

Table of Contents

U.S. Senate Date: Wednesday, January 29, 2020

Committee on Environment
and Public Works Washington, D.C.

STATEMENT OF:	PAGE:
THE HONORABLE JOHN BARRASSO, A UNITED STATES SENATOR FROM THE STATE OF WYOMING	3
THE HONORABLE THOMAS R. CARPER, A UNITED STATES SENATOR FROM THE STATE OF DELAWARE	7
CHRIS JAHN, PRESIDENT AND CHIEF EXECUTIVE OFFICER, AMERICAN CHEMISTRY COUNCIL	15
SHAKEEL KADRI, EXECUTIVE DIRECTOR AND CHIEF EXECUTIVE OFFICER, CENTER FOR CHEMICAL PROCESS SAFETY, AMERICAN INSTITUTE OF CHEMICAL ENGINEERS	20
STEVE SALLMAN, ASSISTANT DIRECTOR, HEALTH, SAFETY, AND ENVIRONMENT, UNITED STEELWORKERS	24

STAKEHOLDER PERSPECTIVES ON THE IMPORTANCE OF THE U.S. CHEMICAL
SAFETY AND HAZARD INVESTIGATION BOARD

Wednesday, January 29, 2020

United States Senate

Committee on Environment and Public Works

Washington, D.C.

The committee, met, pursuant to notice, at 10:04 a.m. in room 406, Dirksen Senate Office Building, the Honorable John Barrasso [chairman of the committee] presiding.

Present: Senators Barrasso, Carper, Inhofe, Braun, Sullivan, Ernst, Cardin, Whitehouse, and Gillibrand.

STATEMENT OF THE HONORABLE JOHN BARRASSO, A UNITED STATES
SENATOR FROM THE STATE OF WYOMING

Senator Barrasso. Good morning. I call this hearing to order.

Today, we are going to consider Stakeholder Perspectives on the Importance of the United States Chemical Safety and Hazard Investigation Board, more commonly known as the Chemical Safety Board. Congress established the Chemical Safety Board in the Clean Air Act Amendments of 1990, and began funding the agency in 1998.

Its mission is to investigate the facts, conditions, circumstances, and cause or probable cause of accidental chemical releases that result in a loss of life and serious injury or serious property damage. The board also issues corrective actions and recommendations for the purpose of improving chemical production, processing, handling, and storage.

The board's main role is fact-finding and analysis. For this reason, Congress excluded the board's findings, conclusions, and recommendations from use in litigation arising from accidents.

The board serves a critical role in helping us understand why chemical accidents take place and the steps needed to ensure these accidents do not happen again. The board also plays an

important role in helping the Environmental Protection Agency and the Occupational Safety and Health Administration, help them better protect the general public and workers. It is in everyone's interest to keep the board functioning.

We should have a five-member board, but currently, it is without a chairperson and has been reduced to two members. The term of one of those board members expires next Thursday, February 6th. By the end of the week, the Chemical Safety Board will have just one member. This is completely unacceptable.

Last summer, President Trump nominated Dr. Katherine Lemos, a former official of the Federal Aviation Administration and the National Transportation Safety Board, to serve as chairperson of the board. In September, this committee approved her nomination unanimously. The Democrat hold has prevented her nomination from clearing the Senate. If this continues for another week, it will deeply impair the ability of the board to conduct such critical business as deciding which investigations to open and the finalization of reports.

These aren't my words; these words come from the EPA's Inspector General. We collectively cannot let that happen. We must get Dr. Lemos confirmed.

I would note that over the weekend, a chemical explosion killed two workers at a manufacturing plant in Houston. It made the front page of the Wall Street Journal. Here it is: "Blast

at Houston manufacturing plant kills at least two.”

We also need to fill the remaining vacancies on the Chemical Safety Board, because as I say, it is a five-member board. This is an agency that needs strong, qualified, and impartial leadership.

EPA’s Inspector General has stated that historically, the Chemical Safety Board has been plagued with leadership issues, such as tension among board members, disputes over the chairperson’s authorities, and complaints of alleged abuses by board members or the chairperson. In the middle of the Obama Administration, the board’s former chairperson resigned, and its General Council and Managing Director were later forced out.

According to EPA’s Inspector General, management challenges continue to exist. More recent examples have included a board member filing public comments on an EPA proposed rule prior to the board adopting an official position in the rule. Also, a board member engaging in inappropriate communications with stakeholders. This behavior severely undermined morale among the board’s personnel.

In response to these incidents, the Inspector General has recommended that the board develop guidance on board member responsibilities. It has also recommended that the board request that Congress amend the Clean Air Act to strengthen the role and authority of the chairperson.

For these reasons, I am glad that we have a panel of distinguished witnesses who represent the key stakeholders who are here with us today. They will help us better understand the board's role, mission, and performance, opportunities for improvement and reform, and how the work of the board is critical to their own safety initiatives.

I want to thank you all for joining us today. I would like to turn to Ranking Member Carper for his opening comments.

[The prepared statement of Senator Barrasso follows:]

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

Senator Carper. Thanks, Mr. Chairman. Thank for bringing us together.

I was talking with our witnesses beforehand and said that this is a board that is small, not well-known, but it is a little bit like my State, which punches above its weight. I am delighted that we are having a hearing and pleased to welcome each of you today.

We are here today to discuss the importance of the Chemical Safety and Hazard Investigation Board, an important Federal agency charged with investigating industrial chemical accidents. Coming from a State that is synonymous with the name DuPont and chemistry, this is something that is worth a little bit of interest to us and to me. This board has investigated everything from BP oil spills to fatal refinery accidents to the chemical explosions caused by flooding during Hurricane Harvey in 2013.

Regrettably, the current Administration has failed to support the agency financially. In fact, each and every one of the President's last three budget proposals have called for the board's elimination.

Fortunately though, the Congress has rightfully rejected President Trump's repeated efforts to dismantle the Chemical

Safety Board. After chemicals at the Arkema Facility in Texas exploded during hurricane Harvey because there was no electricity to keep those chemicals cold, I asked the Chemical Safety Board to investigate. The board subsequently recommended that chemical facilities need to do more to plan for extreme weather events like hurricanes, like flooding, wildfires, that climate change is causing and will continue to cause.

This Trump Administration is not requiring anyone to plan for or mitigate against the effects of climate change. As we all know, this Administration is doing just the opposite. President Trump even rescinded the Obama Administration's executive orders that required federally funded projects to be built to better withstand flood risks and help communities rebuild stronger and smarter following extreme weather damage.

That leaves the Chemical Safety Board as the only Federal entity that is providing guidance to mitigate the costly and often dangerous impacts of climate change under this administration. Similarly, the Chemical Safety Board is set to soon finalize the rule that will require immediate public reporting of chemical releases.

By contrast, the Trump Administration recently weakened an EPA rule that would have better informed communities about the potential dangers of chemicals stored nearby. The current Administration also weakened a portion of the EPA rule that

would have required the chemical industry to consider whether alternative chemicals or processes would reduce the consequences of a chemical safety accident.

This EPA rule was developed after an explosion literally leveled the town of West, Texas. Not the Western part of Texas, that is a town called West, Texas. It killed some 15 people in 2013. Many of us remember that. The Chemical Safety Board investigated the incident and determined that different ways of handling the chemicals could have prevented the accident from happening in the first place.

In addition to protecting communities, the Chemical Safety Board also plays a vital role in protecting workers. Right now, the board is reviewing seven serious chemical safety incidents that occurred in Texas, some of which resulted in worker fatalities. One of those incidents occurred just last week, when a chemical exploded at the Watson Chemical Facility in Houston, unfortunately claiming the life of one worker.

Other recent incidents took place at refineries, some of which store hydrofluoric acid onsite. Hydrofluoric acid is so dangerous that it can quickly kill or hurt literally tens of thousands of people or more if a release occurred in a densely populated area.

In fact, today the board is still investigating the massive explosion that occurred just north of where I live at the

Philadelphia Energy Solutions Refinery in South Philadelphia, some seven months ago. Thankfully, the explosion did not result in a large-scale release of hydrofluoric acid, which could have caused mass casualties. I think the workers get great credit for actually stemming and preventing what could have been just a terrible disaster.

The Trump Administration has weakened several environmental and safety rules that protect workers, again, leaving the Chemical Safety Board as the sole voice protecting recommendations to industry that could help protect workers and communities.

I believe that everyone here today agrees that the Chemical Safety Board must continue to be provided with the resources it needs to do its job. About that, there is little disagreement. High among the resources needed are five qualified, nominated, and confirmed board members, as the Chairman has mentioned.

Next week, when Rick Engler's term expires, there will be only one board member left. Even if the only nominee this President has nominated to the board, Katherine Lemos, is confirmed before then, the board will again be left with only one member in August when Kristen Kulinowski's term expires.

There are currently, as we know, 53 Republican Senators and only 47 Democrats. Our Majority Leader is free to schedule a vote to confirm Dr. Lemos anytime he wants, and frankly, I

suspect he would have even more than 53 votes to do that.

The Majority Leader has found time in his schedule, in our schedules, to confirm a whole lot of nominees. For example, he scheduled a vote to confirm Aurelia Skipwith, whose confirmation hearing in front of this committee was on the exact same date as Katherine Lemos.

Let's set the record straight. The potential absence of a quorum at the Chemical Safety Board is, frankly, no one's fault except our President's, who is trying again and again to eliminate the agency entirely and failed for three years to nominate more than a single board member to serve.

I still find galling the confirmation of Aurelia Skipwith, and it is hard to get it out of my system. I will just lay it out here again. Here was a nominee who refused to respond to appropriate questions that were asked of her in person, questions for the record, and never did. We still let that nomination go forward.

I think that is a shame. That is a shame. If I were ever to have an opportunity to lead this committee, I might not. We will try not to do that in the future. Thanks very much.

[The prepared statement of Senator Carper follows:]

Senator Barrasso. Senator Inhofe, I know you have a conflicting action as Chairman of the Armed Services Committee.

Senator Inhofe. I appreciate it very much. Just a brief comment.

I say to both my colleagues up here, I had a chance to come early and visit with all three of the witnesses today. The only question I would have is a question that I am sure will be answered in the opening statement of Mr. Jahn.

I think I have the distinction of being the only person up here that is a member of this committee who was actually an original cosponsor of the Amendment to the Clean Air Act back in 1990, and we were very supportive at that time. We are going to make sure that we do everything we can to correct the problem and to get a workable committee that we can get things done, so that will be our effort, I think, of all of us up here.

Thank you, Mr. Chairman, for allowing me to get on the record.

Senator Barrasso. Thank you very much, Senator Inhofe.

Senator Carper. May I just say one more thing, Mr. Chairman? Mr. Chairman, I have been trying to schedule a meeting to meet for a couple of weeks now. There has been something getting in the way, so I am having a tough time clearing our schedule.

My hope is one of the things that we will have a chance to

talk about face to face is this issue, this board, and how we can resolve the nominating process and get the job done. He wants to, and I want to, as well.

Senator Barrasso. I would point out, in terms of things that are getting in the way right now, it is also getting in the way of spending time on the Senate Floor getting anyone confirmed to any position. So the idea that our nominee Lemos, who has gotten through this committee unanimously, has now been blocked on the Senate, or as someone had mentioned, should not go by unanimous consent, and should be called up and go through a whole process because of a previous nominee, Ms. Skipwith, seems to not be the appropriate issue to what we should be fighting that old battle on.

When we have somebody who by history, somebody that goes through the committee unanimously, usually goes by unanimous consent to the Floor, not file cloture and go through multiple series of votes. But if we really want to move forward with getting this nominee in place by the time that we are down to one member of the board, then any extension of the activity on the Floor right now and the delays that it will cause will prevent either way getting that nomination filled.

So with that, I would like to turn to our witnesses. Today, we are joined by Mr. Chris Jahn, who is President and Chief Executive Officer of the American Chemistry Council. He

is very knowledgeable about these issues.

Nearly two decades ago, Chris sat on these benches behind us as a legislative assistant. He was responsible for environmental policy at that time. He continues to work along that line. It is always good to see staff doing well.

Also joining us is Mr. Shakeel Kadri, who is the Executive director and Chief Executive Officer of the Center for Chemical Process Safety at the American Institute of Chemical Engineers, and Mr. Steve Sallman, who is the Assistant Director of the Health, Safety, and Environment Department at the United Steelworkers.

I want to welcome all of you. I want to remind you that your full, written testimony will be made part of our official hearing record today, so we please ask that you keep your statements to five minutes so that we may have time for questions.

I look forward to hearing your testimony, and with that, we will start with Mr. Jahn.

STATEMENT OF THE HONORABLE CHRIS JAHN, PRESIDENT AND CHIEF
EXECUTIVE OFFICER, AMERICAN CHEMISTRY COUNCIL

Mr. Jahn. Thank you, Mr. Chairman. I appreciate you and Ranking Member Carper for holding today's hearing on the Chemical Safety Board.

The CSB has the important job of independently investigating major accidents and making recommendations. The CSB's findings are very influential and a catalyst for safety improvements and ensure that the American Chemistry Council strongly supports the work of the CSB.

ACC believes the board plays a much-needed role for safeguarding the public, the environment, and chemical facilities. In order to be effective in that role, the CSB needs the full five board members that Congress envisioned when it created the CSB. Furthermore, those board members should have a broad range of experience, particularly expertise in manufacturing operations, processes, and procedures that are essential to the safe operation of chemical facilities.

As you know, our industry is undergoing a major transformation to a new era of unprecedented growth and investment that is driven by new domestic sources of safe, affordable, and abundant natural gas. More than 340 new chemical industry projects valued at over \$200 billion worth of investment have been announced for construction in the past

decade, just here in the United States.

So as we continue to build on this new investment, we must make sure that growth does not come at the expense of safety, either of our workers, our communities, or our customers. Safety must remain at the forefront of everything that we do.

Our commitment to safety as an industry is embodied in ACC's Responsible Care Program, the chemical industry's leading environmental, health, safety, and security performance initiative. Our program reflects a commitment by our member and our partner companies to prevent and mitigate the impact of chemical incidents.

One important component of responsible care calls on ACC members to evaluate the circumstances of each incident and learn from their own experiences as well as the experiences of other companies. To help collect and apply these learnings, ACC created regional networks all across the Country that bring site safety personnel together on a regular basis to share process safety knowledge, effective practices and solutions, and encourage peer-to-peer networking.

More recently, we brought together a special group to examine the recent incidents that occurred in the Houston, Texas area. The group made several recommendations, including ways to enhance air quality monitoring capabilities, emergency response, and the design and performance of above-ground storage tanks.

We take every incident seriously, and we seek to learn from each one by sharing information on the factors that led to the incident and identifying excellent practices to prevent similar incidents from happening in the future.

To that end, we work with the CSB to ensure that there is broad awareness of the Board's recommendations within our industry, and it is why we have undertaken safety initiatives that complement but do not replace the board's work.

ACC is committed to working with the Administration and Congress to ensure that we have a fully-functioning and fully staffed CSB. Unfortunately, there is a very real prospect that has been pointed out this morning, that we very soon could have only one member of the board, a scenario which ACC and our members would like to avoid.

That is why we urge the administration to nominate additional, well-qualified industry and process safety experts to serve on the board, and we ask the Senate to confirm these nominees as soon as possible.

I close my remarks by thanking the current and past board members for their work to promote sound chemical safety practices. We look forward to working with you and with the Administration to fill the open positions at the CSB with capable and committed candidates and ensure the board has the resources it needs to fulfill its mission.

Thank you.

[The prepared statement of Mr. Jahn follows:]

Senator Barrasso. Thank you very much, Mr. Jahn. Mr.
Kadri.

STATEMENT OF THE HONORABLE SHAKEEL KADRI, EXECUTIVE DIRECTOR AND
CHIEF EXECUTIVE OFFICER, CENTER FOR CHEMICAL PROCESS SAFETY,
AMERICAN INSTITUTE OF CHEMICAL ENGINEERS

Mr. Kadri. Good morning Chairman Barrasso, Ranking Member Carper. Thank you for me the opportunity to talk about the mission and the role of CSB.

First, a little bit about my background. I am a chemical engineer. I have been working nearly 40 years in the industry in implementing a variety of engineering operation, environmental health, and process safety projects with the aim to reduce or eliminate process safety incidents, and environmental impacts.

I personally feel very strongly about this issue. In my 40-year journey, I have closely seen benefits be achieved from sound process safety implementation and severe impact from incidents where process safety failed. My current organization, the Center for Chemical Process Safety, or CCPS, is a technology alliance of the American Institute of Chemical Engineers.

AIChE is 110-year old non-profit technical organization which is working for a safe, connected, inclusive community. CCPS is funded by corporate members, as well as self-funded through conferences, education, et cetera, as well as through the AIChE Foundation. Established in 1985 in response to the Bhopal Gas Tragedy in India, CCPS has about 225 corporate

members around the world who are dedicated to preventing process safety incidents and improve process safety performance across the industry.

Over the past 35 years, CCPS has published more than a hundred books on the subject of process safety that are used as a good practice guidance reference material. Our chemical and chemical processing industries stimulates the economy with high-paying jobs and development of new and innovative materials that enables other U.S. companies and sectors to lead the world in scientific and technological advancement. We are a net exporter of U.S. products.

Many of these businesses, however, are dependent on the use of hazardous material and operate with the daunting challenges of preventing catastrophic accidents. Such accidents, though rare, have severe and far-reaching consequences. Given this rarity, many companies often lack in-house expertise of self-investigation, and concerns about potential liability inhibit willingness to share lessons learned.

Recognizing these issues, Congress created the Chemical Safety Board to provide all chemical users and producers the expertise needed to investigate major incidents and disseminate lessons learned, best practices, and technologies, with the common goal of minimizing and eliminating catastrophic incidents.

AIChE believes that this is a competence that must be maintained and a need that we collectively must continue to address. We urge you to provide continued funding for the Chemical Safety Board so that they may continue to provide this vital service.

CSB has become an effective and important partner to our Country's process industry, and it is this chemical energy and related companies that are so essential to our Nation's continued economic development and competitiveness. CSB has investigated more than 130 major chemical incidents across the Country, has issued 841 safety recommendations, of which 83 percent of them are already closed.

The CSB safety reports, bulletins, and videos are widely used and cited by the industry community, academia, professional associations, first responders, labor, and community leaders. In fact, CSB's 68 videos have received 6.4 million views, and its YouTube channel has nearly 20,000 followers.

We believe that the CSB plays a critical role in keeping Americans safe and strengthening the performance of our industry.

Thank you very much.

[The prepared statement of Mr. Kadri follows:]

Senator Barrasso. Well, thank you very much for your thoughtful testimony. We appreciate your being here today, and we will be back with questions in a few moments.

Mr. Sallman, could I call on you please?

STATEMENT OF THE HONORABLE STEVE SALLMAN, ASSISTANT DIRECTOR,
HEALTH, SAFETY, AND ENVIRONMENT, UNITED STEELWORKERS

Mr. Sallman. Good morning, Chairman Barrasso, Ranking Member Carper, and members of the committee. Thank you for the opportunity to testify today.

Our union is the largest industrial union in North America, representing 850,000 members across a wide variety of manufacturing and service sectors. Most relevant for this hearing, we are the predominant union in oil refining, chemicals, rubber, plastics, paper, steel, and other metals. Many of the CSB investigations have taken place at facilities represented by our union.

Our union believes that every worker deserves a safe workplace. The CSB's mission and investigations are imperative to reaching that goal.

The importance of the CSB is prominent with us. We want to emphasize four major points: the importance of the CSB, the need to fill vacant seats on the board, the necessity of appropriate funding, and the need to have the agency sufficiently staffed to investigate accidents. The CSB investigations and videos have prevented future injuries and saved lives.

My first experience with the CSB involved a triple fatality at a paper mill. In July of 2008, a tank containing a mixture of recycled paper pulp and water exploded, killing three

workers. The CSB found the contents of the tank contained highly flammable hydrogen gas, a byproduct of bacterial decomposition of organic fiber waste inside the tank.

One of the CSB's recommendations was using combustible gas monitoring prior to performing hot work. The CSB eventually developed a safety bulletin on the hazards of hot work. Although we were pleased with the CSB issuing a safety bulletin, we were disappointed when they were unable to produce a full report and video about the incident due to understaffing at that moment of CSB history.

In February of 2017, I again worked with the CSB on another triple fatality. Their investigation, in part, exposed how OSHA's Process Safety Management Standard is too limited in scope.

CSB reports and videos have led to changes in industry practice and regulations. The CSB reports and videos are applicable across many industries. We show the CSB-produced videos at our trainings and safety meetings to prevent future incidents.

In order for the CSB to produce high-quality investigations and videos, the board must have members who support the mission. The board's primary function is to deploy investigative staff to perform root and contributing cause investigations. Board seats need to be filled with a diverse slate of qualified individuals.

There is longstanding bipartisan support in Congress and among a number of labor and industry stakeholders for a fully funded CSB. However, over the last several years, the administration has proposed eliminating funding for the CSB. The agency has fewer than 50 staff and a budget of \$12 million to accomplish an important mission.

Our union has worked hard to ensure that members of Congress understand how important the work of this small agency is. Historically, the quality of the CSB reports have been high, and the dedication of the professional staff is obvious, in our experience.

However, the CSB currently does not have sufficient staff of investigators. We are concerned that understaffing will lead to an increased backlog of open investigations and the inability to deploy to needed investigations. Our union supports CSB investigators, and the value, the thoroughness of the investigations they conduct.

In conclusion, our union hopes that all the members of this committee understand the importance of this small agency. Bipartisan support has contributed to the CSB's success and its mission to make the Nation's workplaces and communities safer.

We look forward to continuing to work with lawmakers and the CSB to protect our members, communities, and prevent future incidents.

Thank you again for the opportunity to testify.

[The prepared statement of Mr. Sallman follows:]

Senator Barrasso. Well, we all, in a bipartisan way, appreciate all of you being here today, and especially the attention you have to the urgency of the issue.

Mr. Jahn, can you explain how the work of the Chemical Safety Board complements the safety initiatives of your own organization, and vice versa? Because it works both ways.

Mr. Jahn. Certainly. I am happy to discuss that, Mr. Chairman. As I mentioned in my opening testimony, our Responsible Care Program actually has a process safety code in it that requires them to look at their site-specific risks and develop plans to mitigate that.

The CSB's work, in terms of its investigations and its studies, very carefully informs our members of those risks and previous incidents, and allows them to take appropriate steps to try to mitigate that in the future. Not only does that help in terms of the program itself, but we also, as I did mention, we have seven regional networks within ACC where we share this process safety information among those site safety professionals.

We share that, and we also have topical workshops. We have a variety of other ways to educate our members on the CSB's work.

We also engage them through their stakeholder outreach. We just had a meeting with the CSB to share some additional

information on responsible care as recently as two weeks ago, I believe, so we are actively engaged with them. Again, we very much feel like their efforts complement what we do, but do not duplicate them.

Senator Barrasso. Mr. Kadri, can I ask you the same question, how the work of your organization complements the safety initiatives with the Chemical Safety Board, and vice versa?

Mr. Kadri. Absolutely. Thank you. If you look at the mission of the Chemical Safety Board, it is really to prevent process safety incidents by learning from it.

Similarly, if I look at the mission of my organization, it is to prevent major process safety incidents. We do it in two different ways, but really come to the same conclusion. What the Chemical Safety Board does is really to understand what went wrong, create the learning, and then bring out the help to the industry for the future to improve.

What CCPS does is to really do more forward-looking, as we understand the risk, identify the safeguards, and make sure that we prevent those incidents. Really, what we have been doing with the Chemical Safety Board is taking a lot of the learning, many of our books have really taken the learning from the Chemical Safety Board and included it into those learnings.

Many of those incidents have been included in our process

safety incident database, and at the same time, we also help CSB in implementing some of their recommendations. The one I would mention here is, one actually Senator Carper just talked about is Hurricane Harvey. The extreme weather response and extreme weather risk involved, Chemical Safety Board actually asked CCPS to develop guidance so that the industry can kind of look ahead of time and be prepared, so that has been doing.

Second one, actually, a few years back, the Chemical Safety Board asked that we initiate chemical process safety education in undergraduate chemical engineering organizations. That recommendation has actually included now, that now that process safety is applied in all engineering curriculum.

Senator Barrasso. Thank you.

Mr. Jahn, here is another question. Looking at the last past decade, the EPA's Inspector General and the House Committee on Oversight and Government Reform have identified numerous instances of mismanagement at that Chemical Safety Board. Could you explain why it is so important that we have a strong, qualified, impartial leadership at that level at the Chemical Safety Board?

Mr. Jahn. Again, the process safety information that they share with our industry is vital in terms of our industry's performance. So we agree that the CSB, its board members, and including its chair, should be held accountable for their work

and their performance.

Just to demonstrate our industry's commitment to accountability and transparency, and one thing I did not mention in my earlier answer was that we require members as part of responsible care to record and report process safety, emissions data, water consumption, and other metrics that we then report on our website, publicly. So we live by that, and we feel like the government partners that we work with should have similar accountability.

Senator Barrasso. Well, thank you all. We will have a chance to hear from some of the other members.

Senator Carper.

Senator Carper. Thanks, Mr. Chairman. I don't ask a lot of yes or no questions, but I am going to just ask a couple of them today, so we can move along.

We will start with you, Chris. Would your organization oppose a proposal to completely eliminate the Chemical Safety Board like the proposals that were included in the President's last three budgets?

Mr. Jahn. We would not support the elimination of the Chemical Safety Board.

Senator Carper. Thank you. Mr. Kadri?

Mr. Kadri. We will not support that recommendation.

Senator Carper. Steve?

Mr. Sallman. We would not support that.

Senator Carper. Okay, thank you. I have no more questions. No, I have more questions.

[Laughter.]

Senator Carper. Second question: do you all agree that it would be best if the, well, for everybody, the folks that work there, the owners, stakeholders, shareholders, people in the communities, first responders, do you all believe it would be best if the board had five qualified, independent, confirmed board members?

Mr. Jahn. Yes, sir, and I would add just that, again, from our experience, we do not have someone on the board right now who has industry safety process experience, so I would add that caveat.

Senator Carper. Thank you. Mr. Kadri?

Mr. Kadri. I will actually add one more thing to the question that Senator Barrasso asked. It is not only that you need a strong and technical expertise, but you also need the impartiality. Because the recommendation and the outcome coming out from the board has far-reaching impact, and maintaining the impartiality will create credibility and gives that implementation much more success.

Senator Carper. All right, thanks for that.

Mr. Sallman. I would like to add that the board should be

made up of a diverse slate of people with process experience, investigative experience, and dealing with various stakeholders, so that everybody brings a different view to the board to make it well-rounded. That experience, I believe, and we believe, would help this board succeed in being able to view what failed, how we could improve to go forward with lessons learned, and prevent those tragedies from happening again.

Senator Carper. Okay, thank you.

One more, if we could, and this is for each of you. Do you believe that the President's repeated efforts to eliminate the agency would probably make it harder to find qualified and independent experts who are willing to serve, or easier?

Mr. Jahn. Our position is that the CSB, not only does it need to be full of board members and fully staffed, but it has to have the resources it needs to do its job, so it needs to be fully funded; an appropriate budget and human resources are absolutely necessary.

Senator Carper. Thank you. Same question, Mr. Kadri.

Mr. Kadri. Yes. I will say that those who are coming in from the industry and other areas to support the board membership and also the staff, they also need some support from the government and also from the support structure, that the risk they are taking to go in, there is a reward there.

I think currently, because of the environment, I think

there is a lot more resistance in that area. So I believe strongly that we need a five-member board and it should be very diversified and impartial.

Senator Carper. All right, thank you.

And Mr. Sallman, just really quick, same question. Do you think it makes it easier or harder to find suitable replacements on the board if this Administration three years in a row has been trying to eliminate the board?

Mr. Sallman. Certainly harder, when, why would you want to apply for a job when it has been proposed to be eliminated and not funded? This is critical work, and when these people are going to be responding, they are going to be dealing with a loss of life. They are going to be dealing with coworkers who signed a job application to go in and go to work, not see what they have seen. Those people have to bring a special talent to this position.

Senator Carper. Thank you.

One last question this round. When the Chemical Safety Board published its report following the Arkema Incident, it found that the explosions occurred in part because Arkema had not planned for this kind of flooding that we know climate change has caused and will continue to cause.

I was on the phone last night with a young man, not so young anymore, but whose roots were in Delaware, his father had

been our Congressman, and been our Mayor, Republican, but a close friend. The son now lives in Australia, and we talked about what they are going through there in terms of wildfires that are destroying large swaths of the country, killing hundreds of millions of animals, birds, and so forth.

The question is, I want all of you to try to answer this. Do you believe that climate change is real, that is caused largely by humans, not entirely, but largely by humans and that it has the potential to cause future costly and dangerous chemical safety accidents if steps aren't taken to analyze the risks and protect against them?

Mr. Sallman, would you go first?

Mr. Sallman. Climate change already has and continues to cause problems in workplaces, not only from a chemical standpoint, but also just working conditions. More and more of our members talk about heat stress, heat stroke. When you look at the fires that is happening in California, what does that do to the electrical grid? If we don't have backup systems to protect us when things go wrong, worse things will happen.

Senator Carper. All right, thank you.

Mr. Kadri, please?

Mr. Kadri. I would say that climate change has impacted. I do not have the expertise in that area, but I do believe that the, as we see, the temperature rise, that would have ultimate

impact.

Senator Carper. Same question, Mr. Jahn.

Mr. Jahn. ACC believes that climate change is a global challenge that requires long-term commitment and action by every segment of society. When we talk about extreme weather events like Hurricane Harvey, clearly, we need to have disaster mitigation and prevention to take those types of events into account.

Senator Carper. I spoke to our witnesses, colleagues, before this started, and told them I am always looking for, as a member of this committee, I have always looked for ways to do good things for our health, cleaner air, cleaner water, better public health for our planet with respect to climate change. The intersection I always look for is making progress on those fronts, creating jobs and economic opportunity, and that is the Holy Grail, the one that we are pursuing, and maybe we will have a chance to talk with you about that some more later on. Thank you.

Senator Barrasso. Senator Whitehouse.

Senator Whitehouse. Thank you, Chairman, and welcome to the witnesses.

Two questions for Mr. Jahn. First of all, welcome to your first hearing as the new president. We had a very good working relationship on a bipartisan basis with your predecessor, Mr.

Dooley, and I want to recognize that and thank him for that.

One of the areas in which we had a very good bipartisan working relationship with Mr. Dooley was on TSCA reform, chemical safety reform. After the bill passed with strong bipartisan support and with your support and good work, your organization's support and good work, we then ran into administrative problems that I believe violated the bipartisan spirit of the legislation over at EPA.

We think we have solved those problems. I have confidence in Alexandra Dunn, who is the new person over there. Can I ask your commitment that you and your organization will help support a fair and thorough administrative process to support TSCA in the same bipartisan spirit that the bill was passed?

Mr. Jahn. Senator, I thank you for that warm welcome as the next victim here at ACC, and we look forward to working with you. I noticed that Senator Sullivan was here earlier. We are working together on some things.

Senator Whitehouse. That is my next topic, so go ahead on about TSCA.

Mr. Jahn. Okay. I didn't want to steal your thunder, I apologize. So yes, we will commit to working with you to make sure that the amendments to TSCA that were passed in 2016 move forward in an appropriate manner. That is absolutely very important for us as an industry.

Senator Whitehouse. I think it is important when you have bipartisan agreement on something to reward, encourage, and honor that bipartisan agreement by then not hopping over to the executive administration of that and trying to undo and cause damage and problems over there.

I don't think that the ACC has been involved in that. I think you have been helpful, actually, at trying to get through that, and I hope you will continue, so thank you for that.

So your second topic, of course, was another area where we have made significant bipartisan progress, and that is on the question of marine plastic waste, ocean plastic waste. It was with Cal Dooley and ACC's support that we were able to get the first Save Our Seas bill passed, which was a very minor piece of legislation in terms of its effect, but it established the proposition that the Senate and the Congress on a bipartisan basis were willing to legislate in this space, something which was not then a proven proposition.

So we proved that proposition and we focused on the worst offenders, which are the five Asian countries, and the ten foreign rivers that produce, respectively, 50 percent and nearly 90 percent of the ocean plastic waste.

We then moved on and just recently, in the Senate, again, unanimously passed Save Our Seas 2.0, which still has to work its way through the House, and they have seven committees that

want a piece of it, and it takes a little bit of doing, procedurally, but which I have a lot of confidence will actually get done.

So, Senator Sullivan, my friend and my colleague in these efforts, and I are already starting to put on our thinking caps and organize with our staffs what Save Our Seas 3.0 should look like, because while 2.0 was real legislation that created a real difference, it is a huge problem, and it is one where I think we need more support from the industry. I think there is more room for bipartisan and perhaps even unanimous progress on this issue.

I want to ask you your thoughts about a SOS 3.0. Do you believe there is more that needs to be done? Are you willing to support us in finding those things that can be done in a bipartisan, even unanimous fashion?

In that regard, let me just put into the record also the July 19th letter of welcome that Senator Sullivan and I wrote to you on this topic.

[The referenced information follows:]

Mr. Jahn. Thank you very much, and thank you for your leadership on this important issue. As you said, it is a significant global challenge, and you have our full commitment to work with you.

I hope that you are correct, we will be able to work through those seven committees in the House, we will get that bill done and have some meaningful change, and then we can move on to 3.0. As you know, and I know you agree --

Senator Whitehouse. That 2.0 doesn't do the trick. There is more to be done. It was good, but not sufficient.

Mr. Jahn. Absolutely. As you well know, in regard to the Alliance to End Plastic Waste that our members have created in the past year and committed, publicly, private funds of \$1.5 billion throughout the chemical supply chain to solve that issue. So we are putting real money behind this. We are dedicated to the proposition, and we will work with you to move forward.

Senator Whitehouse. We look forward to working with you. If I could note for the Chairman, I went to the Our Oceans Conference in Oslo as a congressional delegation of one. It was a strong focus at that international conference on marine plastic.

Unilever, which is one of the biggest consumer products corporations in the world, and which has a very, very

significant footprint in the United States, pledged then that they were going to go to a point where for every ounce of plastic that they put into the economy through their products, they were going to extract the same amount of plastic from the environment and bring it back to proper disposal, which does two things.

First of all, it makes them plastic waste neutral, which is a very important thing for a company. And second, it creates a market for the plastic waste that is out there and gives somebody some encouragement to find, now somebody who is picking that stuff up has a business model to go to Unilever and say, you are going to need to buy a lot of this stuff to honor that pledge.

So for both of those reasons, I just wanted to call out Unilever as one of the international players in this for having made what I think was a particularly strong proposal. Of course, I support that kind of an effort, so thank you very much, Chairman.

Senator Barrasso. Well, thank you.

Senator Whitehouse. By the way, let me thank you, because a lot of this happened because of your support and leadership as Chairman and because of the support of our Ranking Member. If it weren't for the leadership of the Chairman and the Ranking Member, none of this stuff gets done, so while I talk about Dan,

and we do a lot of this work together, I also want to make sure it is clear that it is a unanimous effort.

Senator Barrasso. Unanimous support of the committee, everybody together. Also I point out, and you may have noted what Bill Gates had announced the other day, and I talked to him about it on Sunday, this program for Microsoft which is very similar to what you just described with regard to Unilever and plastics. He has said that about the carbon footprint that has been left by Microsoft, not going forward, but going back to the founding of the company in 1975.

To do it, he is making a huge investment in the technology that we had been working on for carbon capture and sequestration and actually air capture of carbon dioxide in the atmosphere to then go to sequester or putting into products the sorts of things that we looked at in Aberdeen, Scotland with the research laboratories there trying to make those products commercially competitive. So it is not just in plastics that it is happening; it seems to be happening and this may be a new model.

Senator Whitehouse. Yes. Making sure that the market works in these areas is, I think, our top responsibility. Thank you.

Senator Barrasso. Senator Carper.

Senator Carper. Just a follow-up on Senator Whitehouse's comments. I think he mentioned at Oslo, he was a delegation of

one. I would point out he probably had them outnumbered, even as only one.

I want to commend Sheldon and Danny for their great leadership and work on this. There is another Senator, Senator Udall that from out in New Mexico has a strong interest in this issue as well. He focused a little bit more on root causes, which is actually one of the things that the Chemical Safety Board does, it focuses on root causes.

It is not the time to have the conversation now, but I think there has to be an economic opportunity for someone to come along and invent, I know work is going on right now, probably all over the world, to come up with plastics that meet our needs as consumers, but actually do not degrade our environment. Whoever can come up with that, they will do just fine.

Go ahead, Mr. Jahn.

Mr. Jahn. If I could interject on that, that work is already underway, and that is happening. Members are literally invested billions of dollars in what we call circular economy, in bringing those products back in as feedstock to produce new product. So we are going as quickly as we possibly can on that issue.

Senator Carper. I would urge you, Mr. Jahn indicated to us he is just now beginning to do member calls, and we welcome

those. There was a death in his family, which we mourn and regret. Now that you can start seeing us, we would welcome that. That is maybe one of the things we can talk about, and you can share with us what is going on.

I would also urge you, early in your visits here, customer calls with members, go see Senator Udall, just to kind of understand what he is thinking. I think he would welcome hearing what you just shared with all of us.

Mr. Jahn. Thank you.

Senator Carper. The idea to create a virtuous cycle, virtuous circle, is something I always look forward to doing. If we can find ways to harness economic forces that actually do the right thing, that is all the better.

There is just one more issue I want to touch on, if I can. It is not just climate change risk that the Chemical Safety Board reports have made recommendations about. Many of the reports point out systemic safety, or chemical process failures, that should result in industry making changes to prevent similar accidents from occurring in the future.

My question, this is really a question for all three of you, if you would. Since we currently have an Administration that we can safely assume may never take regulatory action to require measures to mitigate against climate change, or other chemical safety risks, could each of you just say a couple words

about how important the continued existence of a fully funded Chemical Safety Board with five qualified and independent board members is? Mr. Jahn, would you like to lead off?

Mr. Jahn. Certainly. So, a fully funded, fully staffed effective board is vital to our industry in both the investigations that the CSB conducts and the studies that they share with our industry. We feed that into our process, into those regional networks that we have that we share that process safety information, as well as the topical workshops and other education that we have for our industry and the requirements that they have under responsible care to plan, prepare for, and drill on response to potential incidents.

So we take that very seriously, and it is a top priority for us.

Senator Carper. Thank you. Mr. Kadri?

Mr. Kadri. Yes. CCPS actually has seen the advantage and benefit of a fully functional Chemical Safety Board. We also have seen a bit of a disadvantage when the Board is not functional. So I believe that having a fully functional Chemical Safety Board is very beneficial to all stakeholders. It is industry, it is academia, it is community, and also regulated sites.

Senator Carper. You get the last word.

Mr. Sallman. Sure. It is critical that we have a full

board and a chair, and I say this because we have a few plants that we are waiting on for those reports to come. Philadelphia, Port Neches, Texas, where our members were exposed to the flash fires and the hazards.

It is not only important to learn and improve, but it is also the community. Our members live in those communities, and when you have seen the devastation that was going on, that is our members' homes that you are seeing.

This isn't just a workplace issue. This is also an environmental issue that is important to our members because people live in those communities.

We are also watching the inspection that is going on and the investigation with the box company, where a pressure vessel exploded. We are the largest union in the paper sector, that we don't represent that workplace, but we are eagerly awaiting the results of that, so that we can take those lessons learned and apply it to all of our other workplaces, so that nobody has to go through that again, or the community.

Senator Carper. Mr. Sallman, at one point in your testimony, I think you used a term, hot work, I think you called it hot work. Would you just take a minute and tell us what that means?

I have some ideas in my own life what hot work is. I used to be a midshipman in the Navy. My freshman midshipman cruise,

I was on a destroyer, and they put all the young midshipmen down in the engine room. There was one large blower that actually brought cool air down to one place. The Chief Petty Officer always stood there, and the rest of us just sweltered, and that was the hottest work I have ever done, but I want to hear what you are talking about when you say hot work.

Mr. Sallman. Sure, great question, and I can elaborate. Hot work is anytime you are doing cutting, grinding, welding, anything that could produce a spark or heat as a source of ignition.

And that is important to us because we have learned the hard way. As I have mentioned in my testimony, my very first exposure to a triple fatality involved hot work, where one of our members noticed that there was a problem with a flinger on top of the tank. He knew that the bolts had broken loose on the flanges, and so they had to go up there and repair that by welding.

In the headspace of that tank was hydrogen, and our members did not know. They were thinking it is water and recycled pulp, I mean, boxes that you would collect from anywhere in a store, you would put it in there, you basically heat that up. Then that basically decay created that hydrogen gas in the headspace of the tank. So while they were welding, all of a sudden, they felt the tank start to rumble, and they heard noises, and then

it literally blew up on them and ended up taking the lives of three members.

The importance about understanding the hot work, I will tell you how far this went, we not only followed that from the tank, we followed it through the entire process, where that content went. And lo and behold, we found out, even on our process machines, that we were having that hydrogen gas elsewhere in the facility. So now we had to expand our hot work, not only from tanks, but also to the process of equipment.

Had we not had the learnings from the CSB, we may not have been able to make those corrective actions using the hierarchy of controls.

Senator Carper. All right, thank you. Thank you for that explanation. We have some hot work of our own to do later today. We thank you for your testimony and for the work that you do.

Mr. Sallman. Thank you.

Senator Carper. We look forward to working with you on other issues. Chris, congratulations on being named to succeed a very good man.

Mr. Jahn. Thank you.

Senator Barrasso. Let me just finish off with a couple of questions. One for all of you.

Currently we are out a chairperson, only two sitting members. Last summer, President Trump nominated Katherine Lemos

to serve as chairperson, the committee approved her nomination, unanimous basis in September. If she is not confirmed by next week, the board will lose its quorum and will be severely impaired.

Is it fair to say that you all agree that we should not let the Chemical Safety Board be reduced to one member?

Mr. Jahn. Yes.

Mr. Kadri. I agree.

Mr. Sallman. Yes.

Senator Barrasso. And then, the other issue is how you can recruit good people to serve in some of these government positions. What we continue to hear is, there is just so much uncertainty that the confirmation process itself can in some way discourage highly qualified individuals from seeking to serve on the Chemical Safety Board. I would just be interested in hearing from the three of you on that.

Mr. Jahn. I would salute you all, and the House as well, in terms of your leadership of continuing supporting the mission of the board, fully funding it, and in fact, increasing funding for that and sending that message out to this community that this is a priority. It is an important mission, and that it has had the full faith and support from this committee.

I think that sends a tremendous message, and that we try to amplify to our community.

Mr. Kadri. I think you picked up a good point, as how would you attract the right level of people. Now, CCPS has 225 corporate members, and each of those corporate members actually provide us the lead process safety individual in our committee.

Many of them would be well-qualified individuals and would be interested. But I think that the current environment actually would have some resistance.

Senator Barrasso. Mr. Sullman, anything you would like to add?

Mr. Sallman. I would encourage outreach to find people and help them understand what these positions are, and look for a diverse group of people. We have even talked to management counterparts that we have good relationships and work well with them, and some of those people have since retired out of the health and safety movement.

There is a lot of talent on there that could be harvested and work at these facilities. But if they are going to go to this agency, and work, they need to know that Congress has their back, that they are going to be funded, and that they are going to have the support and the resources that they need to perform their jobs and do it well.

Senator Barrasso. I ask for unanimous consent to enter into the record a letter from the American Chemical Society in support of confirming Dr. Lemos and advancing additional

nominees. Without objection, that will be added.

[The referenced information follows:]

Senator Barrasso. There are no more questions. You may get questions in writing -- there may be another question.

Senator Carper. Not a question, just a quick thing. I said as an aside to the Chairman, several minutes ago, that we are going to meet, hopefully soon when the impeachment process has concluded.

But one of the things that I hadn't thought would be on an agenda, a good agenda item, just this is figuring out how we get not just avoid having one person on the board, we really need five. We need five, fully well qualified people.

I understand that, and correct me if I am wrong, but if the board is reduced to one member in August, it will be reduced to one member in August, if Kristen Kulinowski is not confirmed, I think that is true. Can you check me on that?

Mr. Jahn. We will follow up on that.

Senator Carper. Okay, if you would, for the record, thank you. Thanks so much.

Senator Barrasso. Thank you. Senator Whitehouse, anything else?

Senator Carper. Maybe if she is not renominated, I think.

Mr. Jahn. I believe that is correct.

Senator Carper. I think that is correct. All right, thank you.

Senator Barrasso. Well, members may submit questions for

the record. I know a number of members are at the White House for the signing of the USMCA.

The hearing record is going to remain open for two weeks. I want to thank all of you for being here, for your time, and your testimony. The hearing is adjourned.

[Whereupon, at 11:05 a.m., the hearing was adjourned.]