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U.S. Senate Date: Wednesday, June 22, 2022

Committee on Environment
and Public Works

Washington, D.C.

TOXIC SUBSTANCES CONTROL ACT AMENDMENTS IMPLEMENTATION

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The committee, met, pursuant to notice, at 10:01 a.m. in room 406, Dirksen Senate Office Building, the Honorable Thomas R. Carper [chairman of the committee] presiding.

Present: Senators Carper, Capito, Whitehouse, Markey, Kelly, Padilla, Inhofe, Sullivan, Ernst.

STATEMENT OF THE HONORABLE THOMAS R. CARPER, A UNITED STATES SENATOR FROM THE STATE OF DELAWARE

Senator Carper. Good morning, everyone.

Let me begin by welcoming our witness, no stranger in this room, Dr. Michal Freedhoff, and thank you, Michal, for joining us today for an important hearing. Michal, we are pleased to welcome you back to the EPW Committee as the Assistant Administrator for the Office of Chemical Safety and Pollution Prevention.

As we gather here today, I believe today is the sixth anniversary of the enactment of the Toxic Substances Control Act legislation, among others. Senator Inhofe, myself, and a lot of folks worked on it. David Vitter, Tom Udall, all kinds of people worked on it. It was a great bipartisan triumph at the time.

As we gather here today, my hope is that this hearing will offer a much-needed and timely opportunity to explore one of the more daunting challenges that we face, and that is protecting our health and the health of our families while also preserving the capacity of chemistry to enrich our lives and spur innovation.

Given the complexities of this task and the intricacies of the science that accompanies it, not just anyone can do that. It should come as no surprise that the miracle of modern

chemistry comes with potential risks and rewards.

In many cases, industries have invested large amounts of resources and expertise to develop the chemicals that surround us in our everyday lives and make our lives better. Having said that, they are not the ones we expect to tell us all we need to know about the potential shortcomings or negative health impacts that those chemicals can pose.

So, we turn, as we often do, to our government to serve as our watchdog and our protector of our people. In this case, it is the EPA. Through the Toxic Substances Control Act, or TSCA as we affectionately call it, Congress has vested the responsibility of protecting Americans from chemicals that pose an unreasonable risk to us and our environment with EPA's Office of Chemical Safety and Pollution Prevention.

With that being said, I am not sure we have found a person more qualified to lead that effort than the witness before us today. Dr. Freedhoff is a Ph.D. chemist who has spent countless hours working with many of us to create a law that can actually provide the protections that Congress intended when TSCA was initially enacted in 1976, but fixing the law is only half the story.

The harder part is dealing with the complexities, with the competing interests, and daunting mechanics of implementing that law. Senator Inhofe, Senator Markey, and a number of our

colleagues on both sides likely recall the high expectations that accompanied our shared sense of accomplishment as relief at enacting the Lautenberg Act in 2016.

Still, no matter how capable the leadership at EPA is, the agency simply cannot meet these expectations without adequate support from Congress and from the Administration. Implementing TSCA requires experts and financial resources to rigorously test literally thousands of chemicals, quickly turn around risk assessments and chemical reviews, and establish the protection against those chemicals that can put our lives and our livelihoods at risk.

As Dr. Freedhoff will point out in her testimony today, EPA's staff has continually faced the high expectations and workloads that we created in 2016 armed with flat budgets. To be fair, this is a shared responsibility. Faced with the previous Administration's efforts to strip the agency of critical personnel and resources, we in Congress did not respond by providing EPA with the budget increases that this law requires. To put it frankly, we collectively dropped the ball.

Not surprisingly, today, the agency is missing deadlines and delaying decisions, which contributes to growing grievances. Advocates are frustrated with EPA's delayed pace in reviewing and regulating harmful chemicals. Meanwhile, those in industries are disheartened by having to wait sometimes a year

or more for new chemicals to be approved or not approved.

It is clear that no one is happy with the current situation. This leaves advocates and companies feeling compelled to look for nefarious explanations for those unmet aspirations and expectations: faulty science, regulatory overreach, skirting the law, and inappropriately close ties between EPA staff and industry.

Fortunately, there is a fundamental solution to all of this. I am going to say that again: fortunately, there is a fundamental solution to all of this, and that is to provide the agency the resources it needs to get the job done, the job we all want them to do, the job that we all need for them to do.

We might be pleasantly surprised to see how much better both the law and EPA start to look if the Congress and the Administration actually work together going forward to ensure that the agency has the qualified people on board, with the resources needed to meet the letter of this new law.

My suggestion is that we give them that chance. We need to do more. I have committed to working together with members of this committee to ensure that we provide the agency with the resources they need in Fiscal Year 2023 and to then hold EPA accountable, going forward, in protecting us from harmful toxics while allowing chemistry to usher in a new world of clean energy and life-saving technologies.

Dr. Freedhoff, we look forward to hearing from you today, in no small part, because you have quite a tale to tell us. Before we hear from you, though, I want to hear from our Ranking Member, Senator Capito for her opening remarks. Senator Capito?

[The prepared statement of Senator Carper follows:]

STATEMENT OF THE HONORABLE SHELLEY MOORE CAPITO, A UNITED STATES SENATOR FROM THE STATE OF WEST VIRGINIA

Senator Capito. Thank you, Mr. Chairman, and welcome back to the committee, Ms. Freedhoff. It is nice to have you here.

Today, we are holding a hearing, as the chairman has said, on EPA's ongoing implementation of the Toxic Substances Control Act, TSCA. In 2016, Congress passed in a bipartisan way, overhauled the TSCA Program, strengthening EPA's authority to evaluate and regulate new and existing chemicals. These were a significant, as you know, working then, a significant bipartisan achievement.

Among other changes, the revised TSCA Program established legally enforceable deadlines for EPA decisions. These deadlines are a key facet of the new TSCA, and one I would like to particularly focus on today. The chairman has already talked a bit about this.

Since being confirmed in your role, you have repeatedly stated, including in your testimony today, that a lack of resources is the reason EPA has repeatedly missed statutory deadlines. With regard to existing chemicals, you have said "It shouldn't come as a surprise that we expect to miss every single deadline for the final risk management rules for these first ten evaluations and every single deadline for the next 20 risk evaluations."

Well, I have to be clear here. It does come as a bit of a surprise to hear a blanket pronouncement such as this, in particular, when the appropriations EPA has received over the past few years have been developed in a bipartisan way.

You have blamed the root cause of TSCA's delay on the prior Administration gutting the program, but we are 18 months into the Biden Administration. Compared to 2016, you have dozens more full-time equivalent employees working within the TSCA Program, and user fees have risen by over 600 percent.

In 2021, EPA issued 146 final determinations on new chemical submissions, fewer than any other year of the prior Administration. The Obama Administration, which was tasked with standing up the entire new TSCA Program, issued 92 determinations from June 23, 2016 until the end of its final year in office.

In contrast, as of last month, your office has issued final determinations only 23 times for 2022 submissions over a comparable amount of time. That is really the crux of the issue that we will be talking about today.

Previous administrations were able to do more with fewer resources. I guess the question would be, why is that? It seems that internal changes pushed by the Administration to the TSCA Program are undermining EPA's ability to meet it statutory obligation. Ten risk evaluations finalized between June 2020

and January 2021 have all now been reopened, adding to a more supposedly already overstretched staff's plate.

According to your previous statements, impacted communities will now have to wait until at least 2025 to see an eventual risk management rule for these high-priority chemical substances.

In your requests for more robust funding to the TSCA Program, you continually point to the increased workload that your office is facing. It kind of seems to me that a lot of the workload is self-generated mission creep of the TSCA Program that is not required by the statute.

Under the Biden EPA, risk evaluations must now include exposure pathways covered by other EPA-administered statutes like the Clean Air and Clean Water Act, as well as assess fence line community exposure.

Your office has revised risk evaluation models to make highly questionable assumptions that OSHA standards are insufficient and that workers are not routinely wearing PPE.

Finally, the agency is no longer issuing risk findings for individual conditions of use but is adopting a "whole chemical" approach.

Taken together, these policy changes have created a situation where existing chemicals under review will most certainly face an unreasonable risk determination going forward.

This expansion of your office's work beyond what TSCA requires has exacerbated the workload issues and is at odds with the intent of the statute.

In addition, it seems staff resources have been diverted to programs without existing authorizations, like IRIS and Safer Choice, with EPA prioritizing elective programs over statutorily authorized programs.

I don't have to tell you this, but in today's turbulent economic times, the importance of reliable, efficient domestic supply chains for key technologies like semiconductors and batteries has become increasingly apparent. Even feedstocks essential for the Biden Administration's renewable energy priorities, like batteries and solar panels, are being held in regulatory limbo. Delays in approving new chemical submissions directly impact our economic and national security, and ultimately, will help fuel inflation and scarcity.

We can all agree that everybody will benefit from getting this TSCA implementation on track. I look forward to hearing what specific actions you plant to take administratively, beyond just asking for additional resources, to fulfill the office's statutory obligations in a timely and cost-effective manner.

Thank you. I yield back.

[The prepared statement of Senator Capito follows:]

Senator Carper. Thank you, Senator Capito.

We now turn to our witness, Ms. Freedhoff. We welcome you. Michal is currently serving as the Assistant Administrator of the Office of Chemical Safety and Pollution Prevention at the Environmental Protection Agency. Prior to her confirmation in that position, in June of 2021, she joined EPA as a Principal Deputy Assistant Administrator for the Office of Chemical Safety and Pollution Prevention in January 2021, right after the inauguration of the President.

Dr. Freedhoff has more than 20 years of government experience, most recently, as the Minority Director of Oversight for this committee. She began her Congressional service in 1996, and then Congressman Ed Markey's office as Congressional Science and Engineering Fellow, after receiving a Ph.D. in physical chemistry at the University of Rochester. Dr. Freedhoff has also served on the staffs of the House Science Committee, the House Select Committee on Energy Independence and Global Warming, the House Energy and Commerce Committee, and the House Natural Resources Committee.

Her environmental expertise spanning a range of policy areas for legislative work includes the 2016 reauthorization of TSCA, the 2019 legislation to address PFAS contamination, fuel economy provisions in the 2007 Energy Independence and Security

Act, and a law requiring the creation of an online database of potential consumer product safety defects.

Somehow, in the midst of all that, colleagues, she managed to bring four children, four babies into the world and raise them, four children any of us would be proud to claim as our own. Once, you worked as a member of our team here on this committee. I used to say that she never slept. My guess is she probably still doesn't sleep now. I don't know how you do it all, but we are here to figure out how we can enable you and the folks that you lead to do your jobs even better today.

With that, your statement will be entered for the record, and then we will start some questions. Thank you. Please proceed. Welcome.

STATEMENT OF THE HONORABLE MICHAL FREEDHOFF, PH.D., ASSISTANT ADMINISTRATOR, OFFICE OF CHEMICAL SAFETY AND POLLUTION PREVENTION, U.S. ENVIRONMENTAL PROTECTION AGENCY

Ms. Freedhoff. Good morning, Chairman Carper, Senator Inhofe, Ranking Member Capito, and other members of the committee. Thanks for inviting me to testify on EPA's implementation of the Toxic Substances Control Act, or TSCA.

It was exactly six years ago that many of us gathered at the White House to witness the historic amendments to TSCA being signed into law. For nearly 40 years, TSCA had largely failed to serve its purpose: to protect people and the environment from the risks of dangerous chemicals. I was proud to be a part of that bipartisan group that negotiated the Lautenberg Act.

I was also proud a few months ago to propose the rule to ban the ongoing uses of chrysotile asbestos, more than 30 years after the previous failed attempt became the emblem for why we needed to rewrite the law. Unfortunately, on amended TSCA's sixth birthday, I think we can all also agree that things aren't yet working as everyone had hoped. Despite the best efforts of our dedicated staff, we are missing many of our statutory deadlines, our scientific peer reviewers and the courts have been critical of our work, and the public lacks confidence in our chemical safety efforts to date.

Having the public's trust is essential to realize the

promise of TSCA reform. It is in everyone's interest for the public to be able to trust EPA when it says that a chemical that industry makes and sells is safe or, when EPA writes a rule, to say how that chemical can be safely used. For the entire six years since the law was enacted, the agency has faced some major challenges, and central to all of them was a lack of resources.

The 2016 TSCA amendments told EPA in no uncertain terms to scale up. The program's workload skyrocketed virtually overnight and doubled again several years later. But in the law's first four years, EPA never once made a Congressional budget request for new resources to implement the new work. As a result, budgets for the new law remain just about exactly the same as the budget for the old, broken law. Although the new law gave EPA the authority to collect fees from chemical companies, we have only collected about half as much as Congress intended.

The President's Fiscal Year 2022 budget request was the very first one that requested additional TSCA funding, but the agency didn't receive everything we asked for. In our 2023 budget request, we have asked for an increase of almost $64 million and 201 FTE for the TSCA Program. That is based on an extensive analysis of how much the law will actually cost to implement the way Congress expected it to be implemented.

We will also update the fees rule and are doing all that we

can to increase efficiencies and improve our processes. But the truth is, the years of compounding budget and workload challenges have taken their toll. The last Administration missed the deadlines for nine of the first ten risk evaluations, and for just about the entirety of the new law's existence, we have struggled to complete new chemical reviews as quickly as Congress intended.

It is simple, elementary school math. We won't do more with less. We will do less with less. For instance, we are working as quickly as we can to put measures in place to protect people from exposures to dangerous chemicals like trichlorethylene, methylene chloride, and asbestos. The deadlines for those final rules and those first ten chemicals are in just a few months, and we won't make a single one of them. Without additional resources, we won't get more than a handful of those rules on the books before 2025 or beyond.

We are conducting about two dozen risk evaluations with statutory deadlines that start to hit later this year. Absent the resources in the President's budget, it is unclear whether we will even be able to complete half of them before 2025. There will be real consequences if we don't get those resources. Communities, workers, children, all of us, really, will go even longer without the health protections we need and deserve.

Congress also wanted our new chemical reviews to be both

protective and fast, but our budget for new chemicals now is actually less than it was before the new law because about 15 percent of the new chemical staff were permanently moved by the previous Administration to work on risk evaluations. With more work and less staff, we will continue to fall short of Congress's expectations.

It is also very clear to me that added resources are not just about meeting deadlines. Resources will also let us build the infrastructure of a well-run, sustainable program. We are focused not just on getting the chemicals reviewed and the rules written, but in ways to build that infrastructure, maximizing use of the scientists and the resources we do have, and because science is the backbone of everything we do at EPA, we are reaffirming our commitment to scientific integrity across the board.

The path forward is clear. We need to implement the law that Congress wrote, and to do that, we need to build a foundation for a sustainable program, one that delivers the promised health and environmental protections, one that brings the predictability that stakeholders expected it to bring, and one that can endure for years to come. I am confident that, with sufficient resources, the law can and will deliver on those promises.

Thank you again for the opportunity to testify, and I look

forward to your questions.

[The prepared statement of Ms. Freedhoff follows:]

Senator Carper. Thank you again for joining us. Thank you for that testimony.

I will start off and then yield to Senator Capito and Senator Inhofe and others who join us. You may not be surprised to know that we have heard from many chemical companies that the new chemical review process at EPA has essentially stalled. This goal to complete these reviews under the Lautenberg Act amendments to TSCA, as you know, set about 90 days. With the resources you have, how long is it taking to complete these reviews?

Ms. Freedhoff. Thanks very much for that question. The answer is it depends on the chemical, because some are more complicated than others to review. But I would say that for the entirety of the last six years, the agency has had typically 200 to 300 new chemical submittals that are waiting for agency action, and our backlog, so to speak, is the same as it has been for just about the last five years.

Senator Carper. If Congress provided the full $64 million boost requested in Fiscal Year 2023 for our chemical programs, would that enable you and your team to meet this target?

Ms. Freedhoff. I think it would sure help a lot. The truth is that the New Chemicals Program is even more challenged than the rest of TSCA. Before the law was changed, EPA only had to do reviews on about 20 percent of new chemicals that came

into the agency. After the law was changed, EPA had to do 100 percent.

Not only did the last Administration fail to ask for any more money to complete what is about five times the amount of work, they actually cut the New Chemicals budget by about 15 percent by moving the staff over to work on existing chemical risk evaluations instead. So that is why we are operating with less than 50 percent of what we thing we need to review chemicals both quickly and protectively. It is why we only have two human health assessors to review the hundreds of new chemical submittals that come every year, and it is why we will continue to struggle with these new chemical reviews until we are able to get the toxicologists and other health experts that we need on board and trained and ready to do work.

Senator Carper. Is there anything that the chemical companies can do when they submit their applications that might help the process move more quickly?

Ms. Freedhoff. Actually, there is, and I appreciate you asking that question. I think, a lot of times what happens is that companies don't give us all of their data up front, and so they will give us something, say, 30 days in or 60 days in, then we have to basically restart the clock and redo the risk assessment.

That doesn't just hold up the line for that particular

company, it holds up the line for everybody else, because everybody is stuck behind them waiting for their work to be redone with the new information.

One thing that we are actually doing and are getting ready to announce in the coming days is, we actually took a look at the types of data that companies weren't giving us up front and analyzed the reasons for delays in reviewing those companies' new chemical submittals. We are going to do some pretty aggressive educational outreach to industry so that they can know what would help us get the work done more quickly.

Senator Carper. Okay. We appreciate your candor with respect to the budget situation facing the TSCA Program. We fully support getting the agency the resources that you need to properly implement this important piece of legislation to protect our communities against the risk from toxic chemicals.

I have two questions, then I am going to yield to Senator Capito. Would you just give us a sense of what EPA will and won't be able to do under TSCA if you do not get the additional money and people requested for Fiscal Year 2023?

Ms. Freedhoff. Absolutely. It is important to remember, before the law was changed, EPA did zero comprehensive risk evaluations under TSCA. After the law was changed, EPA was on the clock to do ten, and then that doubled again to about two dozen now. If we don't get the resources, we will not be able

to do even half of those before 2025.

Before the law was changed, EPA did zero comprehensive rules on existing chemicals because of the failed asbestos ban. We are now writing ten different rules, and without the additional resources that are in the President's budget request, we will only be able to get a handful of those on the books until 2025 or beyond.

With new chemicals, we will continue to occasionally be hindering innovation and preventing the chemicals that are needed to power the Nation, semiconductor, biofuels, battery, and other sectors onto the market as quickly as industry expects and as quickly as the law says.

There are real consequences, not just to people's health because of the delays for protections to be put into place, but there will also be delays for industry for them to get their new chemicals to market.

Senator Carper. One last question, and then I will yield to Senator Capito. Will the funding and personnel included in the Fiscal Year 2023 budget take care of the entire program, or is this a down payment that is going to take several years to pay off?

Ms. Freedhoff. I think it is like any business. We have had six years of budgets that were far too low. It is going to take time to dig out of that hole. I do think that any large,

new venture requires a sustained level of resources and requires a sustained level of effort on the agency's part the increase its efficiencies and find ways to work smarter, not harder. We are committed to doing our part of that as well.

Senator Carper. Thank you so much. Senator Inhofe?

Senator Inhofe. Okay. Michal, first of all, it is nice to see you again. It is kind of funny because we have always gotten along famously in spite of the fact that we disagree probably on more things than we have agreed on, but on the other hand, it has worked very well. I remember, and it was called to our attention a few minutes ago by Senator Carper, that I chaired this committee back during the time that we were really busy on the thing, and of course, on the Lautenberg bill, another person that we are very fond of and worked very closely with, but we were able, in fact, when we would have our meetings, the Republicans would have a meeting once a week. They would get around to me at that time. I think you were with Barbara Boxer at that time.

I commented to them, I said, no, from the committee that actually gets things done, that was us, and we did. In fact, you got along famously with Ryan Jackson, Alex Hergott, Demetri, and all of those people. They really felt a very close relationship with you.

We have some problems, and I have to say this, which will

make it a lot easier than repeating it all. I think that Senator Capito, came out, and I agree with the comments that she made and the problems that we are having. I have talked also, as has the Chairman, to areas where we are having problems.

I had questions that I was going to ask you, and I would do it, knowing full well what the answers will be. One was, Dr. Freedhoff, do you agree that delays in the new chemical review process are hampering innovation and will contribute to supply chain constraints and inflationary pressures?

Ms. Freedhoff. I do agree that delays in the new chemical review process are delaying the introduction of new chemicals into commerce, but I am not sure I fully understand how a chemical that isn't yet in commerce could be causing supply chain problems. That said, we want to do better, and I am committed to doing what Congress expected us to do, which was to review new chemicals protectively and quickly, and I think we do have to do both of those things. Speed is important, and we want to do better.

Senator Inhofe. Yes. In your opening statement, your commented on your frustration with not being able to get, I think you only got one out of ten of the list of ten that were in there. So do you really believe the system that we are using is the best system? There could be a frailty in that system that is causing some of the problems that you talked about that

need heavier funding.

A lot of us believe that the EPA has had kind of the hog's end of the funding for a long period of time. I know that you didn't agree with the previous President with what he was trying to accomplish, but on the other hand, there has to be an answer. Right now, I don't know how you can just go to the funding and say that that is where the problem is going to be resolved.

What things, other than just the funding, what could be done better, more efficiently, to crank out more stuff than we are cranking out right now?

Ms. Freedhoff. I appreciate you asking the question, because you are absolutely right. It is incumbent on the agency to try to find ways to do things faster and better. We are doing that.

One example in the new chemical space was our biofuels initiative, because we noticed we had several dozen biofuels applications in. Instead of treating them all as entirely new things and giving them to different members of the team, we actually created a dedicated team and streamlined the review of those submittals so that we could get them out more quickly.

Then, we are looking at different sectors as well, where we have a lot of applications for the same types of chemistries coming in, seeing if there are ways we can streamline, write down the process, and then the next risk assessor that sees a

chemical like that doesn't have to start from scratch.

We are building up our training, we are investing in the IT, the actual infrastructure of the agency, because one thing that has hindered the new chemicals program for years is basically crumbling information technology that crashes, in some cases, for weeks at a time. Whenever that happens, the new chemical staff can't do any of their work. We are actually investing some money in making sure that those systems are modernized.

We are also trying to standardize our training, write down more of our standard operating procedures in a way that is easy for a new risk assessor to understand, and we are working with the Office of Research and Development to modernize our scientific approach to reviewing these new chemicals.

Senator Inhofe. I had a question that was written down here. It is a complicated question, so I have chosen that to ask you so I can hear your complicated answer. How can you then justify regulations of chemical substances based solely on benefits to carbon dioxide and exhaust particulate matter emissions from the manufacturing of the substance, rather than exposures to the chemical substance itself?

Ms. Freedhoff. The law tells us to do risk evaluations to look at whether there is risk to human health or the environment from a chemical substance under the conditions of use. The law

doesn't say that it can only be some types of exposures or some types of uses. The law really pushed the agency to look comprehensively at the risk that a chemical substance posed.

Senator Inhofe. Okay. Now, what I am going to do, I do want to hear the questions and comments that will be made by Senator Capito. As you might know and you might not know that I am doing the Defense Authorization Bill right now, and that is what I am holding up.

But I just want to hear more about what kind of, and try to analyze myself, knowing the successes that you and I and those of us here at this table have had in the past, so I can try to analyze why we can't do a better job in terms of cranking out more stuff and getting it done. I am concerned what is going to happen to a lot of this stuff. Is it going to go overseas, because there are a lot of unhealthy results and the problems that we are having right now, so I thank you for that.

Senator Capito, I want to hear more of your comments.

Senator Carper. Senator Capito? Thank you.

Senator Capito. Thank you. I am sorry I missed your statement. I had to go over to Commerce, so it is just one of those days, which I am sure you, beyond many people, would understand that.

Obviously, from my statement, it is clear from the data that the new determinations have slowed significantly. What

steps are you taking to improve the pace at which these new chemical determinations are issued?

Ms. Freedhoff. I appreciate the question. It is certainly true that our new chemical reviews have been slow for more than five years. We have just about the same number of chemicals that are waiting for EPA approval than has historically been the case over the last several years.

I will note, we also have 15 percent of a smaller staff, because 15 percent of the new chemicals risk assessors were permanently moved into the existing chemicals risk evaluation division towards the end of the last Administration. So from day one, we actually had less than what both the Obama Administration and the Trump Administration had for new chemical reviews.

That said, I completely agree that EPA has responsibilities. It is not just about asking Congress for money and continuing to do things the same way, and I 100 percent agree with you. There are a number of things that we have done already. One is the biofuels initiative that we rolled out a couple of months ago, where we streamlined the review of those types of chemistries, because we had several dozen different biofuels applications in front of the agency. We realized that by creating a dedicated team where the same people were always reviewing that type of chemistry, and by

streamlining the review of those chemicals, we could get more of them out the door more quickly than if we treated every one like its own new thing over and over again. We will be expanding that type of initiative into other sectors in the coming weeks and months. We are just trying to sort of narrow our focus there.

I think one thing that we have noticed over the years is that companies often don't give us everything we need to do a risk assessment that they feel reflects the real-world conditions.

Senator Capito. Okay, so let me stop you right there, because isn't that on everybody's plate there? Why are they not giving them what you want? Are you telling them what you want in a timely manner so you can hit these deadlines?

Ms. Freedhoff. I think we are realizing that is part of the problem. The problem is us. I think that we are, we did an analysis of why we have to rework so many risk assessments, and it turns out that what happens is, sometimes, after a couple of months, a company will come and say, oh no, I am not planning on releasing this to water, or oh, I am not making this way, your risk assessment is wrong. We will say, okay, give us the data, but then we kind of have to start over again from scratch and redo the risk assessment, and that causes delays, not just for that company, but for all the companies waiting behind.

What we are about to do is release the results of that analysis that kind of lists and documents the type of information that will help us if we get it on day one, and we are going to do some pretty aggressive and proactive outreach to companies to make sure that they understand what our data needs are. We are really hoping that that helps us work more quickly as well.

Senator Capito. Well, I do know that you have had a lot of outreach to companies and that there is a very open door there, so that is very much appreciated by everybody.

If you have a 15 percent smaller staff over the last year and a half, have you hired into those positions?

Ms. Freedhoff. So, the 2022 Appropriations Act gave us a modest number of new hires.

Senator Capito. Can you not fill in the 15 percent?

Ms. Freedhoff. We have only had that many for a couple of months because I think our spend plan was only approved a couple months ago. So we have done and we are doing an aggressive recruitment strategy. We have either hired or selected or somewhere in the process about three-quarters of the people that the 2022 Appropriations Law lets us hire.

I want to say to you, because it is true, rebuilding the New Chemical staff is my number one personal priority, and there is not even a close second.

Senator Capito. Let me skip to, this is kind of my own personal bugaboo, and I think it is the work-from-home scenario. EPA's YouTube channel on April 22nd had a YouTube that said EPA future of work: tips and tricks, and I have talked to the EPA Administrator about this, returning to work. You said in that, I am so looking forward to meeting as many of you as I can. What does that mean? Have you not met them?

Ms. Freedhoff. I hadn't met them in person.

Senator Capito. Are they back now?

Ms. Freedhoff. Many of them are back. Many of them are teleworking more than they did before. Some have applied to be permanently remote work. I have to say, I think the entire Country is reimagining the way its workforce is designed following COVID. I think the West Virginia State legislature just wrote a report that sound much like what EPA has experienced. I think what they said was that telework has proven to be beneficial and productive as a routine part of conducting the business of the State. It is beneficial.

Senator Capito. I am not disputing telework, but if I had an organization that was falling way behind, I think I might be roping people back to the office and saying, look, it is not working this way. I understand it is a capacity thing, and I am not here to beat up on you. I want to help the situation, move it quicker, like you do.

But I did find that, when you have that lack of connection, there is also a lot of stories out there, the lack of connection in work or people doing other things at certain times of the day when you are principally engaged is a problem. But you are right. That is a bigger problem that what is going on in your office.

Ms. Freedhoff. I agree with you. It has been great to meet my staff in person. There are intangible benefits associated with in-person meetings and walking down the hallway and seeing people. I have really enjoyed it.

Senator Capito. Let me ask about PFAS really quickly, because I know you know a lot about this. There are several definitions, I guess, at EPA on PFAS. Do you think a clear and consistent definition would be useful for the EPA?

Ms. Freedhoff. Thanks for that question. I do think so. The definition that EPA used in its rule that Congress actually is requiring us to do to collect historic information about the ways PFAS is made and used, that definition was first written by my office in 2006 for purposes of the TSCA New Chemicals Program. We then proposed to use that definition in that rule, and after we proposed it, the OECD, an international organization proposed a much broader definition.

We are now kind of looking at the public comments that we got on that rule, and we are looking to see what a more robust

definition might look like, and whether we should be adding additional PFAS to our original proposal for that rule.

Senator Capito. I think uniformity, obviously, is easier, and if you are having issues with meeting deadlines, having clear roadmaps are always much, much more beneficial. But apparently, Radhika Fox, when she testified before the committee, said that EPA was not going to be developing a uniform definition.

I have gone over my time, and I see we have some other members here, so I will stop here. Maybe we can get back to this. Go ahead.

Ms. Freedhoff. Can I get 30 seconds here?

Senator Capito. Sure.

Ms. Freedhoff. I think what OECD said was, they created a really broad definition for PFAS and then said that individual regulators might do different things. For example, a definition that would work for the Water Office would properly be focused on PFAS that would be expected to be in water, whereas a definition that worked for the TSCA Office might be one for PFAS that are expected the be manufactured and processed.

I do think there will be some differences, but I think it is important to think about what we all mean when we say that something is or is not a PFAS.

Senator Carper. I believe we have been joined, by WebEx,

by Senator Padilla. Are you there, Alex?

Senator Padilla. Yes, I am.

Senator Carper. You are recognized for any questions or comments you have. Go ahead, please. Thanks for joining us.

Senator Padilla. Thank you, Mr. Chairman. Greetings from the Judiciary Committee. Double duty here.

Dr. Freedhoff, I would like to ask you a question about how the use of supercomputing and computational toxicology could assist your office with the assessment of new chemicals under TSCA. Existing programs, as you know, that address environmental risk and consumer product exposures rely on scientific data, but generating this data can often be slow, costly, and rely on animal testing.

I believe we can improve this by using supercomputers to run models to better predict adverse health effects caused by chemicals and to identify safer chemicals before they are in use in manufacturing. I have been working to advance legislation to create a consortium referred to as "Supersafe" to be comprised of federal agencies, including EPA, HHS, and DOB, along with State agencies and academic and other research institutions with similar capabilities to supercomputing and machine learning to establish rapid approaches for large-scale identification of toxic substances and the development of safer alternatives.

This Supersafe Consortium would develop and validate

computational toxicology methods to predict adverse health effects caused by toxic substances and identify the safer chemical alternatives for use before we have widespread chemical pollutions in air, water, land, and consumer products.

With that as the background, Dr. Freedhoff, how would a Supersafe Consortium assist EPA is assessing new chemicals under TSCA, and would such a program be helpful to your efforts to review new chemicals and bolster the use of good science in EPA's decision-making?

Ms. Freedhoff. Thanks very much for that question. I think the answer is pretty simple. We are excited by any new scientific tool that can speed up our reviews and help us meet our obligation to reduce the use of animal testing under TSCA.

We have recently started a collaborative research program with the Office of Research and Development, and we are making some similar efforts to try to modernize the models and the other scientific tools that we are using for new chemicals. The project that you are describing, I think, would be a really good complement to that.

Senator Padilla. That is getting a little technical on you, but that is what happens when you have some scientists and engineers in the Senate and serving on this committee.

Ms. Freedhoff. I hear you.

Senator Padilla. Just one follow-up to the Supersafe

Consortium concept. As you know, TSCA also requires that EPA reduce and replace the use of vertebrate animals in the testing of chemical substances to the extent that is practicable and scientifically justified. Can you talk just for a minute on how a Supersafe Consortium and the use of these computational tools and models help EPA meet these TSCA mandates?

Ms. Freedhoff. I think it would be a huge help. I think we are working to develop similar models and tools to reduce the use of animals in the TSCA Program, and any additional help we could get through the type of consortia that you are contemplating, I think, would be very appreciated.

Senator Padilla. Okay. Well, thank you very much. I look forward to following up with you on that.

I do have other questions, but they seem to overlap with a question that has been raised by other members of the committee, so with that, Mr. Chairman, I will yield back.

Senator Carper. Thanks, Senator Padilla. I think Senator Markey is next. I don't know that you have ever met Dr. Freedhoff, but does she look familiar? How many years did you work for her?

[Laughter.]

Senator Markey. I think I worked for her for 16 years, and I think you worked for her for four years, yes. I think that is how it broke down.

So, one particular area where additional funding and staffing would be very beneficial is tackling biphenyls, or PCBs, which have been linked to cancer, immune effects, and other health harms. Around one-third of all school-aged children may be exposed to PCBs through their school environments, with more children likely being exposed through daycare and other facilities, which is why I introduced the Get Toxic Substances Out of Schools Act.

Dr. Freedhoff, would additional budgetary support help your work with States or local educational agencies to better understand and work on the risks that toxic PCBs pose to children?

Ms. Freedhoff. Thanks very much for that question. That is an issue that comes up repeatedly whenever I talk to the regional staff, because they are in the position of hearing from schools, in some cases, where the lighting fixtures are so old that the PCBs are literally dripping out of them and exposing people. The schools often lack the technical expertise that they need to be able to address and mitigate the problem. In the 2023 budget request, we do have a modest amount of money that is designed to augment those efforts in the States.

Senator Markey. As Dr. Freedhoff knows, back in 1979, a woman, Annie Anderson, came into my office with her three-year-old boy, Jimmy, who had leukemia. She was in Woburn,

Massachusetts, and everyone was ignoring her.

Ultimately, it became a movie, a civil action with John Travolta playing the lawyer, but in fact, it was Annie Anderson and the mothers who were the heroes. That is who the movie should have been about. They identified the TCE that was ultimately the cause for those cancers in all of those children. Superfund was largely driven by that Woburn and by Love Canal in terms of it going on the books in 1980.

We are still, now, dealing with the funding issues. How are we going to provide for the protections for these devastating cancers so that more children aren't exposed to them? The Trump Administration undermined the EPA risk determination of TCE by refusing to look at all the negative health effects on pregnant women and children.

Dr. Freedhoff, how is your office working to protect families from the dangers of TCE?

Ms. Freedhoff. I really appreciate you asking me that question, because of all the chemicals that we are writing rules for under TSCA, TCE is the one that feels the most personal to me. That is because of my work for you. He already told you some of the history of Anne Anderson with her little boy, Jimmy, and I was re-reviewing that case, that whole story, a few months ago in preparation for an agency meeting on TCE. And I tell you, I was blown away to realize that Jimmy Anderson would have

been just about exactly my age, had he not died when he was 12 years old.

In the four decades since he died, we have managed to regulate TCE under the Clean Air Act; we have managed to regulate it under the Safe Drinking Water Act; we have managed to regulate it under the Superfund Law, but we have yet to regulate its manufacturing use under TSCA. If there is one thing that drives me every day in this job, it is knowing how important it is to get that rule on the books.

Senator Markey. Yes. It is absolutely critical, and again, there was always a lot of denial in the chemical industry on that issue.

By the way, it was one of the first Superfund cleanup sites, and now it is called the Jimmy Anderson Transportation Center. It is where we built an incredible, industrial, commercial, and transportation center up there, named after that little boy.

If you could just briefly touch on asbestos. We fought hard in 2016 to have asbestos included in that TSCA rewrite bill, and it was with the great hope that we would be able to see enormous progress made on asbestos, and ultimately, to see it banned. A lot of the countries in the rest of the world have done so.

Can you talk about the progress you are making on that

issue, and what additional resources you might need in order to accomplish that goal?

Ms. Freedhoff. Absolutely. Thanks very much for that.

Asbestos, symbolically enough, was the very first rule that we proposed that came from the risk evaluations under the new TSCA Program. We did propose a ban on the ongoing uses of chrysotile asbestos. We are taking comments on that proposal now, and we will be looking to finalize it sometime in 2023.

As you might remember, the last Administration chose to exclude other fiber types of asbestos, as well as legacy uses of asbestos, from that risk evaluation. A court found that the agency had improperly excluded those uses and types. So we are doing a second part of the risk evaluation as a result, and that will be done by December of 2024.

Senator Markey. Thank you so much. Mr. Chairman, that issue is personal to me as well. My staff director, Joe Zampitella, his father was the head of the Asbestos Workers in Massachusetts in the 1970s and 1980s. I only had two unions endorse me in my first race, the Asbestos Workers and the Teachers, when I ran for Congress.

Ultimately, Mr. Zampitella passed away in 1986 from asbestos. One of the most powerful images I can ever remember is an entire church filled with asbestos workers, all sitting there, row after row after row after row, because he was the

leader of the union, and he had asbestosis, and he had just passed away.

For so many of them, they realized that would be their fate as well, because there had been no protections that had been put on the books.

We just have an obligation to finish this job on asbestos. I thank you, Dr. Freedhoff, so much for all of your great work on that.

Senator Carper. Senator Markey, thank you so much for joining us.

I think next in line of questioning is Senator Kelly. I believe he is going to be followed by Senator Whitehouse and Senator Sullivan. I think that is the order.

Senator Kelly. Am I up?

Senator Carper. Senator Kelly, I think you are up. Go ahead.

Senator Kelly. Right, thank you, Mr. Chairman.

Dr. Freedhoff, thank you for being here today. I want to begin by discussing the latest drinking water advisory level for PFAS chemicals, and how that impacts the work done by your office to develop national strategies for PFAS testing and tracking PFAS which are still in use.

As you know, last week, EPA updated the lifetime health advisories for two of the most pervasive PFAS chemicals, PFOA

and PFOS from 70 parts per trillion to 4 parts per quadrillion for PFOA and 20 parts per quadrillion for PFOS. These updated guidelines are significant for the more than 20 communities in Arizona which have recorded levels of PFAS at or above these levels.

As I understand it, we don't have testing technology which can detect PFAS in quadrillions yet, meaning many more communities could also be vulnerable, more than the 20 in Arizona.

Dr. Freedhoff, I understand that your office is responsible for developing a national strategy to test for PFAS. How do the new lifetime health advisories affect that work?

Ms. Freedhoff. Thanks very much for that question, Senator Kelly.

Our testing strategy is really about the thousands of PFAS that we don't know enough about to write health advisories or regulate in some way, because, as you know, there were thousands that were allowed into commerce or historically made or used in this Country. If we try to study them one by one by one by one, we will never get the answers that we need in order to take action on the ones that need action taken on.

What we did was we divided those thousands of PFAS into categories based on their structure and other chemical properties, looked at the categories for which we had no health

information, because that is clearly the most important question, is, what does this type of PFAS do to your body if you are exposed, and we are designing a testing strategy designed to fill in those data gaps.

Our first test order went out a couple weeks ago. It was for a PFAS that is found in firefighting foam and other products. When we get the data back for that chemical, it will help us understand more about the human health effects of 500 other PFAS that are similar to it.

I think there is not exactly a connection between health advisories and our testing strategy, but our testing strategy is designed to fill in the holes on human health data that exist for so many PFAS.

Senator Kelly. Are you confident you are going to be able to develop the tests necessary to detect in the quadrillions?

Ms. Freedhoff. We are not testing that way. What we are doing is we are using our authority under TSCA to tell companies to give us information and data about the chemical. So sometimes it is doing modeling to show us what its effect would be. Other times it might be animal testing, if we need to pursue animal testing. Other times, it is information about whether the chemical dissolves in water and would therefore be likely to be in drinking water.

Senator Kelly. So then, my understanding is, as we test

drinking water, we are still going to be testing in the parts per trillion, and the only way we are going to know if somebody is exceeding the lifetime health limit in the quadrillions will be on the data you get from companies that manufacture these chemicals?

Ms. Freedhoff. I think it is a slightly different question. I think, sort of taking a step back, I think EPA has historically written a couple hundred different health advisories for drinking water over the years, and for information on these particular ones, I would say that the Office of Water probably has more answers than I have.

I think, maybe one way to think about it is to think about the lead rules. It is generally accepted that there is no safe level of lead, and so the goal for lead in drinking water is zero.

Senator Kelly. Yes, I got you.

Ms. Freedhoff. But the rules are what factor in the detection levels, how to detect it, and how to treat it and how to remove it. I think that is what you will see. That is sort of the difference between a health advisory for PFAS and a rule for PFAS.

Senator Kelly. I got it. I am going to have my office follow up with yours on this to make sure that, because these 20 communities, we know that the level is above what you just set

the lifetime health advisory for, so we need to figure out how we are going to clean up this water. The drought situation we are facing in Arizona right now is so critical that, at some point here, in the near future, some communities are going to be relying on groundwater, and we have to make sure that water is clean. Thank you, and thank you, Mr. Chairman.

Senator Carper. Senator Kelly, thank you so much for joining us. Now, live from the great State of Alaska, Senator Sullivan.

Senator Sullivan. Thank you, Mr. Chairman. Thank you very much.

Dr. Freedhoff, I want to just begin by commenting. You have a lot of experience with this committee, correct?

Ms. Freedhoff. Yes.

Senator Sullivan. And TSCA?

Ms. Freedhoff. Yes.

Senator Sullivan. I would like to begin by complimenting the Chairman and the committee's culture here of getting things done, big things done, big, important pieces of legislation. I have been on this committee since I first came to the Senate over seven years ago.

We have our debates, and we have our disagreements, but we manage to actually produce legislation like TSCA. This is the first committee that Senator Whitehouse and I started our series

of Save Our Seas Act legislation, which are very important laws, and the Infrastructure Bill. There is a lot that has happened in this committee that I think benefits the Country and shows our fellow Americans that the Senate can work in a bipartisan way.

With that, the TSCA Bill was actually one of the first major pieces of legislation that I worked on as a new Senator in 2015, and I know that you were a part of that. I think it was a really good effort. But one thing that I am concerned about now is, I worry that it might be in line to be subject to abuse.

Let me give you a little bit of context. The Biden Administration is encouraging agencies that have no legislative mandate to regulate the energy sector, choke off capital to the energy sector, whether it is the Federal Reserve, for goodness' sakes, whether it is the SCC, the Chairman of the SCC put out an 800-page rule all about climate change, and he committed to me during his confirmation process he wasn't going to do that. He is doing it.

Comptroller of the Currency, who was nominated by this President, said she wanted to put oil and gas businesses out of business. The Comptroller of the Currency, what the heck does she have to do with it? So you have this major power grab, and of course, this is contributing to $6 a gallon gas, which is crushing working families in America and Alaska and West

Virginia.

I was concerned to read about one of these extreme far-left groups that just petitioned the EPA to use TSCA as a way to phase out fossil fuel production, use, and disposal. Now, you and I worked on TSCA together. We all worked on TSCA together. I was involved, but I am pretty darned sure that I would have noticed a provision that somehow gave EPA authority to do something like that.

An article called this group's filing to the EPA "novel approach" to TSCA. That is a nice way of saying that TSCA did not give the EPA the authority to try to phase out fossil fuel production.

Can you just definitively agree with me on that, saying that, no, TSCA was not focused on that, we are not going to let that bipartisan law be abused in ways that other federal agencies and the Biden Administration are abusing their power to try to shut down American energy, which hurts our national security, hurts working families, drives up gas prices at the pump.

Could you agree with me on that? You helped write this law. You did a great job. This committee did a great job, but this committee did not contemplate using TSCA to phase out energy production in America. Do you agree with that?

Ms. Freedhoff. I do agree that the purpose of TSCA was not

to phase out energy production in America.

Senator Sullivan. Will you look at the petition, I forget which radical group filed it, with the discerning statutory authority of the EPA, which was not intended? You helped draft it; we all worked on it together. It was not intended to do that. Novel or not novel, would you agree with me on that as well?

Ms. Freedhoff. I think I will just sort of take a step back. First of all, we just received the petition. We haven't reviewed it. We have an obligation to review it, and we have an obligation to respond. We will do that. I will also say that we do, as an Administration, believe that climate change is an urgent threat, but when we wrote TSCA --

Senator Sullivan. But was TSCA really focused on climate change? It wasn't.

Ms. Freedhoff. Climate change was not debated when we negotiated TSCA. That is absolutely the case.

Senator Sullivan. Correct. I remember.

Ms. Freedhoff. What TSCA did say, though, was that for all the chemicals that are in commerce, EPA was supposed to study them all and put regulations in place when EPA found risk.

Senator Sullivan. Let me just, I know I am out of time, and I don't want to abuse this, but these kinds of back-door rags, particularly when we all worked on it, we know that that

is not what TSCA was meant to do. If you have a novel approach, you have the President of the United States quoted recently. He is all over the map, but we want to lower gas prices, we need to have more oil supply right now.

Geez, okay, that is different from what he said as a candidate, but I will take him at face value.

But I think this is a test from this White House. If they accept this petition as another federal agency overreach to choke off capital to the American energy sector and then have the President say, oh, no, we are trying to help the American energy sector, no one is believing it. This is going to be another test case.

I hope that you can read the statute with fidelity to what we agreed to here in this committee in a good bipartisan way, but it wasn't meant to regulate the energy sector. By the way, neither is the SCC statutory authority. That chairman is way over his skis.

This Administration is hurting the energy sector, hurting American families. But I just hope you of all people take a hard look, because you know what this statute was about, and it wasn't about the regulation of the American energy sector. I hope you reject this petition.

Thank you, Mr. Chairman.

Senator Carper. You are welcome.

Senator Whitehouse, welcome.

Senator Whitehouse. Thanks very much. I am extremely fond of my colleague, Senator Sullivan, and we work very, very well together on a lot of areas. But I have just got to offer some opposing views regarding some of the stuff that he said.

Senator Sullivan. I am shocked, Mr. Chairman. I am shocked.

[Laughter.]

Senator Whitehouse. For starters, when he talks about the American energy sector, he is talking about America's fossil fuel sector. If you look at America's energy sector, the Biden Administration is working very hard to grow as fast as we can the renewable energy that we need for the future, because climate change is an actual thing, and the transition has to actually happen.

I know that there are a lot of people, and particularly the industry, doesn't want climate change discussed by financial regulators, but for Pete's sake, every major central bank has sent out financial warnings about what climate change is going to do. Freddie Mac has warned of coastal property values crash, cascading through the economy worse than 2008. We have the major corporate folks, most recently Deloitte, coming out with a report talking about a multitrillion-dollar swing between getting it right on climate and getting is wrong on climate.

So the fact that financial regulators are paying attention to this shows nothing more than that they are paying attention. Of course they are paying attention to this.

As for the petition being filed by extreme environmental groups, the guy's name is Henson. He was the top scientist for NASA. NASA got stuff driving around on the surface of Mars. Their scientists are actually pretty good at stuff, and his testimony first came out in this room with a Republican Senator chairing it, John Chafee of Rhode Island, so I take this a little bit personally. And facts have proven his testimony in this room all those years ago extremely, extremely accurate. There is my counterpoint to my friend Dan Sullivan's point.

With respect to TSCA and paying for it, we gave EPA authority to levy fees to target that 25 percent of the program would be covered by industry contributions. What percentage is now covered by user fees?

Ms. Freedhoff. Far less than that, actually, Senator. The fees rule was one of those implementation challenges that I am hoping we can course-correct on, because the first fees rule didn't kick in until fiscal year 2019. It actually excluded all of the costs of the first ten risk evaluations, which was the most expensive thing the agency was working on on TSCA at that time.

As a result, it only collected about 12 or 13 percent of

our costs, not the 25 percent that Congress expected and that every stakeholder supported. In the 2022 Appropriations Bill, Congress directed us to write a fees rule that would reflect the actual cost of implementing TSCA, and that is what we are planning on doing.

Senator Whitehouse. Okay. Where are you in that process? Where are you with redoing that?

Ms. Freedhoff. We are close to being able to send a supplemental proposed rule to OMB in the next couple of months. There was a proposed rule that went out towards the end of the last Administration, but it exempted the cost of rulemaking, so it needs to be supplemented in order to do what it was intended to do.

Senator Whitehouse. You think it will get to OMB by when?

Ms. Freedhoff. I think it will get to OMB sometime this summer or fall, and we are hoping for it to be finalized before Fiscal Year 2024.

Senator Whitehouse. Okay. Good. Well, I have used a good deal of my time.

Senator Carper. It was time well used. Go ahead.

Senator Whitehouse. With Senator Sullivan, but I would remind the committee that there are a lot of people who don't seem to take climate change seriously, but for me and for Chairman Carper, who come from coastal States and not very big

ones. We are looking at actual projections supported by Federal and State government that are unrebutted that we are going to have multiple feet of sea level rise along our shores. We have maps that show that people who live on Warwick Neck in Rhode Island are going to be living on Warwick Neck Island soon, that people who live in Bristol are going to be living in Bristol Island soon. We have major thoroughfares that are going to be flooded out, which are also the escape routes from flooding.

We have enormous, enormous risks and challenges ahead of us. We have enormous expenditures, and all you have to do is read the newspaper, whether it is wildfires or droughts or lost water out west or massive flooding. Things have gone haywire in the Earth's operating systems, and we know why. To pretend that it doesn't have something to do with burning fossil fuels is just simply fictional, magical thinking.

We have to address it, and I hope we will. Thank you.

Senator Carper. Thank you so much. Thanks so much for joining us, Sheldon.

Senator Capito, I have some more questions. Would you like to go first?

Senator Capito. Thank you. I would love that. Thank you.

I just wanted to clarify. I think you addressed this when you talked about how you are going to handle the PFAS issue, but I was wondering, do you intend to utilize a tiered approach? I

think you said you would, to classifying PFAS by categorizing and prioritizing them based on different physical properties and hazards. Is that your intention?

Ms. Freedhoff. Yes, we are.

Senator Capito. Okay. I think that some of the confusion that we hear today is your office's role with PFAS as opposed to the health advisory that came out from the Water Office.

This, to me, having had PFAS in our water systems and shut down our local water systems overnight, the risk assessments and the risk communications are so extremely important. So I am concerned that when you have one office from the EPA setting an advisory level, what does advisory mean to people? It means that if you are in that area, that it is unsafe, and they are planning to come out with a safe drinking level water, which is going to be higher than the advisory level.

I know this is not your problem, but it is your problem, because it is a chemical. I don't know, how do you message that to people when you are trying to tell them what is safe and what isn't?

Ms. Freedhoff. I think you are absolutely right, that risk communication is important, and as a science-based agency, we often speak scientifically and don't do as much work as we should, speaking from my part of the agency, at translating into words that people can really understand and access.

I think though, on the drinking water side, it is not that different from the lead rules, because the maximum contaminant level goal for lead is zero, because it is generally accepted that there is no safe level of lead. The rules do factor in detection limits and treatment techniques and other things that present barriers to actually getting to zero. I feel like the agency managed that risk communication well, and I have confidence that the agency can also succeed in the PFAS space.

Senator Capito. Okay. I am concerned, because obviously, what Senator Kelly was getting to is on the health advisory level, we can't measure that low, and so how do you know? You don't.

Let me ask you about the PPE, because I mentioned it in my statement with OSHA, and I think there is some concern that you are drifting into OSHA regulations where making assumptions that people aren't wearing PPE. So a chemical may not be safe in a water, but if they are fully gowned up and have protective equipment, it is safe to be in and around.

Why are you making assumptions that workers are not wearing their PPE? Isn't that OSHA's job, rather than yours? We have already discussed that your deadlines are last, so let us stay in our lane, I guess, is my message.

Ms. Freedhoff. I appreciate the question. First of all, the law tells us to look at potentially exposed and susceptible

subpopulations, and that clearly has to include workers. While we are in extremely close contact with OSHA and NIOSH and are coordinating with them really well, we can't just assume that OSHA will work for everyone.

There are a few reasons for that. One is that OSHA rules don't apply to everybody. They don't apply to self-employed workers, and they don't apply to public sector workers who live in a State that doesn't have an OSHA plan, so that is reason number one.

Reason number two is when you actually go on OSHA's website for the chemical-specific standards that they write, the very first sentence of that website says that they are outdated and inadequate for protecting worker health, because they were written in the 1970s.

The last reason is, when you look at OSHA's top ten most frequent safety violations, a list that they put out every single year, every single year, you see respirator, eye, and skin protections safety standards among those top ten most frequent violations.

We can't just assume that OSHA is enough, and we can't just assume that OSHA is used and followed by everybody. This is where that risk communication point you just made is so important, because we know that a lot of companies, especially the larger manufacturers, go beyond what OSHA requires them to

do when they are looking out for their workers, and we know that.

I think it is incumbent on the agency to make sure to communicate that when we write our risk evaluations, so that people aren't unduly afraid of an absence of a safety measure that is actually there at their facility where they work.

That is something that we do plan to do. As we move towards risk management, I think what we are striving for is consistency with OSHA rules when OSHA rules are enough, consistency with best industry practices when best industry practices are enough, and to basically level the playing field and make sure that everyone is protected, no matter who they work for or where they live.

Senator Capito. I think the goal of that, obviously, is what TSCA is about, but we have other agencies. My concern is to get to your core functions and to meet those obligations that are outlined very specifically in the law, and that you have additional, whether it is OSHA or somebody else, Clean Water, Clean Air, whatever, entities that are tangential to TSCA, important.

I am just concerned about, as the mission creep, or if you take on too much, you are not going to get anything done. I just put that on your table. I appreciate everything, you have been very candid in your answers. I appreciate your service.

You are doing a good job. Thank you.

Ms. Freedhoff. Thank you.

Senator Carper. I have a few more questions, if your schedule allows.

When I ran out of time for my question and yielded to Senator Capito, we were talking about resources, which you have been talking about literally all morning. I want to come back to this just for a minute. The question is regarding the Fiscal Year 2023 budget. My question is pretty straightforward.

Will the funding and the personnel that are included in the Fiscal Year 2023 budget take care of the entire challenge of the problems you face in doing your job, or is this a down payment that will take several years?

Ms. Freedhoff. I think, in order for the program to work sustainably, it will need a sustainable investment of resources. It will need an updated fees rule, and it will need us to work on modernizing our approaches and streamlining them when we can so that we can make the costs of our work go down using the lessons we have learned over the past six years.

Senator Carper. Okay. With respect to workforce, I suspect Senator Capito has experienced the same thing, I like to do customer calls in Delaware. A lot of them are to businesses.

Now that we are both back up for business here, we have a lot of folks who want to come and meet with us. Just before I

came to this hearing, I had a significant American business that came in and talked about how they are doing and what their challenges are. They said workforce. They just can't find folks with the kind of training, the interest, and the will, the ability to do the jobs that they need to fill.

I hear that all over the Country, all over the Country. I am sure it is something that you face. Talk a little bit about the expertise that you are looking for to meet your ability to do your job. Talk about the skills that you are looking for and are maybe find the hardest to fill. Is there anything, is there something that we need to be doing about the hiring process that exists?

We tried; I think we had a situation at the IRS that they took forever to hire people. Some good work has been done and that has been addressed, at least in part, but we need to focus on this. What can we do, what are the needs, the expertise, what are you looking for, and how are you trying to find it? What can we do to help?

Ms. Freedhoff. I appreciate the question. It is daunting to think about staffing up so quickly. We are putting together a pretty aggressive recruitment strategy, particularly for New Chemicals, because we don't just want a handful of toxicologists now. We want to build relationships with universities so that we have a steady stream of people that we can draw from to

perform that role, because it can be a pretty specialized role.

I also think the Title 42 authority that Congress provided the agency with, which lets us hire a small number of much more senior scientists in a much more streamlined hiring process, is actually going to be really helpful to the agency moving forward. But I agree with you, we will need to really work hard to tell people how exciting an opportunity it is to come and work on a new law that has barely scratched the surface of its potential. I think that will be appealing to a lot of the Nation's younger scientists and engineers.

Senator Carper. When I talk to people, a lot of times, at some point in our conversation, when they are talking about what they do for a living and their careers and all, and I will ask them, what gives you joy in your work. That is what I ask them, what gives you joy in your work.

A lot of times, what I hear from people, basically, is they like helping people. They like helping people. I think there is a great opportunity for folks who work with you, for you to help people, not just to help make sure that we are looking out for folks and their families on the safety side, but also to make sure that we are providing economic opportunity and job creation on the economy side.

The world has changed a lot since I was graduating from school and going off to be in the Navy in the Vietnam War. But

I am convinced that there was a generation of young people coming out of high school, colleges, and so forth these days that want to help people. If they had some idea that they could do it through an endeavor, really, the endeavor that you are leading, I think they would want to do that.

I would just urge you to find ways to communicate that clearly, maybe. Ask most people in Congress: how would you like to work on TSCA? I haven't a clue. I think there is something to be said for being able to message better.

Is the expertise that you need, is it out there?

Ms. Freedhoff. It is out there. It is out there. I think there are people graduating from college every year with amazing education in environmental science and toxicology and ecology. I really do think the workforce is there, and I agree with you. The people at EPA are incredibly excited and committed to the mission of the agency, and really do get excited by the opportunity to help people, as you said.

Senator Carper. Let's talk a little bit about good science, and perhaps a good example is your decision to consider risks of a chemical broadly rather than consider the so-called conditions of use. When you assess the risk of a chemical, as I understand it, the conditions of use refer to the processes or protections that companies might use to minimize releases and exposure to the chemical. I believe you would assert that the

decision to consider risks broadly is the scientifically sound way to proceed. I may be mistaken there, but I understand the industry feels that good science dictates that you consider conditions of use in these risk evaluations.

Question: would you help us understand this disagreement over how science should be used to assess chemical risk?

Ms. Freedhoff. Absolutely. So, the law just says study the chemical substance over its conditions of use, and the risk evaluations do look at the risk attached to each condition of use. They analyze that risk, and we are going to continue to do that.

I think where industry is not in full agreement with our approach is they think that when we say that an entire chemical substance poses unreasonable risk, they think that is unfair, because they think that there are some risks and some conditions of use that are not risky at all. There are some conditions of use that are very risky, and there are some conditions of use that are less risky. They want everyone to know which those are.

We agree with them on that, and we are going to continue to tell people which of the uses are more risky than others and which are the ones that are most likely to be regulated. But I do think that people have the ability to sort of understand the agency's process. It is kind of like Americans know how much

junk food is too much. They know how much medicine is too much. They know how much sun is too much, and when it is time to put sunscreen on.

Ultimately, what our risk evaluations are saying to people is how much of a chemical is too much and what are the ways that that chemical is used that are too risky. Then, when we get to rules, what we want is for the public to trust that we have evaluated the risks, that we have properly addressed them, and our rule says to people, this is how this chemical can be used safely.

I think that is on us to communicate properly, and we do plan on doing a better job in this regard and also would absolutely welcome industry's feedback when they think we have missed the mark on the communications front.

Senator Carper. Okay. One of the things that gives me joy is working with my colleagues across the aisle to take on challenging issues and getting input from all directions and all different quarters and being able to enact meaningful legislation, thoughtful legislation. As you will recall, I was so proud of this committee and the Congress and the Administration at the time for our ability to collaborate with industry and with the folks at EPA in order to enact legislation. Very proud, a high moment from the years that I have been here.

I am just, as we sit here today, six years later, to see how that dream, the hope that we had, is not being realized. It is deeply troubling to me. I know it is to my colleagues. This has not been a committee -- this has not been a hearing. It is not our nature to cast aspersions at you or the folks that you lead and the folks at EPA, but we have got to do better. I like to say, and Senator Capito has heard me say more often than she wants, everything I do, I know I can do better. Everything I do, I know I can do better.

This is a shared responsibility. One member of our staff likes to say, "teamwork makes the dream work." I think there is a lot of good intention here to get this right. We need to. A lot of people are counting on us, and we need to get it right.

With that, I want to thank you, Dr. Freedhoff, Michal, thank you for sharing your experience and your expertise with us today. Thank you for all that you did to help make this legislation a law in our Country and try to enact it.

There is, surely, no road to success without a full understanding of the challenges that you face in implementing a critical federal law. This is not easy. This is hard. The implications couldn't be greater. They include the health of our families, the health of our communities, and include our environment and our ability to tap novel chemistries to hasten our transition to a more stable climate, to obtain medical

breakthroughs, and hopefully, someday, a litter-free circular economy.

I look forward to much help across the dais, and I think I have heard from our colleagues here that there is a strong interest in doing that, and help throughout the Senate to ensure that you get the resources that you and your colleagues need to succeed and help all of us succeed.

With that, a little bit of housekeeping. I would like to ask unanimous consent to submit for the record materials that relate to today's hearing. Hearing no objections, so approved.

[The referenced information follows:]

Senator Carper. Senators will be allowed to submit written questions for the record through the close of business on Wednesday, July 6th, 2022. We will compile those questions, send them to our witness, and ask Dr. Freedhoff to reply by Wednesday, July 20th of this year, if you would.

With that, this hearing is adjourned. Thank you again so much. Thank you.

[Whereupon, at 11:28 a.m., the hearing was adjourned.]