is they don't want to be held at fault. So they are not—I don't want to speak out of turn.

They are not really essentially testing the water because it is coming from them—treating the water at best. But they don't have the type of equipment to take this compound out.

Mr. GIBBS. Okay. Well, I imagine it has got to be——

Ms. DONOVAN. I can add.

Mr. GIBBS. Oh, go ahead.

Ms. DONOVAN. Yes. So it is interesting. In the three-county area that is downstream from Chemours and our area, Brunswick and New Hanover County are testing for these compounds voluntarily because, again, no one is required.

Pender County is testing for it annually. But, see, we all get the same raw water from the same place and then each municipality finishes it using the treatment technology that is in their location.

So, you know, why are—why am I in Brunswick County, able to know every two weeks the level of PFAS that is in my water and New Hanover County is able to know but Pender County is not?

I think it is an economic issue, unfortunately, for them and that is unfortunate because we are all drinking the same level of water.

Mr. GIBBS. I am just guessing the tests—because we are talking 5,000 compounds—is probably pretty sophisticated.

Ms. DONOVAN. Well, unfortunately, they are not even testing for 5,000. The EPA's 537 method is the one that is—that everyone is using right now and I think that is only, at the most, 40, 50 compounds of the 5,000 out there.

Mr. GIBBS. Now, the other information I have in front of me, so it talks about here the reality is that significant research has only really been done on three of the 5,000. Would you concur with that?

Ms. DONOVAN. Exactly. And so when we are talking about being responsible, I guess my question to you is when you take your children or your grandchildren trick or treating do you let them have mystery candy?

I don't think you do. And so why in the world are we allowing ourselves to drink mystery chemicals? And so if we are wanting to be responsible why are we not testing this first and then allowing the chemicals to be used in consumer products?

So the fact that we have 5,000 and we are worried about what—about finding out which one are safe before we remove them, that seems a little backward way to look at it.

Mr. GIBBS. Well, I didn't mean—I didn't mean that. I was just trying to figure out what is going on.

Ms. DONOVAN. Oh, no. I know—I know you didn't mean it but I think it is a really important point, that maybe we need to flip our logic here and realize that we probably shouldn't have 5,000 chemicals like these that are forever persistent bioaccumulative in existence unregulated and any product they can ever be put in that is not essential uses but we don't know how to dispose of them, and then decide if they are safe.

That is backward. Let us decide they are safe first and then release them.

Mr. GIBBS. I am almost out of time but I just—I see that there is a consent decree order with Chemours in your area. Spent $100 million in advanced technologies. Can you go and just elaborate on what is going on there?

Ms. DONOVAN. Yes. So Chemours was required legally to put a filter on their air stacks and on their discharges and they are not doing a good job about it.

They knew. I mean, Chemours is a spinoff of DuPont. And so they continue to operate the same way DuPont operated for 30 years in our area and then they had to be told to stop.

Mr. GIBBS. Okay. Thank you. I yield back.

Mr. ROUDA. Thank you, Congressman Gibbs.

The chair now recognizes Congressman Kildee for five minutes.

Mr. KILDEE. First of all, thank you, Mr. Chairman, and members of the committee—subcommittee for holding this really important hearing, and for the witnesses, thank you for being here.

Thanks for putting a human element to a story that often is argued in statistics and parts per trillion and acronyms that nobody understands and terminologies that are scientific, and when we listen to your stories, obviously, what we know we have is a very, very serious human tragedy that is playing itself out one person, one family, one community at a time and you are the most important voices we can hear at this point.

You said that Congress does need to act and we have taken some steps. We, you know, recently formed a bipartisan task force to address this issue across committee jurisdictions, across party lines.

It has been said this is not and shouldn't ever be a partisan issue. This is something where we have a very serious health prob-

lem that we better get serious about addressing or the stories that you have told are going to be told for generations to come.

So thank you. You are the reason that we do this, and Ms. Wynn-Stelt, from my home state I appreciate you being here, and I wonder if each of you—Ms. Donovan, Bucky—it is good to see you again—if you could just—I mean, obviously, the personal tragedies that you have experienced are hard to imagine.

But I wonder if you might just comment. Like, what—how has this changed Belmont and how has this changed the community you live in in Cape Fear and what difference has this made to the people in Parkersburg?

How is life different than what you expected it would have been when you bought that house across the road from a Christmas tree farm?

Ms. WYNN-STELT. Thank you for the question.

We have a lot more trucks in the neighborhood now, I will tell you that, and life revolves around remember to putting water jugs out and getting whole home filters tested and knowing things like PFAS and parts per trillion and things that I never would have guessed to know.

That being said, and I am guessing everybody comes from a community that they see as extraordinarily resilient and I think Belmont and northern county is a very resilient community.

Wolverine is an important part of that town and I think that makes industrial waste a little trickier to deal with because they have been a good support in the community except for this one little problem.

So I think it has—we have come together as a community. I will say that. But it makes you look at things different.

On the positive, I think we have become a community that has been very pleased that we can actually make change and that people thought that no one listened in Lansing, our state capital, or in Washington, and I think we are actually kind of surprised to see, good grief, you all showed up. That was great. Somebody listened.

So I think that is kind of in a positive, if I can say that. So thank you.

Mr. KILDEE. Thank you.

Ms. Donovan?

Ms. DONOVAN. So, you know, my PTO now asks for bottled water donations before a party instead of baked goods. I worry about my kids getting dehydrated when I am not around them because they are afraid to drink tap water now from any source.

I endure—well, it is not an endurance—it is—it is an endurance to know that we pray weekly for my friend, Tom Kennedy, who is on borrowed time—that I hear constantly my friends who are suffering from yet another illness.

Those are things that in our 30's and 40's we shouldn't be doing because these are the best years of our lives. We should be going on fun trips and enjoying barbecues and not having to wonder who brought the right water for the barbecue. So there is that.

Mr. KILDEE. Thank you.

Mr. Bailey, we see your story played out in the, I think, very important documentary that I hope everybody takes a look at, "The

Devil We Know." But could you tell us the rest of the story for Parkersburg?

Mr. BAILEY. Well, we did move to northern Virginia so I can't speak directly. But the conversations that I have had—my grandfather worked at Parkersburg and he would come home sick at times with the Teflon flu is what circulated around the plant.

My mom worked in the same line, and when you worked for DuPont you were the cream of the crop, and that mentality still goes there.

And Congressman Gibbs had asked about the water district and the initial litigation found—sought after by Joe Kiger was a letter that the water district sent, stating that DuPont deemed their water levels with the chemical in it to be acceptable.

And Mr. Kiger asked why is DuPont deeming anything about my water supplies, and it is because of the stature. And I liken them and 3M and others to a bully who has taken your lunch money and is waiting for you to make a move to take it back.

And it has been too long for us to do that. We can look at their internal documents. We can look at their own records and see the evidence that is tangible 50 years ago and more, and it is time for us to do that.

One regret that I have that stopped me is my father passed away in 2008, and he will never get to see my kids because I was so scared of what they were having to endure and I waited and waited. But, you know, it is a shame what some of these families are going through and it can't go on any longer.

Mr. KILDEE. Thank you so much for being here. There are a lot of hearings taking place in this town today but I don't think there is any more important witnesses than the three people in front of us.

Thank you very much for being here.

Mr. ROUDA. Thank you, Congressman Kildee.

Congressman Keller, you are now recognized for five minutes.

Oh, you didn't? Okay. My apologies.

And we will go to Congresswoman Dingell from Michigan for five minutes.

Mrs. DINGELL. Thank you, Mr. Chairman.

It is really great to see all three of you, and you can tell that Michigan deeply cares by the presence here, and we are seeing it in all of our communities.

Unfortunately, the—as you are talking about Wolverine it went into the Huron River and came down into my district, and there is very much an environmental justice issue here because when you ask if people test for water, the community of Ann Arbor is, like, two of your communities that test for it weekly in screenings and gives—you know, educates it is becoming one of the municipalities across the country.

And yet there are many other areas—like Dan said, Flint—where the water did become polluted and we have got to talk about that.

We are going to hear from our states and our state director. Michigan has been a state that, unfortunately, because of Flint people pay attention to these issues and we have got to find a way that we are going to raise that awareness and I think not everybody understands.

I mean, we—the Republican Governor, Governor Snyder before Governor Whitmer, actually appointed a state task force to study the issue and it was comprised of doctors and engineers from across the country who found that actually—and most people don't realize that the 70 is only a guideline.

It is not a mandatory standard. So we have no national standard. And Governor Snyder's task force found that that was probably too high a number.

But I guess I would like to ask you, Ms. Donovan, because North Carolina has—is, I think, another state that is more aware than many other states, and we know that their defense—we have had—it is also important to—we understand that firefighting foam and there are a lot of things that were doing good things that caused this and we don't know how to get rid of it. We don't know how to clean it up, which is another very real issue.

But in Michigan, and we are going to hear more testimony about that, and you talked about it—we are looking for—what is the state of North Carolina doing?

Ms. DONOVAN. So right now, I would just like to point out, too, we don't know how to get rid of it. We need to stop it at the tap then because if we don't know how to get rid of this stuff then we don't need any more research.

We need to stop it, test the ones that are safe and then rerelease them out onto product. We need to put this onto maybe look at essential uses and really narrow that scope down.

But in North Carolina our state level DEQ is now starting to try and look at the sources. And so it is a little of a back end approach where they are asking all of the wastewater treatment plants along the Cape Fear River to test for PFAS, find out how much is in it and then identify where their sources are and tell the sources.

And then they are going to—the theory is that they will go and then tell the source how much they can and can't release into the environment.

And then, again, we get back to the whole thing of why in the world are we allowing these products. I mean, AFFF we knew forever was toxic.

Yet, we entered into a military spec and an agreement with the manufacturers to basically lock in that technology, and it stifled innovation and it stifled the ability for us to find toxic-free alternatives for firefighting foam. We need to stop going that.

We need to stop allowing industry to poison us with products that we don't necessarily need and put that money into research for things that can be a little more eco-friendly, humane friendly, too.

Mrs. DINGELL. So maybe all three of you, very quickly because I am down to a minute, could talk about how designating PFAS as a hazardous chemical might expedite the cleanup process and hold polluters accountable.

Why don't we start with Ms. Wynn-Stelt and go right down?

Ms. WYNN-STELT. I think the obvious thing is I need polluters to be held accountable so that my tax dollars don't go to clean it up because I need my tax dollars to go to Children's Protective Services and mental health funding and education and that. So that is why I need that.

Ms. DONOVAN. Yes. If we don't designate PFAS, all of them, as a class as a hazardous substance you are guaranteeing that I am having to pay for the cleanup and we are looking at $100 million in Brunswick County and $46 million in New Hanover County.

So if we can get these designated then that at least gives the EPA the possibility to go back to the polluter and get the polluter to pay. Otherwise, you are also forcing us to spend long legal battles, which is what we are doing right now. These are long legal battles. We have no clean water.

Mrs. DINGELL. Mr. Bailey?

Mr. BAILEY. I think our first course of action would be to stop allowing companies to pollute. Right now, they can go dump any amount they want. I think electing this as a hazard chemical would stop that, hopefully, and move forward.

Mrs. DINGELL. Thank you, Mr. Chairman.

Mr. ROUDA. Thank you, Congresswoman Dingell.

And the chair now recognizes Congressman Sarbanes for five minutes of questioning.

Mr. SARBANES. Thank you, Mr. Chairman, for the opportunity to participate today. Thank you all for your extremely powerful testimony. I want to thank everyone who is in the audience today who made the trip to support and reinforce your testimony.

Ms. Donovan, I want to thank you for your efforts, your testimony here, also the local advocacy that you have undertaken, which I know has made a difference. It is extremely commendable work.

You stated in your written testimony that your community only learned that their drinking water was contaminated by PFAS chemicals in 2017, I believe.

How long was that industrial site that was previously owned by DuPont and now owned by Chemours operating when you learned that your water was contaminated?

Ms. DONOVAN. They admitted in public disclosure to elected officials that they had been operating since or they had been releasing GenX into our water for a little over 30 years.

They had started releasing GenX in 1980. The facility, I think, was founded in 1968, I believe. It is in my testimony.

Mr. SARBANES. And the community didn't learn that until 2017?

Ms. DONOVAN. Correct.

Mr. SARBANES. After surrounding communities learned of the contamination crisis, what was the response of Chemours? Did representatives from the company address the community with public meetings? Did they meet with affected residents?

Ms. DONOVAN. No. Fourteen days went by before they released any statement, which was them coming down to a closed door meeting where they only allowed one reporter in the room, and then after that we never heard from them again.

They refused to answer reporters' questions. They have, to this day, never come to Wilmington, Brunswick—Wilmington area to hold any public meetings.

They gave one public meeting near Fayetteville after groundwater contamination. I feel like that happened maybe six months to a year after public knowledge or public disclosure of the contamination.

Mr. SARBANES. So, obviously, a thoroughly inadequate and, arguably, very cowardly response on the part of the company.

Something we have heard from the defenders of Chemours and DuPont is that while PFOA and PFAS might be harmful, that their alternative compounds with shorter carbon chains such as GenX, which you talked about today, that are safe replacements for PFOA and PFAS.

Do you believe that GenX is a safe alternative? I can anticipate your answer but I will give you a chance to emphasize it.

Ms. DONOVAN. So when you file a TSCA—when you do a TSCA filing it is self-reported and that means that you have a suspicion that the chemical is not going to be safe for exposure, and they filed 16 for GenX and all of them came back as awful.

So, no, they knew, and we drank GenX routinely and regularly at average quantity of 631 parts per trillion every day.

So I know there had been some discussion and debate about well, GenX is not in the blood; therefore it can't be toxic.

We need to start having a real heartfelt conversation about the word toxic because just because it is not in my blood doesn't necessarily mean it wasn't toxic while it was passing through my body, especially when I was exposed to it at a regularly basis every day, and I think sometimes at high levels of 4,500 parts per trillion. And Michigan, for some reason, also never tested for GenX and so that always confused me.

Mr. SARBANES. Thank you.

I know that you mention in your written testimony that your husband developed medical conditions you believe are attributable to PFAS, and I wondered if you wouldn't mind describing that a little bit more for the committee.

Ms. DONOVAN. Yes. So my husband is an identical twin, and when he started—he started just having problems with his vision, and so he was constantly getting readers and I was, like, why do we have all these readers in the house, and he was, like, I just can't see.

So we went to an eye doctor, and the eye doctor said there is something really wrong—let us do an MRI. We did the MRI and he had—he had a brain tumor the size of a golf ball stuck in the back behind his nose, compressing his optic nerves, his olfactory, his pituitary, and his central nervous system, and the doctor said, we need to get this out immediately because any longer it is in there you are going to lose your vision and vision is nonrecoverable.

So they removed the tumor. We were grateful that it was a benign tumor. And so now he has to get routine MRIs. He has to get hormonal looks constantly surveilled just to make sure he is okay.

And his identical twin brother lived in another part of the state not in a contaminated area and had an MRI as well and there was nothing.

Mr. SARBANES. So it is unusual for us to get something that looks so much like a naturally occurring experiment, as you described here when you are talking about two twins that will share 99.9 percent of their DNA.

Your husband developed the tumor after living in a contaminated community. His twin, who did not live in that kind of community, never developed a similar condition. That says something powerful.

Thank you very much for your testimony today. We are going to continue to urge EPA to regulate all of these chemicals including the emerging PFAS chemicals.

And with that, I yield back my time. Thank you, Mr. Chairman.

Mr. ROUDA. Thank you, Congressman Sarbanes.

The chair now recognizes myself for five minutes, and it is clear from the testimony here from all of you that polyfluoroalkyls literally is killing us and the related chemicals, and when—I want to focus on how that has directly impacted you, Mr. Bailey, and your mom because as Congressman Sarbanes pointed out, it has been put forth in a documentary, which it would behoove all of us to see it.

But I want to point out that DuPont, since 1951, has been manufacturing PFOA at their manufacturing facility in Parkersburg, West Virginia, and your mother, I believe to my knowledge, was in charge of getting rid of the chemicals. Is that correct?

Mr. BAILEY. That is correct. She was containing the chemicals to a container of some sort as well as she could. When the chemical would come out of the container, she was told to squeegee it and the contents would go outside.

Mr. ROUDA. So she is literally breathing the fumes while she is pregnant with you?

Mr. BAILEY. Yes, sir.

Mr. ROUDA. And, to your knowledge, was there any effort made by DuPont to inform or warn employees about the potential dangers of exposure to these chemicals?

Mr. BAILEY. No, sir.

Mr. ROUDA. You had mentioned that you had undergone dozens of reconstructive surgeries during your childhood and teenage years to help address the physical challenges you were born with.

Beyond just providing your mom with insurance through the course of her employment, did DuPont help your family pay for any of the surgeries or medical expenses?

Mr. BAILEY. No, sir.

Mr. ROUDA. How difficult was it for your family to make those payments?

Mr. BAILEY. Very difficult. Luckily, we found a great physician and great plastic surgeon who was able to do most of my work pro bono.

Mr. ROUDA. And you are fortunate in that sense when so many families and so many victims of these chemicals don't have access to that type of humanity.

In the documentary, "The Devil We Know," you and your wife talk about some of the fears you had when making the decision to start your own family. You were moved to tears earlier. One of your biggest regrets is your father not being able to see your children.

Do you know at what level these toxic chemicals are currently in your body?

Mr. BAILEY. I have not tested current—within the past five to 10 years.

Mr. ROUDA. And your children?

Mr. BAILEY. I have not tested them yet, either.

Mr. ROUDA. The subcommittee extended an invitation to DuPont to participate in today's hearing. Unfortunately, they declined.

Do you feel as though DuPont has been held accountable for their role in contaminating communities like the one you grew up in?

Mr. BAILEY. Absolutely not.

Mr. ROUDA. And if they were here today what would you most want to tell them?

Mr. BAILEY. Tell us the truth and be human.

Mr. ROUDA. Ms. Donovan, same question. What would you like to tell DuPont and some of the other polluters if they were here today? What would you want to ask them? What would you want to tell them?

Ms. DONOVAN. There is a reckoning and that there are human beings making these decisions, and if I poison my neighbor's well I go to jail.

I would also like to point out, too, something very interesting. I don't know if you followed but DuPont and Chemours are now in a legal battle, and if you are familiar, DuPont spun off Chemours and then—and gave Chemours a tremendous amount of debt and all the liability, and now Chemours is coming back and saying, wait a second—we can't handle that.

So, in my mind, it really sounds like DuPont is saying, I am going to make you fail, I am going to make you bankrupt, and I am going to have you take all of responsibility with you so that we are all left—all of us are left paying for their crimes.

Mr. ROUDA. Ms. Wynn-Stelt, same question.

Ms. WYNN-STELT. I just want people to step up and be responsible and make this right. That is what we teach our kids to do. If your kids break something, smash something, spill something, we expect them to clean it up and make it right.

And I need them to stop avoiding that and just do the right thing. That is all they got to do.

Mr. ROUDA. Thank you.

Thanks to all of you for your testimony. I will share with you I have submitted legislation that would provide $2 billion in fees from these organizations, from these companies, from these corporations to address these chemicals that they are responsible for.

And I am hopeful to continue to gain support from all Members of Congress and the Senate as well so we can move this legislation forward because it is so important that we address this issue for all of our communities across the country, including those communities who have yet to even test to fully understand the impact these chemicals are having on their drinking water and the health of their citizens.

With that, we are ending the first panel of testimony. We are going to hop into the second panel. So you guys are free to go, which means I am sure you are going to take a seat and continue to join us.

As the witnesses are switching out, please be aware that you may receive additional written questions for the hearing record and we appreciate your prompt and thorough response.

[Pause.]

Mr. ROUDA. We are going to go ahead and get started with the second panel. I would like to thank the first panel for their testimony again and welcome our final witnesses and thank them for your patience.

With us today is Dr. Jamie C. DeWitt, associate professor, Department of Pharmacology and Toxicology, Brody School of Medicine, East Carolina University; Catherine McCabe, commissioner, New Jersey Department of Environmental Protection; Robert R. Scott, commissioner, New Hampshire Department of Environmental Services; Steve Sliver—got that right—executive director, Michigan PFAS Action Response Team, Michigan Department of Environment, Great Lakes, and Energy; Glenn Evers or Evers—Evers—thank you, Glenn—president, IS2 Consulting, former research scientist at DuPont; and Jane Luxton, co-chair, environmental administrative law practice Lewis Brisbois Bisgaard & Smith.

Please stand and raise your right hands and I will begin swearing you in.

[Witnesses are sworn.]

Mr. ROUDA. Let the record reflect that the citizens—witnesses answered in the affirmative and please be seated as you have.

Please note microphones are very sensitive. So when you are speaking first turn it on, lean in.

And with that, your—let me note your written statement will be made a part of the record, and Dr. DeWitt, you are now recognized to give an oral presentation of your testimony for five minutes.

Thank you.

STATEMENT OF JAMIE DEWITT, ASSOCIATE PROFESSOR, DEPARTMENT OF PHARMACOLOGY AND TOXICOLOGY, BRODY SCHOOL OF MEDICINE, EAST CAROLINA UNIVERSITY

Ms. DEWITT. Thank you, Chairman, and thank you, members of the subcommittee for having me here today.

Yes, I am an associate professor of pharmacology and toxicology at the Brody School of Medicine of East Carolina University.

But I am also a citizen of eastern North Carolina. I also grew up in the state of Michigan. I have family in the state of Michigan. So I am a concerned citizen as well, and I am more than just a dispassionate scientist who stares into test tubes.

I now bear an enormous responsibility to the people in my state, my home state, and the country who are consuming water filled with PFAS.

I have an overwhelming burden now and I don't want to look into faces anymore and say, "I don't know." I want to be able to help them with my science and I want to be able to help you to understand the science so that we can make decisions together about how to protect citizens in our country from these chemicals that are found in our water, in our food, in our air, and now in our bodies.

Yes, there are over 5,000 different PFAS chemicals. But it is important to remember that they are all made to have similar functions.

They are made to be stable under chemical conditions. They are made to be stable under conditions of high heat. They are made because of that carbon fluorine bond and the strength of that bond.

So they have these same functional characteristics. So there are one group or one class of chemicals that do the same things. They are interrelated. They are transformation products of one another.

And I think one of the issues that we have with these chemicals is that they are persistent. We call them forever chemicals and when these persistent chemicals are released into the environment and contaminate our food and water resources, the problem of cleanup is extremely challenging. We have heard some comments about cleanup. Some of the issues we have right now with cleanup is that there is no readily available or affordable way to clean these chemicals out of our water at the large scale.

Right now, we filter, we capture, and then we move these to another part of the country or we move them to an incinerator, and we are not even really sure if incineration will completely break down these chemicals into nontoxic components.

It is really imperative that we find low cost ways to remove these contaminants from the environment and to come up with ways for determining which ones should be used for essential purposes for the good of society.

I would like to paraphrase a scientist—a senior scientist from the nonprofit organization International Chemical Secretariat.

She said that—and her name is Anna Lindquist—she said the real dilemma with persistent chemicals is that if we fail to appreciate their toxicity today and find out later that they are indeed toxic, as has happened numerous times in the past, it will be too late.

Continual exposure to toxic persistent chemicals will eventually increase the risk of adverse health effects.

I first started studying these chemicals in 2005, and when you start to work with a new chemical your job as a scientist is to go through the literature, and I started with the publicly available scientific literature, and I found that some of the earlier studies in the published literature occurred in about the early 2000's, and these were studies on the immune toxicity.

I look specifically at how these chemicals affect the immune system. There were some scientists that determined that mice were very susceptible to the immune effects of these particular compounds.

Well, as I started to learn more about PFAS, I started to go into the past, and when you go into the past in the literature sometimes you go outside of the published literature, and I found out about some studies that occurred in the 1950's, 1960's, and 1970's.

With respect to the immune system there were some studies done in 1978 that demonstrated these chemicals were impacting the immune systems of mice and monkeys.

As far as I know, these publications or these studies have not made it into the published literature. Dr. Philippe Grandjean, a professor at Harvard and the University of Southern Denmark, said, "If I would have known about these studies earlier, I would have started asking questions about the human immune system," much earlier than he did.

We now know that some of this information is available as chemical companies submit information under premanufacture notices. So there are some people who know about the toxicity of these compounds—some of the newer ones that we are facing.

But as a scientist and a citizen, it is challenging for me to get that information to make decisions about where I should go next in my research.

We now know that there are numerous health effects associated with these chemicals. We have listed them out. You have mentioned them several times today.

One of my colleagues, Gretta Goldenman, who works for a consulting company or started a consulting company in Brussels, recently wrote a report for the Nordic Council of Ministers, and she and her colleagues estimated that it would cost billions of dollars a year in U.S. dollars.

We are approaching $100 billion a year to pay for the health care costs associated with PFAS chemicals.

So we need to do something today, not tomorrow when those health care costs are building up.

Thank you.

Mr. ROUDA. Thank you.

Mr. Evers for five minutes.

STATEMENT OF GLENN EVERS, PRESIDENT, IS2 CONSULTING, FORMER RESEARCH SCIENTIST AT DUPONT

Mr. EVERS. Hello. My name is Glenn Evers. I would like to briefly introduce myself. I am going to introduce you to the largest transportable sources of PFAs.

I am going to replace some of the bamboozling nomenclature that PFAs like to use and I am going to give you three simple criteria to help you stop PFA contamination.

I am a B.S. chemical engineer, 22 years with DuPont. I left them in 2002. I am an R&D scientist, a very devout R&D scientist. I mean, I would have had the tattoo DuPont oval on my rear. Very, very strongly DuPont.

From 2004 to 2019, after I had left DuPont, I worked as a consultant working for the largest pigment, paint, and resin manufacturers in the world. So working with world-class chemical companies.

Out of my eight issued patents, I hold two patents that incorporate DuPont fluorochemicals. I have used it. I know what it is used for. I know what the chemicals are and I know the toxicity of what they are involved with.

Zonal RP was used for greaseproof of popcorn bags and paper plates, dog food plates, cookie bags, paper, baking. It came in contact with you every way and in ways you don't even know, and it was initially qualified by FDA for use on paper.

And when they did the first studies it was a reject. FDA said, no, this is toxic stuff. And they came back and said, well, but if you could control the concentration at low enough levels then it wouldn't affect anybody and, oh, by the way, DuPont argued, that it would go in your blood and it would leave very quickly.

So they actually worked through a study. They had a compromise with the FDA and the FDA said, okay, if you can feed the

dogs 1,000 times what they would be normally eating and do this over a three-month period and they all look good, then we will say it is okay. In place of that, you are going to have to do a two-year study.

Well, they ran the three-month study, what they found were dogs with bloated livers. They found dogs with testicular lesions. They found lungs with lesions as well.

And the argument was, well, but it goes through the body. Don't worry about it. And I was involved in a whistle blowing activity because we found that the original premise that the chemicals stay on the paper didn't work and, in fact, their processes had changed and they were being extracted at three times higher concentrations that were allowed by FDA back in the 1960's.

Your children and your mother, everybody involved had an opportunity to eat PFAS and a particular paper fluorochemical.

So today it is still here. It is in windshield cleaners, waxes, oil additives. By gosh, you know, you are walking—you are in the traffic and you see that truck in front of you with that big black puff of smoke as it goes by? He went to Jiffy Lube and so he could get better lubrication and extend his engine life.

He got one with Teflon particles, not PFAS, and it is burning. Teflon is not to be burned. It is in the MSDS. It is insane.

It is on carpet fabric treatment still today, in clothing, in food packaging. They did a trick. What they did was they realized that C8 was no longer fashionable, no good on paper.

But it is so profitable to put on your paper that what they decided they would do is they would take a C8 and break it up, and what they did—these are two—this is C2 right here.

This is another C2 right here. And if I put enough of these C2s together you notice that they all have fluorine, right? That is the eye you got to keep on—you got to keep your eye on the fluorine, not the number of carbons, because the Italians figured out that the way to solve the problem of still selling the fluorochemical is to start inserting oxygens between the C2s.

So what they did to make the same molecule was they started inserting oxygens in between there, and that was not a C8 product. That was a C2 product.

And so when you hear about GenX, you are going to say oh, well, that is a smaller molecular weight version. But in reality it is still keep an eye on the fluorines. That is the key. It is not whether it is PFAS or PFAX or whatever or PFOA.

I can hide behind an ultra pure form of a surfactant, study it to death, and then say it doesn't have toxic effects. That is not the case here. You have to keep an eye on that.

I am really jumping to the end of my presentation here. The clear criteria for whether or not you have something that is hazardous, this is manmade. It doesn't biodegrade.

There is not a single bacteria, mold or virus, anything that will ever break this molecule down. It is only found because man made it, and it is in your blood.

So if it is surface active and in your blood and it has got fluorine, it is still bad.

Mr. ROUDA. Thank you.

Ms. McCabe, five minutes.

STATEMENT OF CATHERINE MCCABE, COMMISSIONER, NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION

Ms. MCCABE. Thank you, Chair Rouda, Ranking Member Comer, and members of the committee. Can you hear me now?

Okay. As the most densely populated state in the country and one of the most industrialized, New Jersey has had a particularly high occurrence of PFAS contamination in our drinking water, and that is why we have taken the threat of PFAS very seriously and from an early time we have been a leader among the states in addressing this problem.

As you have heard from all the other witnesses and have said yourselves, the scientific evidence shows pretty clearly now that exposure to these chemicals presents serious risks to public health and we do take that seriously.

The New Jersey DEP first investigated the occurrence of PFAS in public drinking water systems in 2006, again in 2009, near industrial facilities that were processing or using PFAS.

We focus particularly on the two chemicals known as PFOA and PFAS, and found a very high percentage—65 percent—of the water systems tested positive.

We also found contamination in hundreds of private wells that were located around these facilities. In 2013 to 2015, EPA's UCMR National Survey of Unregulated Contaminants in Public Water Systems revealed PFAS contamination in almost 11 percent of New Jersey's large water systems, the highest rate in the country.

We have also found PFAS contamination in many of our surface waters. In 2018, an assessment of 11 waterways in New Jersey found PFAS compounds in all the surface water samples and in most of the sediment samples.

We also found PFAS in the fish, prompting fish consumption advisories. So to address the level of public health risk from PFAS contamination in the drinking water and to determine what level, if any, of PFAS is safe for human consumption, we called upon the expertise of our highly regarded Drinking Water Quality Institute.

The institute's members are independent scientists and drinking water experts as well as toxicologists and other scientists from the New Jersey DEP and Department of Health.

We also consulted with the U.S. Environmental Protection Agency, which has provided some health guidelines but no national regulatory standards for PFOA and PFAS in drinking water.

New Jersey and other states have repeatedly urged the EPA to move forward with setting nationwide regulatory limits for PFAS under the Federal Safe Drinking Water Act.

But the EPA has been very slow to act. New Jersey, therefore, had no choice but to move ahead to set its own guidelines.

In 2018, New Jersey became the first state in the Nation to establish a regulatory limit for a PFAS chemical in drinking water, setting a state Safe Drinking Water Act maximum contaminant level of 13 parts per trillion for PFNA and we also proposed limits of 13 and 14 parts per trillion for PFOA and PFAS. We expect to make decisions on those proposed standards in the next few months.

New Jersey's extensive research on the latest available science shows that these low limits are necessary to protect public health

including the health of vulnerable members of the population such as infants, who can be disproportionately exposed to these contaminants through drinking water.

We disagree that EPA's current health guideline of 70 parts per trillion is sufficiently protective. What worries us perhaps even more than what we now know about PFNA, PFOA, and PFAS is what we do not yet know.

There are thousands of PFAS chemicals in commercial use, as everyone has pointed out. Many or most of the sources of PFAS contamination have not yet been detected, much less investigated and addressed.

States lack the most basic information regarding the volumes and locations of historic production and distribution of these chemicals and we know almost nothing about the replacement chemicals that are currently in use.

As with their predecessor, these have been billed as nontoxic but experience is teaching us otherwise. We need corporate manufacturers to share information about these chemicals and their toxicity and we need the Federal Government to help us do that.

Even more, we need the Federal Government require chemical companies to use more care and to disclose the risks before putting these chemicals into commerce.

The current approach of market first and let us suffer later is subjecting the environment and the public to the detrimental effects of these chemicals without a full understanding of the nature and the degree of risk that they present.

This leaves states in the position of perpetually scrambling to address the injuries caused by these chemicals rather than preventing them in the first place.

In the meantime, New Jersey had moved ahead to take legal action to require DuPont, Chemours, 3M, and Solvay Chemicals to investigate and pay for treatment and cleanup of the PFAS compounds in our drinking water and environment.

I issued a Statewide directive to these companies to do this in March of this year, and the New Jersey attorney general has filed lawsuits against DuPont, Chemours, and 3M.

I thank you, Chair Rouda, Ranking Member Comer, and members of the committee for your attention to this important issue.

Mr. ROUDA. Thank you, Commissioner McCabe.

And the chair now recognizes Mr. Scott for five minutes.

STATEMENT OF ROBERT SCOTT, COMMISSIONER, NEW HAMPSHIRE DEPARTMENT OF ENVIRONMENTAL SERVICES

Mr. SCOTT. Thank you, Mr. Chairman, and members of the subcommittee.

Again, my name is Bob Scott. I am commissioner of the New Hampshire Department of Environmental Services. Our mission in the state of New Hampshire is to protect public health and the environment, and in this capacity drinking water standards are a concern.

New Hampshire, unfortunately has been very heavily engaged in the PFAS issue, starting with contamination at one of our former DOD sites at Pease Air Force Base. And I will pause there, if I could.

When I deal around the country I hear a lot about DOD sites, airfields, AFFF, and that is very important. Some circles, when I talk like that, I think that is the only place people think this contamination exists.

We are finding it also and have found it at former Superfund sites, at landfills, at fire training areas. You know, the municipal fire departments have to train with this type of foam.

We found it at biosolid disposal sites. We have even found it at a school where we suspect that the cleaning solvents used in the floor—rightly so, the schools clean a lot—their floors.

The janitor dumps it down the drain and it goes to the septic tank and contaminates the local well. So this—it is important for me for you all to understand that it is not just a DOD issue. It is not just a big state—an industrial state issue. This is an everywhere issue.

We also have the distinction, I think—we are one of the states where we have had air emissions—deposition from air emissions from, in this case, it was Saint-Gobain Performance Plastics.

We were able to demonstrate drinking water well impacts. New Hampshire has, roughly, 49 percent—46, 49 percent of our—all our drinking water in our state is private wells. They had impacts from that one stack of over 64 square miles of deposition; not all over standards, but still we had impacts. That is unprecedented and it was really difficult for the state to have the resources to deal with.

I will say the—Saint-Gobain, I would call them a good corporate citizen. They have connected—by the end of this fall they will have connected over 700 properties to public water because of the contamination issues.

So, again, as I mentioned, it is just—it is not a unique thing just to DOD sites. I will cite, and an example is the Saint-Gobain issue where we do have an excellent relationship with EPA Region One, with EPA's Office of Research and Development in particular in dealing with the air deposition. They are very great partners and we would like to make sure that continues.

Moving very quickly here, my counterpart to my right mentioned standards. As of last week, we now have the distinction in New Hampshire of having the most stringent water quality standards for PFAS in the country today.

That was a result of our—we have a very engaged public in New Hampshire, rightly so. We have a very engaged citizen legislature. Our executive branch, our Governor, were tasked by our legislature.

Initially, they wanted to set drinking water standards, MCLs, enforceable standards legislatively. As an agency we said please let us follow the science. Give us that purview and we will do it. We followed the science and that is where we came out.

Why is that important? There is probably—I think there is seven other states currently on a path to do exactly the same thing for enforceable standards, and then there is a handful of states that will be looking at health risk advisory action levels or other non-enforceable standards.

So what this means is we will have a patchwork throughout the country of different standards inevitably which makes it very dif-

ficult for the citizens to understand what that means but also for industry.

I was fortunate—I came from a meeting in Indiana. On my way I came here. I was meeting with some of the national drinking water companies. They have been advocating for national standards also.

So one of my key things here is I think we would all be better off if this is done at the national level. But failing that, we are going to see states like New Hampshire be forced to move ahead to protect their citizens.

So summarizing, I see I have a few minutes left. Again, this is an every state issue. We do need this to come out of commerce so we need industry, the Federal Government, and internationally we need to see these things come out of commerce in a reasonable way.

There is firefighting foam and other things that are providing a good public benefit but we need to find substitutes for that. We need national standards. We need the science. We based our standards on science but we need the Federal Government to help on that.

And at the end of the day, we are going to need financial assistance to be able to remediate this from the environment.

Imagine, if you will, we have landfills where the leachate is contaminated, which goes to wastewater treatment facilities, which don't want to take that anymore, which have biosolids that are questionable now.

We are going to need assistance in not spending millions of dollars to move this contamination around but to destroy it.

Thank you.

Mr. ROUDA. Thank you, Commissioner Scott.

Mr. Sliver, you are now recognized for five minutes for your opening statement.

STATEMENT OF STEVE SLIVER, EXECUTIVE DIRECTOR, MICHIGAN PFAS ACTION RESPONSE TEAM, MICHIGAN DEPARTMENT OF ENVIRONMENT, GREAT LAKES, AND ENERGY

Mr. SLIVER. Good afternoon, Chairman Rouda, Ranking Member Comer, and members of the subcommittee. Thank you for this opportunity to talk about what we are doing about PFAS contamination in Michigan.

My name is Steve Sliver and I am the executive director of Michigan's PFAS Action Response Team, or MPART. MPART is coordinating a rapid and comprehensive evaluation of PFAS in drinking water, groundwater, surface water, waste water, soil, biosolids, industrial byproducts, fish, and even deer.

We have 62 sites where groundwater contamination exceeds our state cleanup criteria and we continue to investigate hundreds more, and as you have heard, we have this many PFAS sites because we are looking, not because we have more contamination than anyone else.

These sites include military installations, airports, landfills, and industrial facilities. Our priority is protecting public health. So when we discover a site we immediately evaluate whether drinking water supplies in the area have been impacted.

MPART and responsible parties have been testing thousands of private wells. More than a third of those tested last year had some amount of PFAS contamination and 4 percent exceeded that 70 part per trillion lifetime health advisory threshold.

Alternate drinking water is offered whenever there is a detection during these ongoing investigations and remediations of the sites.

We are studying the occurrence of PFAS in our surface waters by adding PFAS to the ambient testing of water and fish. This enables us to track down discharges of high concentrations of PFAS so they can be reduced and to identify threats to public drinking water supplies that have surface water intakes.

Much of the focus is on PFOS in surface water because it accumulates in the tissue of fish we consume. Our surface water quality standard for PFOS is 11 parts per trillion in surface water that is also a source of drinking water.

We have identified industrial discharges of PFOS in the thousands of parts per trillion range and we are realizing significant contaminant reductions in the impacted waterways by working through our local wastewater treatment plants to get the industrial users to treat the problem at its source.

MPART is also systematically serving our drinking water supplies. This data helps us to identify and protect residents who are exposed while helping us understand the occurrence of PFAS throughout Michigan.

We know from statewide testing of all community water supplies last year that 97 percent don't have a PFAS contamination issue at this time. We are currently monitoring and investigating further 62 of those supplies where we discovered elevated concentrations of PFAS and we are expanding our investigations to other supplies.

Michigan is engaged in all of these efforts with very little support from the Federal Government. U.S. EPA has not established national enforceable standards despite evidence that PFAS are in our drinking water and that some have been associated with adverse health effects.

At the direction of Governor Whitmer, Michigan, like several other states, is proceeding to develop our own standards because U.S. EPA has not acted in a timely manner.

Our MPART science advisory work group just recently provided recommended health-based levels for seven PFAS in drinking water as a foundation for our rulemaking process for drinking water standards.

The health-based values are lower than EPA's recommended 70 parts per trillion for PFOA and PFOS, cover more compounds, and reflect the trend that we are seeing among other States that are doing the same thing.

There is much more to be done and the promulgation of drinking water standards will add to that, and we need more resources. State alone has already allocated over $50 million over the past two years to investigate and remediate PFAS contamination and to identify responsible parties.

As Michigan's new drinking water standards are promulgated and take effect, the additional burden of dealing with this legacy contamination will fall squarely on the shoulders of the municipali-

ties responsible for treating our drinking water and ensuring it is safe for their customers.

We will continue to hold responsible parties accountable for contamination they cause and we will continue to manage the sites where no responsible party is known.

But we need to sample more water supplies, more chrome platers, more airports, more fire stations. That costs money and it can cost the state millions of dollars to remediate just one of these orphan sites.

Michigan urges the Federal Government to move more swiftly in addressing PFAS issues. We also urge Congress to ensure proactive states like Michigan are provided financial assistance to ensure that our citizens are protected from these chemicals.

I commend the subcommittee for examining the levels of PFAS contamination across the country and industry efforts to clean them up. We have got considerable information available on the Web and look forward to assisting in any way we can, and I look forward to your questions.

Thank you.

Mr. ROUDA. Thank you, Mr. Sliver.

Ms. Luxton, five minutes for your opening statement. Thank you.

STATEMENT OF JANE LUXTON, PARTNER AND CO-CHAIR, ENVIRONMENTAL ADMINISTRATIVE LAW PRACTICE, LEWIS BRISBOIS BISGAARD & SMITH

Ms. LUXTON. Good afternoon, and thank you, Chairman Rouda, Ranking Member Comer, and members of the subcommittee and committee members who have also come to this hearing.

I am a partner in the Washington D.C. Law Office of Lewis Brisbois and co-chair its environmental and administrative law practice.

I am testifying here on my own behalf as an environmental and administrative law practitioner who has a strong interest in science policy issues, which has led me to follow developments relating to PFAS chemicals. I am not representing any client on PFAS issues.

Today, I would like to highlight some of the issues surrounding the effective regulation and management of PFAS chemicals.

First, while a significant amount of scientific research has been done on PFAS chemicals, much of this research remains incomplete and much more needs to be done, as we have heard from virtually everyone, to adequately understand the potential health effects of PFAS chemicals and risks posed by the many compounds that have not yet been studied.

The Agency for Toxic Substances Disease Registry reported in its June 2018 toxicological profile that, quote, "The mechanisms of toxicity of perfluoroalkyls have not been fully elucidated and that comparison of the toxicity of perfluoroalkyls across species is problematic.

Because of the differences in elimination of half lives, lack of mechanistic data, species differences in the mechanism of toxicity for some health end points, and differences in measurement exposure levels between epidemiology and experimental studies," closed quote.

Dr. Linda Birnbaum, director of the National Institute of Environmental Health Sciences and National Toxicology Program, testified before a Senate committee last fall that, quote, "We do not have strong data on which to base conclusions for the great majority of PFAS and we have only limited findings that support particular adverse health effects," closed quote.

More research is needed to determine the extent of causal links between PFOA, PFOS, and the many other PFAS compounds and specific health effects in humans, as well as fate and degradation in the environment and toxicity uptake and retention in humans, plants, and animals.

Additional work is sorely needed on developing effective analytical methods and disposal techniques. A great deal of both academic and governmental research is underway and efforts are increasing to coordinate this work, to expedite the process, and minimize costs.

But rigorous data-driven research is critical to ensuring the resources are properly focused on addressing the highest priority public health risks.

Second, regulatory efforts are proceeding under the Safe Drinking Water Act and other Federal statutes for increased regulation and enforcement of PFAS chemicals.

EPA's February 2019 action plan and its recently issued regulatory agenda commit the agency to issuing by the end of this year regulatory determinations for PFOA and PFOS that are the legally required key step in the process for setting maximum contaminant level standards.

EPA is further committed to making final determinations by the end of 2020 with additional steps to follow as prescribed by law. EPA is also committed to proposing hazardous substance listings for PFOA and PFOS for the cleanup process by October of this year and to developing new test methods to support monitoring of more PFAS compounds and at lower levels than was previously feasible.

Third, this Congress has passed legislation that, if enacted, would direct additional Federal regulatory initiatives as well as facilitate research and, importantly, provide grants for drinking water systems.

In conclusion, states, Federal agencies, and the scientific community are working vigorously to address PFAS issues against a backdrop of limited scientific knowledge, uncertainty, complexity, economic realities, and competing public health priorities.

While pressure is understandably strong for expedited action, truly effective regulation and management of PFAS chemicals must be based on the best scientific evidence available using legally defensible processes that will stand up under judicial review.

Thank you, and I look forward to your questions.

Mr. ROUDA. Thank you, Ms. Luxton, for your testimony as well as all the other witnesses.

That buzzing you heard is our call to vote, and as such, I am going to ask that the members here please try and come back within 10 minutes after the end of the last vote.

And until such time, we are in recess. Thank you.

[Recess.]

Mr. ROUDA. We are going to reconvene with recess being over, and I will remind all the witnesses you are still under oath.

At this time I am going to recognize myself for five minutes of questioning, and Mr. Evers, I am going to turn to you first, if I may.

How much involvement did you have with PFOA research and PFAS issues, more broadly, while employed at DuPont?

Mr. EVERS. I had access to seeing the documents while they were still available that disclosed concentrations in the employees, certainly, in products that were used particularly in the paper industry and what their health effects were.

Mr. ROUDA. Can you talk about that last phrase, the health effects? What access to information within DuPont were you provided regarding the negative health effects by being exposed to these chemicals?

Mr. EVERS. So DuPont had Haskell Laboratories, which is now a skeleton of its own organization, and they did very thorough jobs on trying to determine where the fluorochemicals were going, and where I worked at the Chambers Works plant I was particularly concerned about the products that came from these fluorochemicals.

So the studies are kind of flawed to begin with. First of all, Haskell did a wonderful job of identifying every part of the human body and as part of EWG's submission of documents—you can go back and find out the analysis that they did for a lot of employees.

The flaw with their study was that they took the Washington Works employees and they were looking at their health effects to try to determine if there was something unusual opposite a control, and the control were other DuPont employees.

So they found some that were elevated and some that were not. So the problem was with this whole study is that from the day I joined the DuPont company in 1981 after I had set my payroll to go to my bank I met with H.R. and they signed me up for the blood bank.

I had to pay in Delaware to join the blood bank. Why would a company on every single employee sign them up for a blood bank?

Mr. ROUDA. Obviously, they were checking your blood levels for chemical levels on the blood stream.

Mr. EVERS. Chemical levels and in addition to that, it purged you.

Mr. ROUDA. And can I ask you as a followup to that, my understanding is DuPont tried to suppress evidence that they had regarding the ill health effects of the chemicals. Did you come across that at any time while you were at DuPont or after your time at DuPont?

Mr. EVERS. Okay. So when I presented the 3X higher levels of fluorochemicals that were being extracted from paper, I also presented the papers that showed that this was a situation where the fluorochemicals were not leaving the body.

They were bioaccumulating. And so it is one thing to say that a dog will eat a thousand times the amount that it is realistic. But then it is another thing to say that over time these chemicals stay in your blood and don't leave.

Mr. ROUDA. Okay. So was that the basis of the—what they were trying to hide was the fact that the chemicals actually were not leaving the body; they maintained their presence in the bloodstream and accumulated over time?

Mr. EVERS. And they were also hiding the fact that these levels were being extracted in various ways that are now of concern. They were now coming out of the food wrap into your kids' ketchup.

Mr. ROUDA. Which they weren't supposed to do.

Dr. DeWitt, in your written testimony you also reference a study sponsored by 3M Company which you state, quote, "demonstrated immune-related changes in monkeys, giving PFOA or related PFAS for 90 days." You also state that these studies were, quote, "not part of the published literature," unquote, in the 1970's.

I would like to enter a copy of this study into the record.

Mr. ROUDA. Dr. DeWitt, as a researcher, what would the study have told you about these chemicals?

Ms. DEWITT. So these earlier studies would have told us that mammals given these chemicals have a response at the level of the immune system. We now know that humans also have a response at the level of the immune system.

The immune system can be suppressed or it can be hyper activated. So you can get allergy, asthma, or a decreased response to vaccines.

Had we known about these studies, we could have started additional studies with rodents earlier. We could have started additional studies or evaluations of humans earlier to gather more publicly available evidence earlier so that this hearing today could have been 10 or 15 years ago.

Mr. ROUDA. And can I ask you to expand on that in the sense that—the first panel was in here. We saw the horrendous situations they have gone through in their family, their friends, their neighbors, and that is where there is such a pervasive increase of chemicals in the bloodstream and the exposure that we see those types of outcomes.

But what we perhaps don't know is the impact on all of us with either smaller doses, smaller impact of these chemicals being in our bloodstream, and I just want you to talk a little bit about the increased levels of inflammation, the increased levels of asthma and any other areas that you think that we are collectively suffering from but perhaps don't quite know all the ins and outs.

Ms. DEWITT. Well, sure. I think a report came out in 2017 indicating that there are 9 million premature deaths a year from exposure to environmental pollutants.

It is the number-one cause of premature deaths in the nature and in the world, and it is the number-one cause of premature death in communities that carry a disproportionate burden of environmental pollutants and who don't have the money to protect themselves from the pollutants. It also disproportionately affects children.

And so there are many different types of health effects. Some of the health effects associated with inflammation include cardiovascular disease, stroke, diabetes, obesity, et cetera, and PFAS may play a role in all of these diseases.

Mr. ROUDA. But without proper studies we will never have the true understanding of the implications of it being in our bloodstream to these degrees?

Ms. DEWITT. I think we have enough data right now to say that there are diseases that are caused by PFAS. We have evidence from animals and we have mechanistic evidence to support what we are observing in humans.

So I don't think there is really any doubt in the mind of most scientists.

Mr. ROUDA. Okay. Thank you for that very important clarification.

With that, I would like to recognize for five minutes the ranking member, Mr. Comer.

Mr. COMER. Thank you, Mr. Chairman, and many members in Congress and advocacy groups have been pressing the EPA to set a maximum containment contaminant level for PFOA, PFAS, demanding that the EPA move more quickly, as everyone would understand.

Ms. Luxton, we have heard a lot of the discussion in the news about the need for a maximum contaminant—I am tongue tied—level.

Ms. LUXTON. We call it MCL.

Mr. COMER. Right. In the Safe Drinking Water Act. Can you please elaborate a little more on the steps and the process to set an MCL, what is required and what does the agency need to do?

Ms. LUXTON. Yes, thank you for the question.

The MCL is an easier way, but environmental law is rife with acronyms. But it is a four-step process and it is prescribed by law how those steps have to be laid out.

The first two in the process have been done already. They are contaminant selection and PFOA and PFOS have been listed in both 2009 and 2016. It is a process that occurs every five years.

The second is monitoring to collect nationwide data on the prevalence of these contaminants in water systems. PFOA and PFOS and four more PFAS compounds were identified in 2012.

EPA, in its action plan and its regulatory agenda, has now said that it will take the next step, which is making a preliminary regulatory determination by the end of 2019 and a final one by the end of 2020.

After that, the actual development of the drinking water regulation, or MCL, would take—would occur and that is required to be proposed within 24 months of the final regulatory determination.

It can be at the beginning of that period of time. And then a final national and maximum contaminant level goal and maximum contaminant level that is required. Those are supposed to be as close to each other as possible.

So it is a complicated process with legally required steps and a lot of scientific studies and evidence that needs to be considered in order to make it a regulation that will withstand judicial scrutiny.

Mr. COMER. Talking about science, what role does science play in EPA's chemical regulatory process and what type of information does EPA consider as part of this process?

Ms. LUXTON. Well, it is a critical process. For any legally defensible final rule there has to be a basis in both science and the pro-

cedures have to be followed because if they are not the proposed and final rule will be struck down as arbitrary and capricious under the Administrative Procedures Act.

That involves procedures for public comment and, again, an administrative record that is scientifically robust enough to justify the costs and benefits—the cost of the rule—because of the scientifically shown benefits of imposing it.

The danger here if this isn't done right is that the rule will be struck down and we will be back to the starting point.

So trying to shortcut or speed up the rules in a way that isn't carefully done can just cause more trouble than—can cause a lot of negative effects because it will spend a lot of time and won't produce effective results.

Mr. COMER. Are there legal and other possible ramifications if EPA doesn't base its regulatory actions on sound science?

Ms. DEWITT. Yes, and that is exactly where I was going with that last answer, that the net effect of not doing it right can lead to results that are—put you worse off than when you started. You have to start over again.

Mr. COMER. What is the best way if you determine that water—the water levels are excessive with the PFAS and other chemicals, how do you rid that out of the water? I mean, is there a good enough filter process out there? Is the technology out there to be able to ever get that water safe again?

Ms. DEWITT. Well, as we have heard in testimony earlier today, reverse osmosis is one of the recognized techniques for dealing with that. But when it comes to water systems there are needs for greater analytical methods and treatment methods, and we have also heard the disposal method is unclear.

What do you do with all this PFAS when all these measures require it to be taken out of water treatment systems and potentially out of ground—you know, Superfund sites, all kind of things, and I don't think there is any consensus yet on the best way to deal with that.

Mr. COMER. Thank you.

Mr. ROUDA. Thank you, Ranking Member Comer.

The chair now recognizes Congressman Keller for five minutes of questioning.

Mr. KELLER. Thank you, Mr. Chair, and I would like to thank the panel and the previous panel for your testimony today.

You know, we are examining the contamination threat posed by PFAS chemicals on our air, drinking water, groundwater, and food supplies.

Chemicals are used to make—these chemicals, as we have noted, are used to make things, from nonstick surfaces to water repellants to fabrics, food packaging, all those things.

And I know there has been proposals to regulate, roughly, 5,000 of these PFAS chemicals as a class instead of individually.

Ms. Luxton, just a couple questions, you know, following the testimony. I thought you had mentioned about research that has been done on PFAS chemicals. To what extent are the chemicals different—are different structurally? You know, is there any—do you have any information on that?

Ms. LUXTON. I am not a scientist, but yes, the studies show that there are tremendous differences among these compounds and not all of them are known. They are chemically different, structurally different. They have short chains or long chains, different half lives.

Some of the testimony or some of the—one testimony in one report that I referenced talked about those differences and that they are not well understood.

Those things can make a difference in terms of toxicity uptake, retention in the body, and metabolism including mechanisms of action within the body and whether they truly are toxic and to what degree.

I mean, it is commonplace in toxicology to say the dose makes the poison, and so knowing what these particular substances are and their relative toxicity makes a great deal of difference.

Mr. KELLER. And then in order to be able to regulate them effectively it would be best to research them individually and they might have different regulations depending upon their chemical structure?

Ms. LUXTON. Yes. Ideally, in the best of all worlds, you would have the time and you could do that. But everyone is so concerned, understandably, about these compounds that one of the areas that is really being prioritized is trying to group them into different classes so that—and, again, by some of these characteristics that have different properties that relate to toxicity and other adverse effects.

So the National Academy of Sciences report that I referenced, and it is cited in my written testimony, is—spends time talking about some of the more promising ways of doing that kind of classification to expedite this process.

Mr. KELLER. Okay, and that would tell us then how to best handle the chemicals if we were to do more research on those?

Ms. LUXTON. Knowing that would really go a long way in trying to manage the process of research and understanding of these substances and then regulation, yes.

Mr. KELLER. Okay. Have there been any other challenges that you have been made aware of through any of the research that you have done related to finding out how the chemicals differ and what we need to do to best protect our air, water, and food supplies?

Ms. LUXTON. Well, those are some of the most important, really, understanding the chemicals better, trying to get a handle on these very large numbers of compounds and how best to understand them, classify them, and manage them.

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

Mr. ROUDA. Thank you. We did lose a few members due to votes. So as such, I am going to do another round of questioning from the members here.

And Mr. Comer or Mr. Keller, if either one of you would like to ask a few more questions you are more than welcome to have an additional five minutes.

I am happy to go first if you would like me to.

Mr. COMER. Go ahead.

Mr. ROUDA. Sure. Give you a minute to catch up.

Mr. COMER. I have got it.

Mr. ROUDA. Ms. Luxton, let me start with you. The statement you just made—the dose is the poison—if any dose is poison, wouldn't we be better off not having any doses until we knew more about these chemicals rather than allow the chemicals to be used without knowing the full impact of them?

Ms. LUXTON. It is a good question, but we don't know if any dose is poisonous. Many—just to take an example, many essential elements——

Mr. ROUDA. Exactly. We don't know. That was the testimony earlier too, which would suggest that before it is introduced into our bodies via water, air, land, and otherwise, it would be good to know what the full impact of it is, especially since we have seen what the impact is on test animals.

So I have a tough time understanding why we are supposed to have humans act as guinea pigs to figure out what is the right level. Is that what you are suggesting?

Ms. LUXTON. No, of course that is not what I am suggesting.

We don't know what we don't know about many things. But our laws don't operate that way. Our laws require that there be some risk-based knowledge to justify regulating something, and for things where we don't have any reason to believe they are toxic.

We have no scientific evidence of that. We can't ban them in advance, not to mention the next chemicals that may be out there that we don't know about right now.

Mr. ROUDA. Well, I hope we never get to a point in our country where any chemicals can be introduced and only until there is sufficient evidence to find that it has a material impact on our health that we can take action.

That being said, I would like to move to the two commissioners because your states have implemented laws that far exceed in a positive way what the Federal Government has done so far.

I would like to—two areas of exploration here that I would like to cover is, one, just having a better understanding that while you have implemented these thresholds how do you intend to enforce those who violate it and how do you want to be able to monitor it and have sufficient transparency and accountability?

Ms. MCCABE. For monitoring we are going to focus on the public water systems, which we are already monitoring, having issued the first MCL for PFNA in New Jersey last September.

The water systems in New Jersey began monitoring for that compound. But they also find other PFAS. They will find PFOA and PFAS as well, and we are seeing those results already coming in and that will be phased in over the next two years.

We know there is many more. We know we have GenX in New Jersey as well that we haven't specifically started the regulatory process for.

But in monitoring for the ones that we have started, we are going to find a lot of information about where the problems are and then we will track down the sources from there and we will hold the responsible parties liable for the cost of treating it and preventing any further discharge.

Mr. ROUDA. And is that codified how you will hold them for the costs or do you—is that more taking legal action against them and recovering the costs?

Ms. MCCABE. It is by operation of our existing laws. Once we have made an MCL a standard for them that is legally enforceable then we can take action under a number of laws that we have in New Jersey that also are—have counterparts in the Federal Government. We have a Spill Act that is comparable to CERCLA, et cetera.

Mr. ROUDA. Commissioner Scott?

Mr. SCOTT. Thank you.

Similarly, again, we have done administrative rules, which have the force of law. So starting October 1, basically the fourth quarter of this year, all public water systems, so again, a lot of our drinking water in our state is private that is not regulated.

The testing requirement will be now including the four PFAS substances that we are now regulating. So there will be a requirement every quarter for drinking water systems to monitor.

Mr. ROUDA. Just to clarify, you said four when we have heard numbers of 5,000. Is that four classes or four specific——

Mr. SCOTT. Four specific. So I mentioned earlier in my testimony we had the dialog with our legislature, which resulted in a law.

We felt there was data enough—the epidemiology and toxicology data for four of these compounds. We had enough—we had enough of the science for those four and those are the ones we have moved with.

Mr. ROUDA. Okay.

Mr. SCOTT. So at the end of the four quarters, if drinking water systems above or the average is above, so if you are very high it could be—for first quarter—then you will have to—that drinking water system would have to present a plan to us on how they would get compliance.

Mr. ROUDA. Mediation?

Mr. SCOTT. Right. So it could be granulated activated carbon, reverse osmosis. It could be ion exchange. What we are already seeing is blending. So if you have multiple wells you can blend to get below the levels.

Some, thankfully, we have—for other reasons, whether it is just an effect from byproducts, that type of thing, in the water chemistry there is what is called finishing going on. So they will just change their media more often.

So we are seeing the—already being very proactive on that end. But we are very concerned about the cost to municipalities and drinking water systems and we are exploring options there.

Mr. ROUDA. And, Mr. Comer, if there is no objection, may I continue?

Mr. COMER. Go on.

Mr. ROUDA. Thank you.

The other question I wanted to ask the two of you is that, obviously, you have spent a lot of time and effort with your states and coming up with the appropriate legislation.

What would you like to see the Federal Government do to address this issue? What are the key outcomes issues that we need to address?

Ms. MCCABE. Well, on the treatment end, as Commissioner Scott was just saying, this is going to be expensive so we are going to need some help. We are already challenged in our public——

Mr. ROUDA. Can you clarify? Water treatment or treatment of landfills and Superfunds?

Ms. MCCABE. Water. Water treatment.

Mr. ROUDA. Okay. Thank you.

Ms. MCCABE. Drinking water treatment, because when we first find it in the drinking water that is where we are aiming our concern right now.

So when we find it, as Commissioner Scott was saying, you can treat it with carbon filters and reverse osmosis. But these things can be expensive and some of these communities that are going to experience the costs are small, and they will need assistance with that.

We are already challenged in the Northeast, particularly with a lot of lead in our drinking water and we are using a lot of our SRF funding where we can to help communities with that. It is not enough of it so we will need more help on that.

But on the front end of this, talking about the thousands of other compounds that are already out there and new ones that are probably being invented every day, where we really need help from the Federal Government is to use TSCA to get in front of this and to figure out how to direct the chemical companies that are making these new compounds to do that research, do those studies first before we allow these chemicals to be put in the marketplace.

Mr. ROUDA. Okay. Thank you.

And let me turn to—actually, I mentioned this slightly earlier. I have introduced H.R. 2570, PFAS User Fee Act, where we would hold polluters accountable for their role in the crisis.

The bill establishes a trust fund through user fees from PFAS manufacturers to pay for ongoing operations and maintenance costs of water treatment centers and plants to help remove PFAS chemicals, and the plan there was no less than $2 billion a year in those fees, which I know is actually, no pun intended, a drop in the bucket still to address making sure that we have safe drinking water nationally.

So you talked about what we need to do on that end. I would like to kind of go to those individuals that have been affected by PFAS, and can you talk a little bit, Doctor, about how do we address those who are having these incredible health care issues because of the contamination from PFAS?

Ms. DEWITT. I think one of the things that we need to do and I need to do as a scientist is to help to educate physicians about pollutants and to bring physicians together to tell them about what pollutants might to do to individuals.

So in terms of PFAS, we need to educate them about what they are, where they come from, what happens when they get into people's bodies, and what they can do to help their patients to do some medical monitoring to make sure that they can get ahead of any health effects that they might experience.

Mr. ROUDA. And what can we do as the public to find out what our personal levels of PFAS contamination is?

Ms. DEWITT. Sadly, right now we don't have many alternatives. There aren't any clinics that you can go to to get your blood tested. You can become part of a biomonitoring study that the Centers for Disease Control and Prevention is—I think they are reviewing ap-

plications for those proposals this week. You could potentially be a member of another study group and find out what your blood concentration is.

Mr. ROUDA. So let me be clear here. If I want to go find out what my personal PFAS levels are you are saying it is pretty difficult to get that done, at best?

Ms. DEWITT. Yes. It is extremely challenging and I think that has been a call from many different communities, "How can I find out what is in my body? I don't know. There is no place I can send my blood."

There are some organizations that are doing affordable water testing. But as far as I know, there are no clinical labs that can routinely do testing that community members need to find out what is inside of their bodies.

Mr. ROUDA. Thank you. I may have some further questions.

But with that, let me go ahead and yield to the Ranking Member Comer to ask questions.

Mr. COMER. Just from the testimony today, I have learned that different states are already implementing certain types of testing.

I am curious, Ms. Luxton, are there—are there concerns with states setting their own different levels of what is acceptable and what is not or are the states working with the EPA?

Who is—who is the entity that determines which level is acceptable and which level is too high?

Ms. LUXTON. Well, that is a good question. I mean, we heard I think it was Commissioner Scott say that there is a patchwork of numbers, and that is true. We have heard different numbers. I think New Hampshire has one, New Jersey three. I am not sure about Michigan. I used to have the number.

But they are very different, and so that lack of consistency is a question. There are many questions about analytical methods, how you can detect these compounds, particularly when it gets past some of the best known ones and treatments.

So having different standards is an issue, and EPA is working through the process. I am not here to defend EPA and I think you have had an oversight hearing of them.

Some of the legislation talks about expediting some of their steps. But that is—I think most of the states are calling for a national approach to this to have a consistent standard nationwide.

Mr. COMER. Mm-hmm. You know, one of the—I was asked earlier if I had had many calls on this issue and from my district in Kentucky, and I had one.

Actually, the Kentucky Professional Firefighters Union, when they came to meet with me, they brought this up because they knew that I was ranking member on the Oversight Committee and we had had one hearing on it, and they just said that this was something that they absolutely had to have in fighting fires.

And I haven't talked to anyone at Fort Campbell or any of the military people or bases in my congressional district. But I just wanted to throw that out there when we are talking about possible solutions and uses of this. But another question I have is are all PFAS chemicals the same structurally?

Ms. LUXTON. Maybe others can address that as well.

Mr. COMER. Yes.

Ms. LUXTON. But I think the answer is no. They are chemically different and structurally different.

Mr. COMER. All right.

Mr. Evers, do you want to—you would probably be the expert on that.

Mr. EVERS. Yes. So there are major differences between these chemicals and even when you talk about PFOA, as an example, or any particular, what they are doing is they are talking about the average of what is there. So in perfluoroalkyl chemicals they will say C8.

But what they didn't tell you is that from the production of C6 there were some big molecules like C10, which they couldn't use. And so they blend that into the C8, and the C2s and the C4s—all these little cousins and aunts and uncle.

They can't control a specific size, okay, and so you have this broad band of chemicals, and then they can put on different heads that love water, some phosphate groups—ammonia, carboxyl groups on it. Then they can even make molecules that have twin tails, like twin dragons, you know, that have tails.

So the number of chemicals that are out there from a single product is incredible, just from a single product. So the question comes back, how do you identify them, right. And so I was—I was talking with Ms. McCabe.

She said what would be the silver bullet that you would use for controlling this, and I said actually the silver bullet isn't the toxicity.

The silver bullet is the fact that it is in your blood, and what people don't realize is that when a fluorochemical, and I put a little fluorine atom on a carbon, is in your blood, the industry will say, well, it has a half life of nine years or four years.

Okay. So if it has a half life of four years or nine years, that means half of it goes away. If it is not biodegradable where does it go?

That is the issue, and I can tell you right now that we can take the most scholarly guys from the best universities, Ph.D.s, and they will all say the same thing. It doesn't go away. This is a man-made chemical. We just pass the baton to our generations of kids.

In fact, if you were to incinerate and cremate me, I would technically be a fluorochemical hazardous source. The Teflon mesh that is used in my hernia produces a very toxic gas and decomposes to something called Devil's piss, which is hydrofluoric acid. You can't kill this beast. You can only control it.

Now, why does publishing this—if you just put this—you know what an F minus is on a report card, right? It is not too good, right.

But I have the right to know and the most aggressive law that I have ever seen in industry when I worked at DuPont at Chambers Works was the New Jersey Right to Know law.

They didn't want an MSDS that said proprietary. If you wanted to keep it proprietary you still had to tell us what the chemical was. They had to know. But that is the important thing.

So the public decides, do I want this in my blood. And don't talk to me about parts per trillion. Talk to me about number of molecules, because when you take the molecular weight times the

Avogadro's number, you wind up with a thousand molecules in a liter of water.

Mr. ROUDA. Thank you.

Congressman Levin from Michigan is with us and, without objection, I am going to allow him to ask a few questions. But before he does, since he just sat down, I am going to give him a few minutes to settle in, and I think we are going to be finished here in about 10 minutes or so, just to let everyone know what the timeframe is.

I would like to give all the witnesses just a moment, because there has been a lot of testimony today from both panels, and Ms. Luxton, starting with you, if there is anything that you would like to clarify, add, that you have heard today that you think is important that you haven't had an opportunity say, please take a moment to do so.

Ms. LUXTON. Thank you, Chairman Rouda.

I just wanted to pick up on something that Ranking Member Comer mentioned—the firefighting foam, which is one of the PFAS issues that has really gotten the most attention.

What he said is right. At the moment, there doesn't seem to be a feasible alternative. And so when I have heard people talk about this, they say, then what do you do on a submarine if you don't use this substance—allow it to burn.

So even in the legislation that has been proposed there is a phaseout time period to try and identify alternatives that are acceptable that really do work.

So I think it is another example of the complexity of this issue where everyone is trying to find solutions and understanding how complex and what is needed to do it in a scientifically robust way really is a big challenge.

Mr. ROUDA. Thank you. And I have heard from California firefighters as well and the feeling is wanting to make sure that the exposure to it is nonexistent—that they have proper apparel to address it and that the use of the chemicals doesn't contaminate our groundwater.

Mr. Sliver?

Mr. SLIVER. Yes, thank you, Chairman.

So I think one of the things to emphasize here is our job one is protecting public health, and we know from our scientists that certain PFAS are harmful when ingested as through drinking water.

And that is why Michigan went to a panel of scientists and asked them, look across the country and tell us your best advice which compounds we have defensible science for today to proceed with establishing state drinking water standards.

We feel compelled to do that because we probably got the most comprehensive study of any state on what is in our community water supplies.

We tested all of them, and so we have got a really good data set. And we now have health-based value recommendations from some of the top scientists in the country.

And so we know from EPA's, you know, PFAS action plan that we are not going to see any MCLs out of them for years and they are only right now considering two.

We have got scientists telling us look at seven. And so we are in that rulemaking process right now, like other states have been through, and we will have draft rules by October 1, which will lay a path forward to institutionalizing or memorializing this testing in our drinking water supplies and whatever mitigation is necessary, going forward.

Mr. ROUDA. Thank you, and I applaud your state for the testing that you have done throughout the state as well.

Commissioner Scott?

Mr. SCOTT. Thank you.

Short term, again, I don't think we have a choice but to look at what science we do have and regulate on that end. As I alluded to earlier, destroying what is in the environment is going to be very important.

So we have talked within our state and regionally about thermal oxidation, regional facilities, combining resources, that type of thing. That is important that we don't perpetuate the problem.

Long term, I don't think playing whack-a-mole, if you understand the analogy, with—you know, we do four today and we are talking about 5,000, we will never finish that, that type of regulation.

So I think long term I would call upon industry, EPA, and others to work together to get this out of the consumer stream to begin with.

You are correct, there are some uses like firefighting foam. If today that is what is needed I certainly support that. In our state, we don't tell if you need Class B because you have a liquid fuel fire, we say go ahead and do that but let us know.

We will help you contain it and we will remediate it. That is the important thing. But in the long term, there needs to be a better solution than that.

Mr. ROUDA. Thank you.

Commissioner McCabe?

Ms. MCCABE. I understand about the need for the firefighting foam and to, you know, use a phase-out approach to that. But do you remember DDT?

Mr. ROUDA. Mm-hmm.

Ms. MCCABE. Everyone said, oh my God, you can't take that away. It will ruin our agriculture. We won't have enough food to eat.

Well, we did. Necessity is the mother of invention. We are very inventive, we Americans. We can find other solutions. But someone needs to make us do it because the marketplace itself isn't going to do it, and that is where we need Congress.

What you have heard from the states about what we are doing is what we can do. We are dealing with the past. We are dealing with the legacy of what has already been let loose out there that we are now finding out is in our drinking water and in our blood.

We will do what we can with that. It would be better to have a national Federal rule. We don't like, you know, having all of this difference between the states. We don't like having to do 50 times what EPA could do once.

We don't believe that you need years more of study to figure out that this is a problem. So we do want the Federal Government to do something about it.

But most of all, we want the Federal Government to get a handle on what only the Federal Government can do, which is the interstate commerce part of this.

The presumption should be that until they can show it is safe, it doesn't go into the marketplace. We shouldn't have to be scrambling to catch up with the science, which takes us years to figure out this was dangerous only after it is already in our bloodstream.

Mr. ROUDA. Good point. Thank you.

Mr. Evers?

Mr. EVERS. The atomic bomb on PFAS went on December—on May 15, 1998, and it was because there was a great law that the Federal Government had—is that going—time going? I can't see my time.

Mr. ROUDA. Well, if you keep it to 30 seconds to a minute that would be great.

Mr. EVERS. Okay.

So it was at that time that they were required by law to report it within 24 hours and they got out of the business. A hundred and fifty million dollar business, they got out instantaneously.

Your legislation putting a fund together is excellent. It provides a safe haven for all the guys who didn't realize that they were doing bad. But what it needs is transparency.

It needs the ability that you say you want to be part of the insurance fund, fine. Tell me what you were using. Give me the list of all your customers, and that helps EPA. It helps the states identify where the point sources are.

You cannot get government protection until you tell us where the problem is. And I would endorse not reusing activated carbon as a source for—it does a great job of stripping out the fluorochemicals but as we have also heard, we don't know what to do with it when we—when we got rid of it, you know, and the old equation of, well, it has got a half life in your blood—where does it go.

Mr. ROUDA. Mm-hmm.

Mr. EVERS. So I think you guys are doing a great job and I would also commend the Environmental Protection Agency. I would not be a witness if it weren't for the EPA. They came to my house with their black SUVs and T'd my car as I was leaving with my wife, and they said, we are the Criminal Investigation Unit from Environmental Protection Agency.

Who knew, right? I said, this has got to be a car rip off thing here, you know. And I rolled down the window slightly. I said, let me see your badge, and he pulled out his Environmental Protection Agency badge and then he showed me his gun and the other agent was there said, whoa.

I said, hey guys, I am on the same team here. I don't know how you found me.

And we spent all night talking about sources of fluorochemicals. But you know what kept the big companies from harassing me?

It was a criminal investigation, and the second a manager or an attorney from somebody who came to harass me said something, they got a note from the EPA that said, you are an obstruction to justice.

So let EPA do what they need to do. Full transparency.

Mr. ROUDA. Thank you, Mr. Evers.

Dr. DeWitt?

Ms. DEWITT. Thank you.

PFAS might be 5,000 different chemicals that are cousins, uncles, siblings, aunts. But they are all part of the same class, and like those relatives that don't go away, they are never going to go away. They are here with us forever.

They can move from the environment into our bodies, and in their bodies they stick around for a while. They have long half lives, and when they are in our bodies they can interact at the level of molecules to change how our bodies work, how our bodies function.

In some people, that bodily change might be cancer. In other people, it might be thyroid disease. In other people it might be increased allergy or asthma. In other people, it might be absolutely nothing.

But these chemicals are able to get into our bodies and adjust our physiology—adjust how we function. The newer generation of PFAS are even more insidious because they are persistent.

They are bioavailable. They can get into our bodies and they are very mobile so they can move around the environment a lot more rapidly.

I can give a mouse an amount of PFOA, which is eight carbons—one of the legacies—at 75,000 nanograms per mL of PFOA in the mouse's blood. They will not be able to respond to a vaccine very well.

I can give GenX to a mouse and it is 7,000 nanograms per mL. They won't be able to respond to a vaccine very well. GenX supposedly has a more favorable toxicological profile than PFOA. I think the key phrase here or the key word in that phrase is not favorable. It is toxicological.

So these compounds are not safe. They are still toxic and we are continually exposed to them because they are still persistent and they can still move into our bodies.

Mr. ROUDA. Thank you, Doctor.

At this time, the chair would like to recognize Congressman Levin from Michigan for five minutes of questions.

Mr. LEVIN. Thank you, Chairman Rouda, and thank you so much for your leadership on this. I really appreciate it.

This is a super important issue. I see I am surrounded by names of my colleagues from Michigan who presumably may have been here to question you earlier.

This is a big deal for us and I am afraid I do feel like PFAS is the DDT of our—of our era and we are going to be dealing with this for a long time to come.

So we have people from—officials from New Jersey, Michigan, New Hampshire, Democratic and Republican state governments, who are committed to addressing PFAS contamination within their own borders because, in part, the Federal Government has not acted and has not set maximum contaminant levels or MCL standards for the entire nation.

I certainly commend the three of you for your efforts and I thank you for being here with us today.

Commissioner McCabe, you pretty clearly stated that the EPA's PFAS action plan, which was released earlier this year, isn't sufficient to address the problem. Is that correct?

Ms. MCCABE. Yes, that is correct. We don't think that the timeframe is good enough and we don't think that the protective level that they are considering setting for an MCL is protective enough.

Mr. LEVIN. So if I have my recent history right, you came to work for New Jersey after a stint with—as acting EPA administrator and acting Region Two administrator in the Trump administration. Is that right?

Ms. MCCABE. Among my other career jobs that were not acting, yes.

Mr. LEVIN. Yes. So based on these experiences, do you believe the Trump administration will set an MCL for PFAS chemicals?

Ms. MCCABE. I have no confidence that they will set a PFAS MCL that will be protective.

Mr. LEVIN. And why not?

Ms. MCCABE. There is a dialog that goes on that has to do with the Department of Defense, and the Department of Defense has a significant amount of exposure across the country and they have consistently argued that the level should be higher.

So that pressure is no doubt going on in the discussions in the Federal Government. So regardless of what the career people at EPA and the career scientists may be saying, based on the latest available science about whether that 70 level is protective enough, and we don't think it is, the pressure right now will be to make it higher.

Mr. LEVIN. Based simply on liability?

Ms. MCCABE. Yes.

Mr. LEVIN. The DOD's—based on their liability we would endanger millions of Americans all around the country?

Ms. MCCABE. I would not think that anyone would consider doing such a thing. But I suspect the pressure is there.

Mr. LEVIN. Thank you, Commissioner.

Dr. DeWitt, you specialize in the health effects of environmental contaminants, specifically, PFAS chemicals. As the commissioner was saying, 70 parts is—you know, that is not a good standard.

What do you think the maximum contaminant level of PFAS and PFOA in drinking water that could be considered safe for humans might be?

Ms. DEWITT. Well, the right answer to that question is zero. We shouldn't be exposed to these synthetic chemicals that don't belong in our bodies.

I think the appropriate question is what is an acceptable maximum contaminant level and that is what is acceptable for Ms. Donovan to have in her body and her children to have in their body. Something lower than 70 parts per trillion, likely in the single digits, would be acceptable.

But zero really is the best answer because they shouldn't belong in our bodies.

Mr. LEVIN. Thank you. Thanks very much.

Mr. Sliver, I am glad to see you here. I am proud of the work that EGLE has done—the Michigan Department of Environment, Great Lakes, and Energy. Proud of our leadership in this.

Can you talk a little bit about the science that you relied on when you were setting the maximum contaminant levels for Michigan?

Mr. SLIVER. Well, actually, we haven't set maximum contaminant levels yet. We asked——

Mr. LEVIN. Okay. So tell me about the process you are going through.

Mr. SLIVER. Right. And so actually Dr. DeWitt would probably be better to explain what the methodical process they went through in looking at the information from across the country.

She was one of our science advisory work group members that we asked to look at the available science out there and recommend health-based values to basically inform the MCL-setting process, which is currently underway. MPART accepted their recommendations back at the end of June and we are now targeting October 1 to look at other factors in setting the MCLs.

Mr. LEVIN. So my time is pretty much up. Let me just ask you, there are so many—there is, like, thousands of these chemicals.

Will this be—what you do in October, hopefully, cover all of them or some of them or what is a regular Michigander, you know, to understand about that?

Mr. SLIVER. So we asked our science advisory work group to focus on the 18 PFAS that are part of the nationally recognized EPA method for testing drinking water and tell us which of those there is enough defensible science to proceed with setting MCLs, and they came up with seven.

And so no groupings of those. It was seven that we will look at individually in the rulemaking process for municipal water supplies.

Mr. LEVIN. Mr. Chairman, I just have to say I am so proud. But just think what a small start this is on dealing with a huge and very scary problem.

Thank you all so much for coming today and thanks for giving me the time, Mr. Chairman.

Mr. ROUDA. Thank you, Congressman Levin.

And thank you to all of the witnesses in both panels for bringing your personal stories as well as your expertise and helping all of us better address this crisis and advocate for meaningful solutions.

Also, thank you to the Environmental Working Group for their work on this issue. I would like to submit their statement for the record. That includes critical information related to 3M and DuPont's knowledge of the dangers of these toxic PFAS chemicals.

Without objection, so ordered.

Mr. ROUDA. During this hearing, many important questions related to what corporations and manufacturers knew, when they knew it, and the need to have answers and accountability from them.

So I look forward to making sure that they provide answers to the American public.

Finally, I would like to thank the staff of both the minority and the majority that are sitting behind Ranking Member Comer and myself.

These guys do a heck of a job getting us ready for this and preparing us, and so thank you. We really appreciate your hard work.

Finally, without objection, all members will have five legislative days to which to submit additional written questions to the witnesses to the chair, which will be forwarded to the witnesses for their response.

I ask our witnesses to please respond as promptly as you are able, and this hearing is hereby adjourned.

Thank you.

[Whereupon, at 5:30 p.m., the subcommittee was adjourned.]