

PROTECTING COMMUNITIES FROM INDUSTRIAL ACCIDENTS: REVITALIZING THE CHEMICAL SAFETY BOARD

HYBRID HEARING

BEFORE THE
SUBCOMMITTEE ON OVERSIGHT AND
INVESTIGATIONS
OF THE
COMMITTEE ON ENERGY AND
COMMERCE
HOUSE OF REPRESENTATIVES
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PROTECTING COMMUNITIES FROM INDUSTRIAL ACCIDENTS: REVITALIZING THE CHEMICAL SAFETY BOARD

WEDNESDAY, SEPTEMBER 29, 2021

HOUSE OF REPRESENTATIVES,
SUBCOMMITTEE ON OVERSIGHT AND INVESTIGATIONS,
COMMITTEE ON ENERGY AND COMMERCE,
Washington, DC.

The subcommittee met, pursuant to call, at 10:34 a.m., in the John D. Dingell Room 2123, Rayburn House Office Building, and remotely via Cisco Webex online video conferencing, Hon. Diana DeGette (chair of the subcommittee) presiding.

Members present: Representatives DeGette, Kuster, Rice, Schakowsky, Tonko, Ruiz, Peters, Schrier, Trahan, Pallone (ex officio), Griffith (subcommittee ranking member), Burgess, McKinley, Long, Palmer, Dunn, Joyce, and Rodgers (ex officio).

Staff present: Austin Flack, Policy Analyst; Waverly Gordon, Deputy Staff Director and General Counsel; Tiffany Guarascio, Staff Director; Perry Hamilton, Clerk; Fabrizio Herrera, Staff Assistant; Rebekah Jones, Counsel; Zach Kahan, Deputy Director, Outreach and Member Service; Chris Knauer, Oversight Staff Director; Will McAuliffe, Counsel; Elysa Montfort, Press Secretary; Kaitlyn Peel, Digital Director; Tim Robinson, Chief Counsel; Nikki Roy, Policy Coordinator; Andrew Souvall, Director of Communications, Outreach and Member Services; Benjamin Tabor, Junior Professional Staff Member; Sarah Burke, Minority Deputy Staff Director; Jerry Couri, Minority Deputy Chief Counsel for Environment; Marissa Gervasi, Minority Counsel, Oversight and Investigations; Brittany Havens, Minority Professional Staff Member, Oversight and Investigations; Nate Hodson, Minority Staff Director; Emily King, Minority Member Services Director; Bijan Koohmaraie, Minority Chief Counsel, Oversight and Investigations Chief Counsel; Clare Paoletta, Minority Policy Analyst, Health; Alan Slobodin, Minority Chief Investigative Counsel, Oversight and Investigations; and Michael Taggart, Minority Policy Director.

Ms. DEGETTE. The Subcommittee on Oversight and Investigations hearing will now come to order.

Today the committee is holding a hearing entitled “Protecting Communities from Industrial Accidents: Revitalizing the Chemical Safety Board.” This hearing will examine the ongoing mission, governance, staffing, and other challenges at the Chemical Safety and Hazard Investigations Board.

Due to the COVID-19 public health emergency, Members can participate in today's hearing either in person or remotely via online conferencing. Members who are participating in person must wear a mask. Such Members may remove their mask when they are under recognition and speaking from a microphone. Staff and press who are present in the committee room must also wear a mask at all times.

For Members participating remotely, your microphones will be set on mute for the purpose of eliminating inadvertent background noise. Members participating remotely will need to unmute your microphone each time you speak—something you'd think we'd be used to by now.

Please note that, once you unmute your microphone, anything that is said in Webex will be heard over the loudspeakers in the committee room and subject to be heard by livestream and C-SPAN.

House Members are participating from different locations at today's hearing. All recognition of Members, such as for questions, will be in the order of subcommittee seniority.

If at any time during the hearing I'm unable to chair the hearing, the vice chair of the subcommittee, Mr. Peters, will serve as Chair until I can return.

Documents for the record can be sent to Austin Flack at the email address we have provided to staff, and all documents will be entered into the record at the conclusion of the hearing.

The Chair now recognizes herself for purposes of an opening statement.

OPENING STATEMENT OF HON. DIANA DeGETTE, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF COLORADO

Good morning. Today's oversight hearing covers one of our small but incredibly important independent agencies, the Chemical Safety Board, or CSB.

Although many of you have never heard of it, the CSB plays a vital role in protecting American workers and communities.

We are all familiar with the role of the National Transportation Safety Board. When a plane falls from the sky, we want to understand not just why it happened but also how we can prevent it from happening again.

And that's the role that CSB plays when it comes to industrial accidents. The CSB improves the safety of American workers, communities, and the environment by investigating the root causes of these tragic events and making recommendations to prevent them in the future.

While many Americans may not know the CSB by name, they are certainly familiar with some of the critical incidents that it has investigated.

Please display the first slide.

[Pause.]

Ms. DeGETTE. They did practice this in advance.

[Pause.]

Ms. DEGETTE. We have some kind of a technology problem, but I hope we can fix it, because the first slide was a photo of the 2010 Deepwater Horizon disaster.

And we all remember the Deepwater Horizon, a sudden explosion and fire on an offshore rig that took the lives of 11 workers and seriously injured 17 others.

It also triggered a massive oil spill into the Gulf of Mexico that lasted for 87 days, one of the worst environmental disasters in U.S. history.

In fact, this subcommittee held a field hearing in Louisiana to assess the local impact of the spill, and then I and Ranking Member Waxman later sent a letter to CSB requesting that they further examine the root cause of the accident. This was a disaster.

In 2005, there was the BP America Refinery explosion in Texas City, just outside of Houston. In that incident, 15 workers were killed and 180 more were injured during the restart of a unit at the refinery.

In 2013, Texas saw yet another tragedy, this time at a fertilizer storage and distribution facility in the town of West. A fire within a storage facility triggered a massive explosion of ammonium nitrate. Twelve emergency responders and three members of the public died, over 260 people were injured, and more than 150 homes and businesses were damaged, resulting in hundreds of millions of dollars of property destruction.

More recently, in 2019, there was a massive fire at the Philadelphia Energy Solutions Refinery in Philadelphia, Pennsylvania, where a vapor cloud including potentially deadly hydrofluoric acid ignited.

The quick actions of a control room operator to rapidly drain the remaining hydrofluoric acid prevented a massive release of more of the harmful gas which would have placed the highly populated surrounding communities at tremendous risk.

These are just a few examples of the critical incidents that CSB has deployed to over the past several years.

The devastating impacts that these accidents have had on facilities, workers, and surrounding communities are obvious, and the CSB safety recommendations that have come out of these and other investigations are directly responsible for improved safety conditions within many U.S. industries.

CSB's work has saved lives and protected communities, and those of us with industrial facilities in our districts understand the stake in CSB's work. We want to see this agency flourish.

But despite the positive impacts, there have been challenges at the agency since its inception. In recent years, Board vacancies, unfilled staff positions, employee morale issues, and most recently the COVID-19 pandemic have led to unproductivity at the agency.

We were pleased to see that the CSB published two new final investigation reports last Friday, but there are still currently 18 open investigations, some dating back to incidents that occurred in 2016 and 2017.

This is the biggest backlog of investigations that the agency has ever had—one of them.

The timeliness of these reports matter. When CSB isn't expeditiously sharing its findings, it cannot effectively prevent future in-

cidents and fulfill its mission to protect people and the environment.

Now, we are aware of the many challenges that I have already mentioned today, and they were inherited by our witness today, Chairman and CEO Katherine Lemos. But we're also here today not to focus on CSB's past, but the present and future.

And so the questions are straightforward:

How does the CSB intend to finish and close the many important investigations it's opened, and when can we expect to see the vital recommendations that come from that work?

How will the CSB take on important new work if it can't close the many investigations that remain incomplete?

When will the CSB fill key staffing vacancies to its investigative mission?

And, finally, what's the plan to address how the important governing board operates and to avoid the dysfunction it's suffered from in the past?

In short, we need to understand the Chair's strategic plan to move this agency forward.

I'm pleased that part of the solution is already underway. The Chairman will soon have reinforcements on the Board. President Biden has nominated three new Board members who we hope to see confirmed soon, seeing as right now we only have one Board member and she is sitting right here.

We look forward to the increased activity that we expect to see when they are on board. But we also know new Board members alone will not solve all of the agency's problems, and that's why we're holding the hearing today.

I want to thank the Chairwoman for being here today, and I look forward to the discussion so that we can ensure CSB has the leadership, strategic plan, and resources needed in order to execute on its vital mission. American workers and communities are simply counting on it.

[The prepared statement of Ms. DeGette follows:]

Committee on Energy and Commerce

**Opening Statement as Prepared for Delivery
of**

Subcommittee on Oversight and Investigations Chair Diana DeGette

***Hearing on “Protecting Communities from Industrial Accidents: Revitalizing the Chemical
Safety Board”***

September 29, 2021

Good morning. Today’s oversight hearing covers one of our small, but incredibly important, independent agencies: The Chemical Safety Board or CSB.

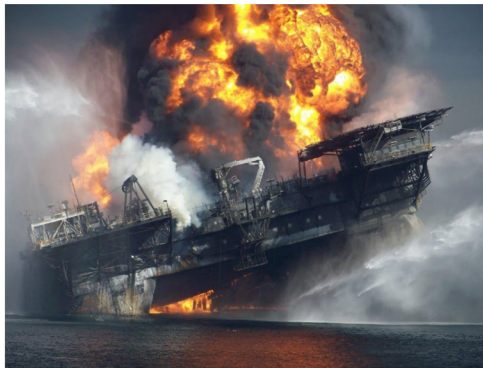
Although many have never heard of it, the CSB plays a vital role in protecting American workers and communities.

We are all familiar with the role of the National Transportation Safety Board or NTSB. When a plane falls from the sky, we want to understand not just why it happened, but also what can be done to prevent it from happening again.

And that is the role the CSB plays when it comes to industrial incidents. The CSB improves the safety of American workers, communities, and the environment by investigating the root causes of these tragic events and making recommendations to prevent them in the future.

While many Americans may not know the CSB by name, they are certainly familiar with some of the critical incidents that it has investigated.

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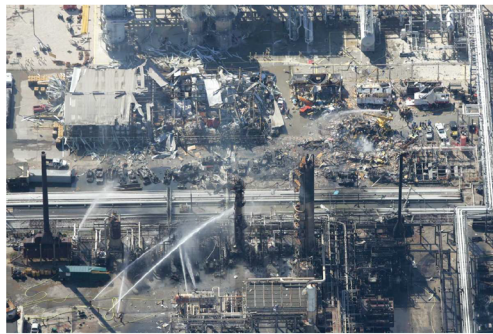


We all remember the 2010 Deepwater Horizon disaster.

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A sudden explosion and fire on an offshore rig that took the lives of 11 workers and seriously injured 17 others. It also triggered a massive oil spill into the Gulf of Mexico that lasted for 87 days – one of the worst environmental disasters in U.S. history. In fact, this Subcommittee held a field hearing in Louisiana to assess the local impact of the spill, and then I and Ranking Member Waxman later sent a letter to CSB requesting that they further examine the root cause of the accident.

Please display the next slide.



In 2005, there was the BP America Refinery explosion in Texas City—just outside of Houston. In that incident, 15 workers were killed and 180 more were injured during the restart of a unit at the refinery.

Please display the next slide.



In 2013, Texas saw yet another tragedy — this time at a fertilizer storage and distribution facility in the town of West.

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A fire within the storage facility triggered a massive explosion of ammonium nitrate. 12 emergency responders and 3 members of the public died, over 260 people were injured, and more than 150 homes and businesses were damaged, resulting in hundreds of millions of dollars of property destruction.

Please display the last slide.



More recently, in 2019, there was a massive fire at the Philadelphia Energy Solutions Refinery in Philadelphia, Pennsylvania when a vapor cloud including potentially deadly hydrofluoric acid ignited.

The quick actions of a control room operator to rapidly drain the remaining hydrofluoric acid prevented a massive release of more of the harmful gas, which would have placed the highly populated surrounding communities at tremendous risk.

Thank you. Please remove the last slide.

These are just a few examples of the critical incidents that CSB has deployed to over the past several years.

The devastating impacts that these accidents have on facilities, their workers, and surrounding communities are obvious.

And, the CSB safety recommendations that have come out of these and other investigations are directly responsible for improved safety conditions within many U.S. industries.

CSB's work has saved lives and protected communities, and those of us with industrial facilities in our districts understand the stakes in CSB's work.

We want to see this agency flourish.

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Despite its positive impact, there have been challenges at this agency since its inception.

In recent years, board vacancies, unfilled staff positions, employee morale issues, and – most recently – the COVID-19 pandemic have led to underproductivity at the agency.

While we were pleased to see that the CSB published two new final investigation reports last Friday, there are still currently 18 open investigations – some dating back to incidents that occurred in 2016 and 2017.

This is among the biggest backlog of investigations the agency has ever had.

The timeliness of these reports matter. When CSB isn't expeditiously sharing its findings, it cannot effectively prevent future incidents and fulfill its mission to protect people and the environment.

Now, we are aware that many of the challenges I've already mentioned were inherited by our witness today, Chairman and CEO Katherine Lemos.

But we're here today not to focus on CSB's past, but CSB's present and future.

The questions today are straight-forward:

How does the CSB intend to finish and close the many important investigations it has opened, and when can we expect to see the vital recommendations that come from that work?

How will the CSB take on important new work if it cannot close the many investigations that remain incomplete?

When will the CSB fill key staffing vacancies vital to its investigative mission?

Finally, what is the plan to address how the important governing board operates and to avoid the dysfunction it has suffered from in the past?

In short, we need to understand the Chair's strategic plan to move this agency forward.

I am pleased that part of the solution is already underway — Chairman Lemos will soon have reinforcements on the Board. President Biden has nominated three new Board members who we hope to see confirmed soon.

We look forward to the increased activity that we expect to see once they are on board. But we also know that new Board members alone will not solve all the CSB's problems, which is why I am holding today's hearing.

I thank Chairman Lemos for being here today, and I look forward to today's discussion so that we can ensure CSB has the leadership, strategic plan, and resources needed in order to execute on its vital mission.

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American workers and communities are counting on it.

Ms. DEGETTE. The Chair is now very pleased to recognize the ranking member of the subcommittee, Mr. Griffith, for 5 minutes for an opening statement.

OPENING STATEMENT OF HON. H. MORGAN GRIFFITH, A REPRESENTATIVE IN CONGRESS FROM THE COMMONWEALTH OF VIRGINIA

Mr. GRIFFITH. Thank you, Chair DeGette, for holding this hearing.

As you said, the Chemical Safety Board is an independent, non-regulatory Federal agency. According to its enabling statute, the leading charge of the Chemical Safety Board is to investigate and determine the cause of any accidental release resulting in a fatality, serious injury, or substantial property damage.

It has been described, as Chairwoman DeGette described it, as the equivalent of the National Transportation Safety Board but for chemical spills as opposed to transportation accidents.

Unfortunately, the Board has been criticized for falling short of accomplishing this primary responsibility.

The Chemical Safety Board was created by the Clean Air Act Amendments of 1990, but it did not become operational until 1998.

Since then, it has been saddled with functioning challenges. In 2000, just 2½ years after its inception, the Government Accountability Office identified management challenges and investigative backlog.

Now, 21 years later, we share the same concerns as our colleagues of Congresses past.

Since May 1, 2020, the Chemical Safety Board has operated with only one of its five Board seats filled.

Chair Lemos, I understand that under your leadership you have been disadvantaged with a short staff and a sharp learning curve. The vacancies in Board member positions impede the agency from making substantial progress on benchmarks. Board members are vital for facilitating and closing out investigations, including participating in site visits and approving investigative reports.

The Chemical Safety Board certainly faces challenges in recruiting and retaining qualified staff. The quality of investigations hinges on the ability of experts to conduct complete, unbiased investigations. These investigators should have solid backgrounds in chemical engineering or industrial process safety.

We understand it is difficult to compete with industry to find such specialized skill sets, but we are hopeful the Board is taking actions to recruit these kinds of candidates for vacant investigator positions, and we would like to see that progress continue.

I believe that Chemical Safety Board investigations can benefit industry, but I have ream concerns how this work is being conducted.

Due to the ongoing challenges with management over the years, investigation processes are somewhat unclear. The Board should establish unbiased criteria for selecting incidents to investigate as well as protocols to determine when to deploy an investigative team.

Uniform procedures would help to ensure objectivity and balance in the Board's investigative work, especially as staff turnovers occur.

Based on the data and analysis of an investigation, investigative reports usually include recommendations. Yet these recommendations have no legal standards. They lack cohesiveness from one report to the next. And an absence of standardized criteria allows for investigative reports to include agenda-setting recommendations that advance a particular viewpoint.

This is not the job of the Chemical Safety Board. The job of the Chemical Safety Board is to determine the root cause of an accident.

When recommendations are made, they should focus on measures to minimize the consequences of an accidental release. That is their purpose, as outlined in the statute. And recommendations should not need to be rewritten if new staff is placed on an investigation.

The Chemical Safety Board should not set expectations that are unreachable. It is not practicable to eliminate all chemical accidents, and the law does not mandate that.

Above all, the role of the Chemical Safety Board is to play fact finder in these incidents and to provide regulators with information they need to create policy. The Board should not seek out investigations or issue recommendations simply to spotlight disfavored technology or preferred new practices.

Finally, the Chemical Safety Board must focus on completing outstanding investigations as quickly as possible. To gain the trust of stakeholders and the public, the Board must conduct its operations in a timely and a transparent manner, and communications between the Chemical Safety Board and industry must improve to repair the reputation of the Board.

Today I hope we will focus on what the Chemical Safety Board can and should do in the upcoming months to close out high quality investigations in both an expeditious and an efficient manner. We need to hear from the Board on how they will improve internal processes and allocate resources judiciously to complete rigorous and instructive investigations.

I thank you for representing the Chemical Safety Board, Chair Lemos, and being here today, and we look forward to your testimony.

I yield back.

[The prepared statement of Mr. Griffith follows:]

PREPARED STATEMENT OF HON. H. MORGAN GRIFFITH

Thank you, Chair DeGette for holding this hearing.

The Chemical Safety Board (CSB) is an independent, non-regulatory federal agency. According to its enabling statute, the leading charge of the CSB is to investigate and determine the cause of any accidental release resulting in a fatality, serious injury or substantial property damages.¹

Unfortunately, though, the Board has historically been criticized for falling short of accomplishing this primary responsibility. CSB was created by the Clean Air Act Amendments of 1990, but it did not become operational until 1998. Since then, the CSB has been saddled with functioning challenges. Back in 2000, two and a half years after its inception, the Government Accountability Office (GAO) identified

¹ 42 United States Code (U.S.C.) §7412(r)(6).

management challenges and an investigative backlog. Now, 21 years later, we share in the same concerns as our colleagues of Congress' past.

Since May 1, 2020, CSB has carried on with only one of its five board seats filled. Chair Lemos, I understand that under your leadership you have been disadvantaged with a short staff and sharp learning curve. The vacancies in Board member positions impede the agency from making substantial progress on benchmarks. Board members are vital for facilitating and closing out investigations, such as participating in site visits and voting on investigative reports.

The CSB also faces challenges in recruiting and retaining qualified staff. The quality of investigations hinges on the expertise of investigators to conduct complete, unbiased investigations. These investigators should have solid backgrounds in chemical engineering or industrial process safety. We understand it is difficult to compete with the industry to find such a specialized skill set. But we are hopeful that CSB is taking actions to recruit these kinds of candidates for vacant investigator positions; and we would like to see that progress continue.

I believe CSB investigations can have a beneficial value to the industry, but I have real concerns with how this work is being conducted. Due to the ongoing challenges with management over the years, the Board has not created standardized processes for its investigations. The Board has finite resources and needs to establish unbiased criteria for selecting incidents to investigate and protocols to determine when to deploy an investigative team. The Board needs policies and procedures in place to ensure its objectivity and balance in its investigative work.

Based on the data and analysis of an investigation, investigative reports usually include recommendations. Yet, these recommendations have no legal criteria. They are lacking in cohesiveness from one report to the next. When recommendations favor a position, the report loses its independent, investigative aspects. A lack of standardized criteria allows for investigative reports to include agenda-setting recommendations that advance a viewpoint.

This is not the job of the CSB. The job of the CSB is to determine the root cause of an accident. Any periodic recommendations should suggest measures to minimize the consequences of an accidental release—their purpose as outlined in the statute. They should not need to be rewritten each time turnover places new staff on an investigation.

A “nation safe from chemical accidents” is a nation of closed chemical industrial plants. It is not practicable to eliminate all chemical accidents, the law doesn’t mandate it, and the CSB should not set expectations that are unreachable. First and foremost, the CSB must play the fact finder in these incidents. The Board should not seek out investigations or issue recommendations simply to spotlight disfavored technology or preferred, new process safety practices. What the Chemical Safety Board must do is focus on completing the outstanding investigations as soon as possible. To gain the trust of stakeholders and the public, the Board must remain transparent, and communications between CSB and industry should improve to repair the reputation of the Board. Today, I hope we will focus on what CSB can and should do in the upcoming months to close out high-quality investigations in both an expeditious and efficient way. We need to hear from the CSB on how they will improve internal processes and allocate resources judiciously to complete rigorous and instructive investigations. Thank you, Chair Lemos, for representing the CSB here today. We look forward to hearing your testimony. I yield back.

Ms. DEGETTE. I thank the gentleman.

The Chair now recognizes the chairman of the full committee, Mr. Pallone, for 5 minutes for an opening statement.

OPENING STATEMENT OF HON. FRANK PALLONE, JR., A REPRESENTATIVE IN CONGRESS FROM THE STATE OF NEW JERSEY

Mr. PALLONE. Thank you, Chairwoman DeGette.

Today we are conducting an oversight of a little-known but important Federal agency, the Chemical Safety Board. Coming from a State with a large number of industrial facilities, I have been involved with the CSB since its inception, helping to create and secure appropriations for the agency back in 1998.

Since that time, CSB has conducted vital investigations into industrial chemical accidents. Its mission is to find answers and provide recommendations to prevent future incidents.

For example, in my district, CSB investigated the 2005 Acetylene Service Company gas explosion in Perth Amboy, which killed three workers. From its findings, CSB made recommendations that addressed the dangers of flammable gas accumulation and how to prevent similar incidents in the future.

But despite its good work, CSB has faced numerous challenges in recent years. This past May the committee sent a bipartisan letter to CSB outlining our concerns, including a backlog in investigations, understaffing, and management challenges. And these concerns are shared by Members on both sides of the aisle, and I'm pleased that we're here today to continue this important bipartisan oversight.

One of my biggest concerns is that CSB has been slow to finalize its reports and provide critical safety recommendations in recent years.

For instance, CSB has yet to release its investigative report on the 2019 Philadelphia Energy Solutions refinery fire and explosions which involved the release of hydrofluoric acid, a highly toxic chemical.

Fortunately, because of built-in safety protocols at the plant and the heroic action of the workers, the worst potential outcomes for both the workers and the surrounding Pennsylvania and New Jersey communities were narrowly avoided.

It has been 2 years now since this incident, and CSB still has not released its investigative findings. It's imperative that we understand the root causes of these types of incidents so that we can safeguard workers, protect communities, and prevent future incidents.

And I look forward to hearing from Chairperson Lemos on her plan to close this and other investigations.

The CSB also plays an important strategic role in preventing future incidents in the face of climate change and extreme weather. Industrial facilities across the country are at increasing risk. You need to look no further than this most recent hurricane to see that.

Earlier this month, Hurricane Ida dumped record rainfall in New Jersey, flooding the Raritan River and devastating communities throughout the State. The Environmental Protection Agency is still assessing the damage at oil sites, chemical facilities, and Superfund sites, including one completely inundated Superfund site that was previously home to a large chemical plant.

Meanwhile, in Louisiana, 138 industrial facilities were in regions that fully or partially lost power due to Hurricane Ida. This is problematic considering that some of these facilities use electricity to contain hazardous materials. We don't know yet the full extent of chemical spills, oil leaks, and toxic air releases in the State.

And to its credit, CSB has warned industrial facilities about the safety hazards posed by extreme weather events, particularly hurricanes. For example, CSB highlighted the 2017 Arkema chemical plant fire near Houston, Texas, and found that the company was unprepared for the flooding levels experienced during Hurricane Harvey.

Houston Mayor Sylvester Turner testified before the subcommittee in March that the Houston region, which is home to countless petrochemical and other industrial facilities, experienced three 500-year floods in 3 years. And recent analysis shows that 2,500 chemical sites in the U.S. lie in moderate- to high-risk flood zones.

So there is no question that floods and other extreme weather events are getting worse. I look forward to hearing how the Chairperson is positioning the agency to address these growing strategic challenges.

In my view, getting the CSB back to functioning at the highest level is the first step, and the goal of today's hearing is to help get CSB back on track. And I hope that we can all come back together to revitalize this critical agency. It really is critical.

And I thank the chairperson for having this hearing, which I think is very important.

Thank you, Chairwoman DeGette.

[The prepared statement of Mr. Pallone follows:]

PREPARED STATEMENT OF HON. FRANK PALLONE, JR.

Today we are conducting oversight of a little known but important federal agency, the Chemical Safety Board (CSB).

Coming from a state with a large number of industrial facilities, I have been involved with the CSB since its inception, helping to create and secure appropriations for the agency back in 1998. Since that time, CSB has conducted vital investigations into industrial chemical accidents. Its mission is to find answers and provide recommendations to prevent future incidents.

For example, in my district, CSB investigated the 2005 Acetylene Service Company Gas Explosion in Perth Amboy which killed three workers. From its findings, CSB made recommendations that addressed the dangers of flammable gas accumulation and how to prevent similar incidents in the future.

Despite its good work, CSB has faced numerous challenges in recent years. This past May, the Committee sent a bipartisan letter to CSB outlining our concerns, including a backlog in investigations, understaffing, and management challenges. These concerns are shared by members on both sides of the aisle, and I am pleased that we are here today to continue this important bipartisan oversight.

One of my biggest concerns is that CSB has been slow to finalize its reports and provide critical safety recommendations in recent years. For instance, CSB has yet to release its investigative report on the 2019 Philadelphia Energy Solutions Refinery Fire and Explosions, which involved a release of hydrofluoric acid, a highly toxic chemical.

Fortunately, because of built-in safety protocols at the plant and the heroic actions of workers, the worst potential outcomes for both the workers and the surrounding Pennsylvania and New Jersey communities were narrowly avoided.

Yet it has been two years now since this incident and CSB still has not released its investigative findings. It is imperative that we understand the root causes of these types of incidents so that we can safeguard workers, protect communities, and prevent future incidents. I look forward to hearing from Chairperson Lemos on her plan to close this and other investigations.

CSB also plays an important strategic role in preventing future incidents in the face of climate change and extreme weather. Industrial facilities across the country are at increasing risk. You need to look no further than this most recent hurricane to see that.

Earlier this month, Hurricane Ida dumped record rainfall in New Jersey, flooding the Raritan River and devastating communities throughout the state. The Environmental Protection Agency is still assessing the damage at oil sites, chemical facilities, and Superfund sites, including one completely inundated Superfund site that was previously home to a large chemical plant.

Meanwhile, in Louisiana, 138 industrial facilities were in regions that fully or partially lost power due to Hurricane Ida. This is problematic considering that some of these facilities use electricity to contain hazardous materials. We do not yet know the full extent of chemical spills, oil leaks, and toxic air releases in the state.

To its credit, CSB has warned industrial facilities about the safety hazards posed by extreme weather events, particularly hurricanes. For example, CSB highlighted the 2017 Arkema Chemical Plant Fire near Houston, Texas, finding that the company was unprepared for the flooding levels experienced during Hurricane Harvey.

Houston Mayor Sylvester Turner testified before this Subcommittee in March that the Houston region, which is home to countless petrochemical and other industrial facilities, experienced three “500-year” floods in three years. And recent analysis shows that 2,500 chemical sites in the United States lie in moderate- to high-risk flood zones.

There is no question that floods and other extreme weather events are getting worse, and I look forward to hearing how the Chairperson is positioning the agency to address these growing strategic challenges.

In my view, getting the CSB back to functioning at the highest level is the first step. The goal of today’s hearing is to help get CSB back on track, and I hope that we can all come together to revitalize this critical agency.

Ms. DEGETTE. Thank you so much, Mr. Chairman.

The Chair will now recognize the ranking member of the full committee, Mrs. Rodgers, for 5 minutes for an opening statement.

**OPENING STATEMENT OF HON. CATHY McMORRIS RODGERS,
A REPRESENTATIVE IN CONGRESS FROM THE STATE OF
WASHINGTON**

Mrs. RODGERS. Good morning, Madam Chair. Thank you.

The chemical industry is one of the largest manufacturing sectors in the U.S., serving both a domestic and global marketplace. Our chemical industries help stimulate the economy by providing materials that we use in our everyday life.

But when major chemical accidents occur, it can result in devastating impacts, including death, serious injury, and significant property damage. These accidents pose a significant risk not only for workers but for surrounding communities.

In the Clean Air Act Amendments of 1990, Congress took a three-faceted approach to address the potential risk from these significant events, using the Occupational Safety and Health Administration, the Environmental Protection Agency, and the Chemical Safety Board.

To understand the role of the CSB, it is essential to understand the landscape in which the Board operates, including its main players and their designated roles.

The EPA has a primary role in addressing accidental releases. The 1990 amendments required the EPA to publish regulations and guidance for chemical accident prevention, preparedness, and response activities at facilities using substances that pose the greatest risk of harm from accidental releases. This act placed EPA in charge of requiring qualifying companies to develop their own risk management plans.

To protect workers from injury resulting from accidental releases, the 1990 amendments provided OSHA with standard setting and enforcement authority concerning process safety management. OSHA also provides training, outreach, education, and assistance in this area.

Unlike EPA and OSHA, the CSB by law is an independent, non-regulatory body established to provide objective knowledge. The Board’s primary purpose, as stated in the conference report, the Clean Air Act Amendments of 1990, is to investigate the root causes of accidental releases.

This is an important function. Without an independent investigative body searching for the answers, the industry will not have all the valuable information needed to reduce the risk of a chemical accident that causes substantial damage.

Unfortunately, though, the CSB has recently failed in fulfilling this mission. Right now the CSB has a backlog of 18 investigations, not including the 2 investigations that were closed last Friday, with the oldest open investigation from 2016.

Let me be clear: Waiting more than 5 years to close out these timely and important investigations simply is not acceptable. These investigations help companies understand what went wrong to help prevent future accidents. Something must be done to improve the investigative process and end the waiting game for owners and operators of these facilities.

I recognize the CSB must have all of its parts working to ensure functionality, otherwise it cannot address its investigative backlog and new investigations.

A key building block here is quality investigators. They must have chemical or process safety expertise to analyze accidental releases and discover their root causes.

It is also crucial that investigators have proper experience and the relevant scientific qualifications to make technically feasible and practical recommendations about how to reduce risks from chemical accidents.

The Board's statutory responsibilities include investigating chemical accidents and providing Congress, Federal, and State authorities with periodic reports that contain recommendations to improve chemical safety.

Unfortunately, CSB is not fulfilling those responsibilities. Importantly, the CSB should not be seeking ways to expand its jurisdiction into EPA's or OSHA's authorities.

The testimony mischaracterizes, quote, "safety recommendations" as part of a root cause investigation. While it seems reasonable CSB suggest steps to address a specific accident, its statute seems to suggest something different.

Under the law, "safe" is a feature that may be explicitly covered in CSB's periodic reports, not root cause investigations; moreover, the majority of the law's reference isn't to recommendations, suggested changes, and regulations.

The CSB should channel its resources into conducting investigations, especially looking for ways to meet the baseline. It should not use its investigations and the recommendations in its report to push certain agendas.

My hope is that the Board will resist the urge to become distracted with other priorities and focus on the main task at hand: demonstrating it can color inside the lines by focusing on investigations. Ultimately, workers, communities, and our manufacturing sector depend on it.

Thank you. I yield back.

[The prepared statement of Mrs. Rodgers follows:]

PREPARED STATEMENT OF HON. CATHY McMORRIS RODGERS
LANDSCAPE OF ACCIDENTAL RELEASES

The chemical industry is one of the largest manufacturing sectors in the U.S., serving both a domestic and global marketplace.

Our chemical industries help stimulate the economy by providing raw materials that we use in our everyday life.

But when major chemical accidents occur, they can result in devastating impacts including death, serious injury, and significant property damage.

These accidents pose a serious risk not only for workers, but surrounding communities.

In the Clean Air Act Amendments of 1990, Congress took a three-faceted approach to addressing the potential risks from these significant events, using the Occupational Safety and Health Administration, the Environmental Protection Agency, and the Chemical Safety Board.

To understand the role of the CSB, it is essential to understand the landscape in which this Board operates, including its main players and their designated roles.

EPA

The EPA has a primary role in addressing accidental releases.

The 1990 Amendments required the EPA to publish regulations and guidance for chemical accident prevention, preparedness, and response activities at facilities using substances that pose the greatest risk of harm from accidental releases.

It is also the EPA's role to build upon existing industrial codes and standards and require qualifying companies to develop their own Risk Management Program under Clean Air Act.

OSHA

To protect workers from injury resulting from accidental releases, the 1990 Amendments also provided OSHA (Oh-sha) with standard setting and enforcement authority concerning process safety management.

OSHA also provides training, outreach, education, and assistance in this area.

PURPOSE OF CSB

Unlike, EPA and OSHA, the CSB, by law, is an independent, non-regulatory body established to provide objective knowledge.

The Board's principal role is to *investigate* the root causes of accidental releases.

Without an independent, investigative body searching for the answers, the industry will not have all the valuable information needed to reduce the risk of a chemical accident.

Unfortunately, though, CSB has recently failed in fulfilling its mission.

Right now, the CSB has a backlog of 18 investigations, not including the two investigations were closed last Friday, with the oldest open investigation from 2016.

Let me be clear: waiting more than 5 years to close out these timely and important investigations simply is not acceptable.

These investigations help companies understand what went wrong to help prevent future accidents,

Something must be done to improve the investigative process and end the waiting game for owners and operators of these facilities.

FUNDAMENTALS OF THE CSB

The CSB must have all its working parts to ensure functionality. Otherwise, CSB will be unable to address its investigative backlog, while also addressing new investigations. A key building block of CSB work is quality investigators. They must have chemical or process safety expertise to analyze accidental releases and discover their root causes.

It is crucial that investigators have proper experience and the relevant scientific qualifications to make technically feasible and practical recommendations about how to reduce risks from chemical accidents.

EXPANDING AUTHORITY

The Board's statutory responsibilities include investigating chemical accidents and providing Congress, federal, and state authorities with periodic reports that contain recommendations to improve chemical safety.

Unfortunately, the CSB is not fulfilling those responsibilities.

Importantly, the CSB should not be seeking ways to expand its jurisdiction into EPA's or OSHA's authorities. The Board conflates "safety recommendations" as part of a root cause investigation. "Safe" is a feature that may be covered in CSB's periodic reports, not root cause investigations. The CSB should channel its resources into conducting investigations, especially looking for ways to meet the baseline.

Similarly, the CSB should remain independent in its work. It should not use the findings and recommendations in its reports to push certain agendas.

My hope is the Board will resist the urge to become distracted with other priorities outside its statutory authority and focus on the main task at hand—demonstrating it can color inside the lines. Ultimately, workers, communities, and our manufacturing sector depend on it.

Thank you, I yield back.

Ms. DEGETTE. I thank the gentlelady.

The Chair now asks unanimous consent that the Members' written opening statements be made part of the record. And without objection, so ordered.

I now want to introduce our witness for today's hearing, the Honorable Katherine A. Lemos—am I pronouncing that correctly? “Lemm-ohs.” OK, thank you.

Dr. LEMOS. “Lemm-ohs” is correct.

Ms. DEGETTE. Chairperson and Chief Executive Officer, U.S. Chemical Safety and Hazard Investigation Board.

We really want to thank you for appearing today. And I know you are aware that the committee is holding an investigative hearing, and when we do so, we have a practice of taking the testimony under oath.

Do you have any objections to testifying under oath?

Dr. LEMOS. No, ma'am.

Ms. DEGETTE. Let the record reflect the witness responded no.

The Chair then advises you that under the rules of the House and the rules of the committee, you are entitled to be accompanied by counsel.

Do you desire to be accompanied by counsel today?

Dr. LEMOS. No, ma'am.

Ms. DEGETTE. Let the record reflect the witness has responded no.

And so, if you would, would you please rise and raise your right hand so you may be sworn in?

[Witness sworn.]

Ms. DEGETTE. And let the record reflect the witness responded affirmatively.

And you are now under oath and subject to the penalties set forth in Title 18, Section 1001 of the United States Code.

And at this time the Chair will now recognize you for 5 minutes to provide your opening statement.

Before we begin, I want to explain the lighting system. In front of you are a series of lights. The light will initially be green. Then it turns yellow when you have 1 minute remaining. We would ask that you try to wrap up at that time, start wrapping up. And the light turns red when your time expires.

And so, Chairperson Lemos, you are now recognized for 5 minutes.

Just move it a little closer, I think.

**STATEMENT OF KATHERINE A. LEMOS, Ph.D., CHAIRPERSON
AND CHIEF EXECUTIVE OFFICER, U.S. CHEMICAL SAFETY
AND HAZARD INVESTIGATION BOARD**

Dr. LEMOS. Thank you. Good morning. I'm Dr. Katherine Lemos, and I'm proud to serve as the Chairperson and CEO of the United States Chemical Safety and Hazard Investigation Board, or CSB.

As you know, and as you stated, our mission is to “drive chemical safety change through independent investigations to protect people and the environment.” This is a critically important mission and one to which we are fully committed.

We achieve this mission through three strategic goals: to advocate for safety, to prevent the recurrence of significant chemical incidents, and to maintain an engaged and high-performing workforce.

I would like to address each of these.

First, our strategic goal to advocate for safety, which involves achieving change through recommendations, outreach, and education.

In total, CSB has released 860 safety recommendations; 742 of those are closed. In fiscal year 2021, CSB has issued 19 new safety recommendations, in comparison to zero for fiscal year 2020.

A major focus of CSB in fiscal year 2021 has been advancing and closing previously issued recommendations, because this is a key driver to realizing positive safety change.

In fiscal year 2021, CSB advanced 46 recommendations; 28 closed successfully. In comparison, in fiscal year 2020, CSB advanced only 15 recommendations; 4 closed successfully.

Another strategic goal is to prevent recurrence of significant chemical incidents through independent investigations.

Over the years, CSB deployed to 146 incidents. Even through the pandemic, following our COVID Safety Plan, which we implemented very early on in my tenure, CSB has continued to efficiently deploy to meet our mission.

In fiscal year 2021, CSB made a commitment to increased transparency, and we have demonstrated this through initiating live Board meetings upon completion of our investigations.

In fiscal year 2021, utilizing this new transparency process, we completed three investigations: Aghorn, AB Specialty Silicones, and Evergreen Packaging. This compares to only one completed investigation in fiscal year 2020.

We are working diligently to complete the remaining 18 open investigations. Due to enhanced internal processes developed this year, we are poised to complete investigations more efficiently moving forward.

Our third goal, it is to create and maintain an engaged, high-performing workforce. After accepting this role last year, I was shocked to learn of how low the staff numbers actually were.

Our agency is critical to the safety and the well-being of our workers, the public, the communities, and our environment.

To address this, we have prioritized hiring a robust, diverse, and engaged Mission Product Team. And by year end fiscal year 2023, our plan is to have an all-time high number of investigation and technical specialists on the Mission Product Team.

We have also increased technical contractor support, with expertise in specialized fields such as metallurgy, blast modeling, and equipment testing.

To create more stability at the agency, we are hiring key support staff and leadership at the career level.

Finally, CSB looks forward to onboarding new Board members. These appointees are critical to our mission. They bring unique subject matter expertise and additional perspectives that helps to ensure the integrity of our products while enhancing our advocacy.

Ultimately, we are committed to the CSB mission, we are committed to its growth, and we are committed to ensure that we can respond and react properly to catastrophic chemical events.

Thank you, and I look forward to your questions.

[The prepared statement of Dr. Lemos follows:]

Good Morning!

I am Dr. Katherine Lemos, and I'm proud to serve as Chairperson and CEO of the United States Chemical Safety and Hazard Investigations Board, or CSB.

As you know, our mission is to "*drive chemical safety change through independent investigations to protect people and the environment.*" Our vision is "*a nation safe from chemical disasters.*"

This is a critically important mission, to which we are fully committed.

We achieve this mission through three strategic goals: To advocate for safety, to prevent the recurrence of significant chemical incidents, and to maintain an engaged and high-performing workforce.

I'd like to address each of these.

First: Our strategic goal to advocate for safety, which involves achieving change through recommendations, outreach, and education.

In total, CSB has released 860 safety recommendations with 742 being closed. These recommendations have been issued to federal, state and local regulators and entities, as well as associations and private industry.

In FY21, CSB has issued 19 new safety recommendations, in comparison to zero for FY20.

In addition, a major focus of CSB in FY21 has been advancing and closing *previously* issued recommendations. This is a key driver to realizing positive safety change.

In FY21, CSB advanced 46 recommendations, 28 were closed *successfully*. In FY20, CSB advanced *only* 15 recommendations, four were closed *successfully*.

This increase in productivity shows our commitment to our mission.

Another strategic goal is to prevent recurrence of significant chemical incidents through independent investigations.

Over the years, CSB deployed to 146 incidents. These investigations meet our mandate to report the findings and analysis, to determine the probable cause and issue safety recommendations.

Even through the pandemic, following our COVID Safety Plan, CSB has continued to efficiently deploy to meet our mission.

We are adopting a more agile investigative model such that our approach to investigations and products better aligns with safety needs. As CSB executed in earlier years, we are implementing a range of investigative products that can reach the community in a timely manner. The CSB's Incident Reporting System is a benefit to our capturing more data on events that meet the criteria, and more efficiently.

In FY21, CSB made a commitment to increased transparency. We have demonstrated this through initiating *live* Board Meetings upon completion of investigations. This provides the public with insight into the staff's investigative process, the facts and analysis, conclusions, and recommendations. Further, the Board's deliberation occurs in real time.

In FY21, utilizing this new transparency process, we completed three investigations: Aghom, AB Specialty Silicones and Evergreen Packaging. This compares to only one completed investigation in FY20.

Most investigations are featured on our YouTube safety video series, which addresses our mandate for outreach and education.

We are working diligently to complete the remaining 18 open investigations, while continuing to monitor incidents for additional investigations as they arise. Due to enhanced and consistent internal processes developed this year, we are poised to complete investigations more efficiently moving forward.

To accomplish the goals of safety through investigations and advocacy, **our third goal is to create and maintain an engaged, high-performing workforce.**

After accepting this role last year, I was shocked to learn of the low staff numbers. Our agency is critical to the safety and well-being of our workers, the public, communities, and environment.

To address this, we have prioritized hiring a robust, diverse, and engaged Mission Product Team. Right now, we are completing the hiring of four investigators, and will follow shortly by bringing on additional hires to round out the technical team. By year end FY23, our plan is to have an all-time high number of investigation and technical specialists on the Mission Product Team.

We also have increased technical contractor support, with expertise in specialized fields, such as metallurgy, blast modeling, and equipment testing. This enhances our capability, agility and reach without the need for employing all subject matter experts in-house.

To create more stability at the Agency, we are hiring key support staff and leadership at the career level. These include a staff Managing Director, a General Counsel, and a Chief Information Officer. This is in addition to onboarding a newly hired Human Resources Director and Procurement Manager.

Finally, CSB looks forward to onboarding new Presidentially appointed and Senate confirmed Board Members. These appointees are critical to our mission, bringing unique subject matter expertise and perspectives. This will help to ensure the integrity of our products while enhancing our advocacy.

Ultimately, we are committed to the CSB mission, we are committed to its growth, and we are committed to ensure that we can respond and react properly to catastrophic chemical events.

Thank you for the opportunity to speak. I'm pleased to answer any questions.

Ms. DEGETTE. Thank you so much, Chairperson Lemos.

The Chair now recognizes herself for 5 minutes for questioning.

And as I said in the opening statement, today's discussion is really focused on where the agency is right now and what we need for it to do for it to function going forward.

And so I just want to ask you a series of questions, Chairperson, and if you can, if you can answer as briefly as you can, that would help because, of course, we each only have 5 minutes to question.

Now, as we all talked about on both sides of the aisle, CSB investigates some of the most consequential industrial accidents in the United States. Is that correct?

Dr. LEMOS. Yes, ma'am.

Ms. DEGETTE. And the purpose of those investigations is to identify the root causes and then make corresponding safety recommendations to prevent future incidents. Isn't that correct?

Dr. LEMOS. Yes, ma'am.

Ms. DEGETTE. So conducting these investigations and then informing the public of its findings is really the bread and butter of CSB's work, and I know that you agree with that.

So let's talk for a minute about the investigation backlog, which I know you are striving mightily to reduce. But as many of us on both sides of the aisle said, there are 18 open investigations, some which go back to 2018.

So my first question to you, Chairperson Lemos, is, do you currently have a strategic plan and scheduled timeline to close each of the 18 open investigations?

Chairperson, do you have a plan to close each of those 18 investigations?

Dr. LEMOS. Yes, Chairwoman, we have a plan. And I'm looking for my specific notes on the data for that right now.

Ms. DEGETTE. OK.

Dr. LEMOS. So hold just a moment.

Ms. DEGETTE. The ranking member points out the plan is with the slide.

Do you have that there? You know what, what I'm going to—OK. Do you have it now?

Can you turn your mike on, please?

Dr. LEMOS. So sorry. I actually have two different aspects.

First of all, our top priority is to focus on the mission.

Ms. DEGETTE. Yes, OK. But do you have a plan for closing those 18 open investigations? Yes or no?

Dr. LEMOS. Yes.

Ms. DEGETTE. And can you give me a copy of that plan?

Dr. LEMOS. We can provide a copy of the plan, as we have discussed or as we have exchanged information with your staff—

Ms. DEGETTE. OK. If you can give me a copy of that plan, then I will put it into the record.

And the other point that I want to ask in my time remaining, that's transparency of the agency. CSB's regulations require that each quarterly public meeting include a review of the Board of the schedule for completion of all open investigations.

Now, I understand that the schedule has not always been made public in the past. So will you commit to providing this schedule

of completion for all open investigations at your quarterly public meetings going forward?

Dr. LEMOS. So, first of all, I would like to address one of the questions you asked before.

Ms. DEGETTE. OK. But, first of all—and I will have time for you to do that, but let's answer this question.

Can you provide the schedule of completion for all open investigations at your quarterly meetings? So if you have a quarterly meeting, you can say which ones you are planning to close.

Dr. LEMOS. I can tell you right now which four are the next to come up.

Ms. DEGETTE. OK. But do you plan to release those at your quarterly meetings?

Dr. LEMOS. Yes, we plan to release those.

Ms. DEGETTE. OK.

Dr. LEMOS. And we have actually recently, in the last two meetings, said which ones will be up for finalization.

Ms. DEGETTE. Super. Thank you.

And then you can go back to your—I've got 45 seconds, so you can answer my previous question.

Dr. LEMOS. Understand. Yes, we have a plan. We have got early phase, mid-phase, and late phase.

Ms. DEGETTE. Super.

Dr. LEMOS. And I can tell you the four right now that are up for legal review, which is the final phase before the Board receives them—

Ms. DEGETTE. Great.

Dr. LEMOS [continuing]. Are Sunoco, Didion, BioLab, and Loy Lange. And I would give you all of the details on that except you have limited time.

Ms. DEGETTE. That's OK. We have a lot of Members that can ask.

And then what about the rest of the investigations? Do you have a plan for completion of those?

Dr. LEMOS. Yes, we do, and we will provide that to you.

Ms. DEGETTE. I so appreciate it. Thanks.

And, again, I really appreciate the yeoman's work that you are doing in a very tough situation. But we all agree on the mission here. We just have to get this agency working to protect the safety of our constituents.

With that, I will yield to the ranking member 5 minutes for his questioning.

Mr. GRIFFITH. Thank you, Madam Chair. I appreciate it.

According to its statutory authority, the Chemical Safety Board can incorporate recommendation measures into investigative reports. But I have been told investigators sometimes may write investigative reports that incorporate their own background or biases when developing recommendations.

If they are doing so, that might challenge the independent investigatory jurisdiction of the Chemical Safety Board to determine the root cause of an accident.

Does the Board have standardized requirements for its recommendations?

Dr. LEMOS. The Board has standardized requirements which are in the process of being codified, and that is exactly what we're trying to address in our internal process improvement.

Mr. GRIFFITH. And when do you anticipate that that will be codified? I know you are the only member of the Board, so it makes it more difficult, but when do you anticipate that would be completed?

Dr. LEMOS. Within months.

Mr. GRIFFITH. So if we check back in 6 months, it either ought to be done or pretty darn close? Is that what you're saying?

Dr. LEMOS. It should be prior to that. We actually have drafts written, and it would be nice to have other Board members to weigh in on that as well.

Mr. GRIFFITH. Thank you. I don't disagree with that.

Dr. LEMOS. OK.

Mr. GRIFFITH. And do appreciate that you have been carrying this load yourself. So I don't want to underscore that with any of my—

Dr. LEMOS. We've already drafted it.

Mr. GRIFFITH. I don't want to undermine that or neglect to say that, because I'm going to ask some tough questions. I understand you have got some handicaps.

Do you think it would be a good idea to establish legal criteria? So you're going to codify these standardized requirements, but do you think it would be a good idea to establish legal criteria so we can have a greater standardization among recommendations and reduce the chance of agenda setting through recommendations?

Dr. LEMOS. So everything that we process currently under my tenure undergoes legal review, every recommendation, every report, every safety bulletin, every safety alert. That was not the case prior.

Mr. GRIFFITH. OK. So I guess that's, in essence, a yes.

Dr. LEMOS. Yes.

Mr. GRIFFITH. All right.

In your message in "The Chairman's FY 2020 Chemical Safety Board Impact Report," you state, "The U.S. Chemical Safety Board has successfully carried out its core mission work in fiscal year 2020 despite an unprecedented impact from COVID-19."

The Board's mission is to "drive chemical safety change through independent investigations to protect people and the environment." But that language is not actually found in the statute.

Is the Chemical Safety Board's mission different from its statutory requirements?

Dr. LEMOS. Per my understanding, they are exactly the same.

Mr. GRIFFITH. OK. We might disagree on that. We can talk about that later.

In determining the success of carrying out its mission for a fiscal year, does the Board factor in how many investigations were closed during that year?

Dr. LEMOS. Can you please repeat that question one more time?

Mr. GRIFFITH. Yes, ma'am. In determining the success of carrying out its mission for a fiscal year, does the Board factor in how many investigations were closed during that year?

Dr. LEMOS. In the past, performance has not been a measure that has been held accountable, that the Board has been accountable to, and I've instituted that. We have included that information in budget requests. But that is something that I am working strongly to institute.

Mr. GRIFFITH. So that should be a part of the determination as to whether or not you've had a successful year?

Dr. LEMOS. Absolutely.

Mr. GRIFFITH. OK.

The impact report also states that a top priority for the Board is to continue delivering high-quality safety products to the community. Can you explain what "high-quality" means in this case?

Dr. LEMOS. This means they're all cause, they investigate to the degree that the safety impact is warranted, and we apply our resources accordingly, and that the outcome is sound.

Mr. GRIFFITH. All right. What were prior Chemical Safety Board products lacking that caused you to establish different standards to improve the quality of the work product?

Dr. LEMOS. As mentioned, there have been widely varying product types and product integrity levels. Having come from the NTSB and having been at the FAA receiving those recommendations and reports, it's really important that you have consistency in your logic flow from the facts to the findings to the conclusions to the recommendations. And that is something that we have been working on vehemently this past 6 months to a year.

Mr. GRIFFITH. All right. Thank you very much.

I yield back.

Dr. LEMOS. Thank you.

Ms. DEGETTE. I thank the gentleman.

The Chair now recognizes the chairman of the full committee, Mr. Pallone, for 5 minutes.

Mr. PALLONE. Thank you, Chairwoman DeGette.

I wanted to focus on CSB's strategic role in addressing climate change risk to industrial facilities.

As you know, thousands of our chemical and petrochemical facilities are in low-lying areas that are vulnerable to flooding. Just this past month, Hurricane Ida caused a serious risk of power outages and flooding at a number of facilities in my State, Louisiana, and New York.

And I'm pleased that CSB's guidance and recommendations began to address climate change and extreme weather following Hurricane Harvey and the resulting Arkema chemical plant fire in 2017, but we have to do more. Many facilities seem to be caught off guard by catastrophic events driven by climate change.

So let me ask the Chairperson: What more should industrial facilities be doing to prepare for a changing climate, in your opinion?

Dr. LEMOS. So just to repeat, what more should facilities—

Mr. PALLONE. What more should you think that industrial facilities should be doing to prepare for a changing climate? What are your suggestions?

Dr. LEMOS. So based on the Arkema report, we recommended that CCPS put out comprehensive guidance, which is how to prepare for extreme weather events. As we have seen with Ida, behind me, Managing Director David LaCerte is from Louisiana, Baton

Rouge, lived through that. And a lot of our—we anticipate seeing more and more of these events, so it's going to become even more of a challenge for chemical industry moving forward.

So we have interacted with GAO in extreme weather, in making sure that we collect the information and trending and tracking and which incidents in the past and the future have occurred due to extreme weather to try to find some causal factors.

But in terms of what plants or facilities can be doing, following guidance that is out there to ensure that they are not just preparing for today's historical, but tomorrow's, based on recent history, and predicted future level of extreme events.

Mr. PALLONE. Well, I appreciate that you are, you know, putting out recommendations, and hopefully there will be more. But I did want to ask, I want to make sure that CSB, that its Board members, staff, and specialists are relying on sound science.

Let me just ask you, Chairperson, has the Board identified a set of scientific resources that it draws upon to help assess the impacts of increased sea levels, rise in storm surge, storm intensity, or other extreme weather events? Have, you know, what are the scientific resources that you draw upon?

Dr. LEMOS. So I'm glad that you mentioned that the CSB is an independent and scientifically based agency.

We, as we mentioned to the GAO—and a report is forthcoming in a few months—we focus on the extreme weather events. And it's more responsive.

There are other agencies that are responsible for predicting what might occur. What we need to do is ensure facility resiliency and ensure that there is guidance that is adequate to help facilities prepare for these extreme weather events.

Mr. PALLONE. But, I mean, have you identified a set of scientific resources that you draw upon to assess the impacts of this climate change?

I mean, there is that, and then there is also, like, the challenge with staffing. So, you know, having the right mix of experts to do these assessments.

So I guess I'll just repeat, if you've identified a set of scientific resources to draw upon or you're considering bringing on additional investigators to examine the nexus between climate change and industrial preparedness?

Dr. LEMOS. That's a wonderful point. And in terms of staffing and our ability to conduct scientific studies, first of all, we need to partner with our Federal agencies as our enabling legislation encourages, because at this point we don't have the staff to conduct that level of safety study and analysis.

So we need to rely on a range of our Federal partners and outside entities to be able to identify what could be done and what should be done in the chemical community.

Mr. PALLONE. I mean, I know you can't lobby us for additional resources, but it sounds like you do need additional resources. So I'll take that to mean you do need additional resources and you would like to see additional resources for more staffing.

Dr. LEMOS. Um, I'm certainly not lobbying. I'm telling you that there's only so much that we can do with the resources that we have. And I would—we would appreciate fully funding what we

have requested. I believe that we're in an upward trend. We have hired more staff. They are joining. We're likely to get more Board members. I believe that that's an upward trend, and we're going to maintain that staff and engage them.

But to be able to conduct all of the activities in our enabling legislation, which is to conduct safety studies in addition to investigations—although investigations is the primary—we would need that additional staff to be able to carry that out effectively and fully.

Mr. PALLONE. Thank you. Thank you so much.

Thank you, Madam Chair.

Dr. LEMOS. You're welcome.

Ms. DEGETTE. I thank the gentleman.

The Chair now recognizes Mrs. McMorris Rodgers for 5 minutes.

Mrs. RODGERS. Thank you, Madam Chair.

I believe it's important that we focus on the mission of this Board, the Chemical Safety Board. And before we start talking about more people and more resources, let's make sure that the Board is actually even fulfilling the mission as currently stated in the statute.

And I think it's clear that Members on both sides of the aisle have concerns about the effectiveness and the outcomes of the Board with the current staff and current levels of funding.

On the CSB website, it states that the investigative process generally takes 6 to 12 months to complete, and a draft report is then submitted to the Board for consideration. Reports may be adopted through a written vote of the Board or in a formal public meeting during the incident site or in Washington, DC.

Dr. Lemos, can you walk us through the investigative process currently and if we can expect new investigations to be completed within the stated timeline of 6 to 12 months?

Dr. LEMOS. I think, to answer your question, 6 to 12 months, if you look at our history, that's not the timeline that things have been closing. But the community and our agency is accountable to actually meet a more rigorous timeline.

If you look at our counterpart, the NTSB, it's about 2½ years for a major investigation. Part of the problem or part of the challenge is that our agency has moved to an all-or-nothing full investigation, 160-page report, or not at all.

And part of what I'm trying to do is return to what the CSB used to do and what the NTSB does and provide a range of products such that we can get out immediate safety recommendations and products within that timeframe.

Mrs. RODGERS. So do you believe that the 6 to 12 months is the right timeline? Or, if it's not the right timeline, then do you think Congress needs to evaluate the timeliness of CSB's work?

Dr. LEMOS. So I believe that the enabling legislation says 1 year. One year is very aggressive, especially for a major investigation. I believe that less than that is very reasonable for a minor investigation.

Mrs. RODGERS. The oldest investigation in the backlog is from 2016. Do you think that the recommendations for that report, assuming the investigation is closed at some point, if implemented, would be outdated or carry less weight as these recommendations would have a year or so after the incident?

Dr. LEMOS. There's no doubt that the delay has a negative impact on the safety.

Mrs. RODGERS. Thank you.

Dr. LEMOS. But we do have the ability to issue urgent safety recommendations, if identified, any phase of the investigation.

Mrs. RODGERS. OK. And "The Chairman's FY 2020 Chemical Safety Board Impact Report" states that one investigation was closed. If there's a backlog of 18 investigations, does it mean it would take 18 years to address only the backlog? Or do you have a plan for an accelerated process for backlogged investigations?

Dr. LEMOS. Thank you for that question.

We absolutely have a plan for accelerated closure. We've already executed on that. We did three, we completed three this year versus one last year. There were different reasons for that.

And I've already committed to six in the coming year. And we've already identified four that will be coming to the Board before the end of the year or early in the next year.

I would like to have other Board members to vote on those with me. But that would close the three oldest, plus one of the newer.

Mrs. RODGERS. The statutory purpose of the CSB in the Clean Air Act is to investigate root causes of accidental releases.

Have you discussed providing alternative types of work product, besides an investigative report, that identifies the root cause in a condensed bulletin report form?

Dr. LEMOS. I'm so glad you mentioned that, because that's exactly what the CSB used to do and what the NTSB does.

And so, by providing a range of products, a safety bulletin, a safety case, one of the most impactful reports I've ever read was from 1998, two events in 8 pages in a safety bulletin unrelated, but they both—unrelated industries—but they both dealt with management of change.

Those were out, I believe, within 6 to 8 months. That is what we need to be able to accomplish.

Mrs. RODGERS. Thank you.

I yield back, Madam Chair.

Ms. DEGETTE. I thank the gentlelady.

The Chair now recognizes Miss Rice for 5 minutes.

Miss RICE. Thank you, Madam Chair.

Ms. Lemos, if we could just go down, I'd just like to talk about the nuts and bolts of the agency.

Ms. DEGETTE. Miss Rice, you're fading in and out.

Miss RICE. OK. Can you hear me now?

Ms. DEGETTE. Yes.

Miss RICE. OK. Great.

Ms. Lemos, I'd like to get to the nuts and bolts of the purpose for this agency and remind everyone that, while it was created in 1990 and authorized by the Clean Air Act Amendments of 1990, it wasn't funded until 1998 as a result of a series of industrial accidents led to a renewed impetus to secure appropriations for the organization.

So now it's my understanding there are presently four vacancies on a five-member Board, and President Biden has made three nominations that are sitting in the Senate waiting for confirmation.

So I'm sure that that is providing an enormous amount of difficulty for you to actually carry out the mission of this organization since you're the only Board member out of a five-member Board.

And I would ask—I'm sure that I will get the agreement of my Republican colleagues on this committee, to ask their Republican colleagues in the Senate to move these nominations as quickly as possible so that this Board can be fully constituted and get going.

So that's number one.

Number two, I understand that there are or were 40 full-time employees, 20 of whom were investigators. I believe that there are unfilled positions for those investigators.

Dr. Lemos, what I would like to ask you is, who else makes up your staff? I mean, it's all well and good to talk about the outcome of certain investigations, but if we don't have an agency that is fully staffed with the appropriate personnel and a specific mission, then the result of investigations are surely going to be delayed and questioned.

So I just want to get into the nuts and bolts of who else are your employees, other than investigators?

And I also want to ask you, if you could—I know this is a very long question, but I'm just trying to understand the makeup here: Is there a specific enough description of what the responsibilities and duties are of each individual Board member?

So first tell me who your employees are, and then speak about the specific responsibilities of the Board, if you would.

Dr. LEMOS. Thank you for that question.

So the first part of that is who our employees are, and I'll talk about the Mission Product Team. I have trouble seeing you on the screen, so I'll just look up here at the Chair.

So the Mission Product Team is comprised of investigators who actually go out to the sites, do the followup, do the investigation. They oversee the testing and whatnot.

We have also on the Mission Product Team recommendations staff that are assigned to help identify the gaps in guidance, regulation, procedures, policies that are related to the contributing factor.

So those are important elements of that team, as well as the recommendations staff and advocacy team to provide materials.

In terms of support staff, that includes human resources, general counsel, contracting, all of the other things—administration—all of the other things—IT—that are required to support and feed our investigative and Mission Product Team.

Miss RICE. Can I just interrupt you for 1 second? Are up to—do you have the staff that you need? Yes or no?

Dr. LEMOS. Not yet, but we are getting there.

So we just hired a contracting manager, and we just hired a new human resources director. We will be hiring a career managing director as well as replacing our general counsel.

Miss RICE. And the responsibility of the Board again—I'm running out of time—could you just tell me, do you feel that the mission, the responsibility of the individual Board members, is specific, or does it need to be more—better defined?

Dr. LEMOS. So I believe you've asked whether or not—so what the roles and responsibilities of the Board members are and whether that needs to be better defined. Is that correct?

Miss RICE. Yes.

Dr. LEMOS. OK. So Board Order 28, that discussion, specifically discusses the roles and responsibilities of Board members versus vis-a-vis the staff.

So as the OIG reported out, mentioned in several management challenges reports, we needed to settle this. So we have in writing and already passed roles and responsibilities that are clear so that Board members can focus on their mission.

And what their mission is in technical reviews, they review reports, they review recommendations, they vote. They engage in stakeholder collaboration and community outreach.

They are our technical—they lend their technical expertise and perspectives to the products, and they also assist with the strategy and the mission of the agency.

Ms. DEGETTE. Thank you so much. The gentlelady's time has expired.

Staff has asked me, Chairperson Lemos, if you can mute your microphone when you're not talking. I guess it's causing feedback.

And the Chair will now next recognize Mr. Burgess for 5 minutes.

Mr. BURGESS. I thank the Chair. And I thank our witness for being here with us this morning.

I apologize for not being there in person. We have a Rules Committee hearing going on at the same time. But through the miracle of the hybrid hearing, I'm able to participate in this one.

And it was important to me because a little bit south of the district that I represent in Texas, back in 2013, a fertilizer plant blew up in the town of West, Texas.

[Audio malfunction.]

Ms. DEGETTE. Dr. Burgess, we've lost your audio.

We've lost Mr. Burgess. So we're going to go to Mr. McKinley, and if Mr. Burgess can get back on, then we will have him after Ms. Schakowsky.

So, Mr. McKinley, you're recognized for 5 minutes.

We apologize profusely, Chairperson Lemos.

Mr. MCKINLEY. Thank you, Madam Chairman.

If we could start, I would like to enter into the record a statement from the American Chemistry and the American Fuel and Petrochemical Manufacturers in support of the CSB.

Ms. DEGETTE. Without objection.

[The information appears at the conclusion of the hearing.]

Mr. MCKINLEY. Dr. Lemos, the role of the CSB is to investigate—I've heard all the testimony before—investigate accidents and determine the conditions and circumstances that led up to those accidents and identify the cause or causes so that similar events might be prevented.

For the record, is that a fair assessment?

Dr. LEMOS. Yes, sir.

Mr. MCKINLEY. OK. But according to the CSB's website, its mission is to, quote, "drive chemical safety change through inde-

pendent investigations.” That’s worded slightly differently than the statute.

And the phrase, quote, “drive chemical safety change” seems to suggest some form of an attempt to regulate chemical safety, which we’ve heard testimony that’s really the responsibility of the EPA. The CSB should only be making recommendations to them.

Now, the Senate Environmental and Public Works Committee recently considered, as we’ve talked about, the three Democrat nominees to fill the vacancies at the CSB.

These chairmen do have different backgrounds. One of them, however, has focused her work on “advocating for regulations,” close quote, and in a recently deleted Tweet targeted the Trump EPA and her inability to work in a technical and in an unbiased manner.

So given the nominees’ background and the extensive backlog for accident investigations and staffing shortages, and with the full awareness that you’re under oath, can you ensure us that the committee—that the CSB will not attempt to take on the role of a regulatory agency and remain focused on its statutory mission of independent investigations and recommendations?

Dr. LEMOS. Yes, sir. Our mission and our mandate is to be free from political interference and to not regulate.

Now, the gaps identify recommendations and safety gaps, but they have to—we are not a regulator.

Mr. MCKINLEY. Were you concerned that this nominee has expressed such strong opinions about wanting to regulate? Was that a concern to you?

Dr. LEMOS. I would prefer not to express my opinion regarding statements of nominees that have not been confirmed. But I can commit to you that I will maintain what I committed to the Senate, that we are a nonpolitical agency, we’re not regulatory, and our job is to be safety focused and to call out the safety gaps.

Mr. MCKINLEY. Thank you.

I yield back the balance of my time.

Ms. DEGETTE. I thank the gentleman.

The Chair now recognizes Ms. Schakowsky for 5 minutes.

Ms. SCHAKOWSKY. Thank you, Madam Chair.

And thank you, Ms. Lemos. And I want to thank you, begin by thanking you—some positive news—that the Chemical Safety Board approved its investigation report of a May 2019 AB Specialty Silicones explosion that took place in my State of Illinois.

It was very serious. The incident killed four workers and caused serious damage to the town of Waukegan, Illinois.

So I’m very grateful for that. But I want to talk about the abilities that you have to answer the enormous issues that face you.

So exactly how many or approximately how many a year of these incident reports do you get?

Dr. LEMOS. Are you asking how many incident reports meet our reporting criteria?

Ms. SCHAKOWSKY. I mean when someone calls up and says there has been a problem, how many of those?

Dr. LEMOS. Twenty thousand to 30,000 per year.

Ms. SCHAKOWSKY. Twenty thousand or 30,000 per year. But we know—in fact, in your testimony you said you were shocked to

learn about the low staffing numbers. We've been talking about that. I understand that about 30 to 40 percent of the investigative positions were vacant this year.

And so my understanding is that you also noted in your testimony that by year's end of this year that you plan to have an all-time high number of investigators and technical specialists, et cetera, on the Mission Product Teams. And I wonder if we're going to be able to get there. And what is your plan to get there?

Dr. LEMOS. Thank you for that question, because more staff are certainly needed to address more of these events.

So the all-time low in staffing in recent years was in 2019, which was eight investigators. And currently we have 14. Two new persons just joined us this past week.

So we're on track by the end of fiscal year 2023, so the end of the next fiscal year, with your support and appropriations, to have an all-time high across the Mission Product Team, and that includes the recommendations staff and advocacy, technical writers, and others that are required to put together that full report in an efficient manner and with integrity.

Ms. SCHAKOWSKY. So how many more people does that mean? How many more people do you have to have at that point?

Dr. LEMOS. I believe—well, so on the Mission Product Team or the entire staff?

Ms. SCHAKOWSKY. Well, the entire staff. You can divide it any way you like.

Dr. LEMOS. I believe the entire staff, we just submitted for 61 positions by the end of fiscal year 2023. My belief, that's low.

Ms. SCHAKOWSKY. Is there any way to speed this up so that we can get even more sooner?

Dr. LEMOS. So there's a scaling issue as well. Currently most of our investigators are 12 months to 18 months new to the agency, despite them having a lot of experience. So that's why we've been investing in the processes so much to ensure a consistency.

Is there a way to speed it up? We can ramp up a plan to do that. If we were able to and funded to do so, absolutely.

Ms. SCHAKOWSKY. Let me ask you this. You said you get tens of thousands now of calls about toxic or accidents that need to be investigated.

How do you make the decision of what comes first, especially with this current shortage and limitation on the staff? What's the process?

Dr. LEMOS. So that's a good question.

So of the 20,000 to 30,000 reports per year that we receive, I'll just say from the reporting event, since the reporting criteria last year, March of last year at the end, 88 actually qualified.

So we determine that based on the criteria of fatality, injuries, environmental impact. There is whether or not it's a critical driver on our list, and the potential safety impact that it has.

However, our attempt to take a range approach of our products will allow us to address all of those 88.

Ms. SCHAKOWSKY. Twenty thousand to 30,000, and you're saying that 88 actually qualified? That's it? None of those others your agency can address in any way? That's the max that gets qualified?

Dr. LEMOS. So it's important—well, it's important for us to be able to track and trend incidents and to be able to identify high risk areas.

But 20,000 to 30,000 incidents, which may not meet our reporting criteria but are reported to us, based on what we request, are important, and I do know that the regulatory agencies also track these events.

Ms. SCHAKOWSKY. OK. I'm out of time. I appreciate that. Thank you.

And I yield back.

Ms. DEGETTE. I thank the gentlelady.

The Chair now recognizes Mr. Long for 5 minutes.

Mr. LONG. Thank you, Madam Chair.

And, Ms. Lemos, are desk investigations different from regular investigations? And if so, how?

Dr. LEMOS. So I'll first take your question regarding desk investigations. Desk launches are what I'm referring to, and that's actually not a formal name. We don't have that. We're still exploring the model and the method by which to have a more agile approach to addressing the range of events that we see.

Mr. LONG. OK. And why might an accidental release not warrant a deployment of investigators to that site?

Dr. LEMOS. We have to prioritize the limited resources. We can't deploy to every single accident, nor is it necessary to deploy personally to each and every incident.

Mr. LONG. Given a backlog of 18 investigations and new incidents occurring to investigate or need to be investigated, can work be done at the desk to determine whether or not to deploy to an ordinance, allocate resources that might be impactful for investigations to the industry?

Dr. LEMOS. So we're maintaining an agile approach moving forward. Again, we have to codify it with the staff. I would like other Board members to weigh in as well.

But with the staff we are taking this approach that, if you're familiar with the NTSB, who we were crafted after, they complete hundreds of accidents through the help of their Federal counterparts. And in my confirmation hearing and process, it was encouraged upon me to reconsider the degree to which we utilize our Federal counterparts to help us carry out our investigations.

Mr. LONG. And what's your personal role in closing out investigative reports? And how will this shift or change if the three CSB Board nominees are confirmed by the Senate?

Dr. LEMOS. Just to make sure I heard the question, if they are not confirmed?

Mr. LONG. Pardon?

Dr. LEMOS. Just to confirm the question, you are asking what is going to be the impact if they are not confirmed?

Mr. LONG. No, if they are confirmed.

Dr. LEMOS. We will continue forward just as we are now with closing investigations. There will be some training time and some education when you have three new Board members at the same time. Obviously, that's a challenge to take on. But we will have increased advocacy and community engagement, and that's critical to the success of our agency.

Mr. LONG. OK. So I'm going to repeat the question to make sure that you got it and I got it, and that might have been the way that you answered.

But my question was, what is your personal role in closing out investigative reports, and how will this shift if the three CSB Board nominees are confirmed by the Senate? What's your personal role in that?

Dr. LEMOS. My personal role, the difference when there's just a Board of one versus a Board of four, correct?

Mr. LONG. Uh-huh.

Dr. LEMOS. I will have other perspectives. We will debate the matters in a live forum. We will have other perspectives. That's going to be the difference in closing those out.

Mr. LONG. OK. I'm having a little trouble with the sound system in here picking up everything you're saying, but I appreciate it.

The CSB needs the five Board members mandated in your enabling statute, and the Board members should have a broad range of applicable experience and expertise, including experience in the operations, processes, and procedures typically applicable in commercial chemical facilities.

If you could create the most well-qualified Board, what applicable experience and expertise do you seek out in those Board members?

Dr. LEMOS. So the question is—and I'm trying to speak louder and into the mike, I moved it. If you can hear me?

Mr. LONG. It's part on my end, but that's fine. I've got an issue, so that's fine.

Dr. LEMOS. Excellent.

So the type of experience that is mentioned in our enabling legislation really just describes the range: safety management systems, human factors, toxicology, those familiar with chemicals. It takes a range of backgrounds, and it's very rare for someone to have all of those together.

Mr. LONG. OK. Thank you. And I appreciate your being here today.

And I yield back, Madam Chair.

Ms. DEGETTE. I thank the gentleman.

The Chair now recognizes Mr. Tonko for 5 minutes.

Mr. TONKO. Thank you, Madam Chair.

And certainly as the subcommittee chair on the standing committee of Environment and Climate Change, I have great interest in the operational qualities of CSB.

So despite its significant impact on the safety of workers and communities, CSB has a history of governance challenges. Specifically, Board infighting and long stretches without steady leadership have undermined the agency, to say the least, over the years.

These Board-level issues have led to significant challenges for staff at the agency, including high attrition, low morale, and difficulty attracting new hires. As we have heard today, three new Board members will hopefully soon be joining this agency.

So, Chairperson Lemos, I know you would like to prevent history from repeating itself. So how do you intend to integrate and involve these new members so that the agency does not fall into that power-sharing squabbling that has hamstrung it in the past?

Dr. LEMOS. Thank you for that question, which I believe is how do I intend to prevent a repeat of what has been occurring for—since the inception, really, of the CSB.

I met the CSB at a time when it seemed to be more stable, around the 2005–2006 timeframe, and appreciated how they worked as colleagues together.

So the first thing that I did when I joined the agency was realize that we have a pressing need to address the OIG's management challenges, and that was my top priority last year, and we finalized that, which was to provide the structure for the Board members to know what their roles and responsibilities are, to provide them the support staff, and to help them execute that. That is what I did.

Mr. TONKO. Thank you.

And, Chairperson Lemos, I assume you have examined some of the root causes of the friction that has undermined the functionality in the past.

So can you share some of your insights into why the Board has had these management problems in the past and what you intend to do so that these mistakes are not repeated under your leadership, particularly given that new Board members will be arriving and arriving soon?

Dr. LEMOS. Well, it's possible that memorializing these changes in CFRs, such as the NTSB has, would help.

In our benchmarking we use the DNFSB, we use the NTSB and other agencies in terms of how we structure decision making and budget making. Perhaps codifying that would allow for these Board orders, which are internal policy, to settle them.

Mr. TONKO. Thank you.

Earlier this year, you approved a revised Board Order 28, which set new terms for Board member responsibilities, budgeting power, and other related areas.

While I understand that this new Board order was intended to respond to some of the criticisms of CSB identified by EPA's Office of Inspector General, some of your critics have called this a power grab because the action was undertaken during a, I quote, "quorum of one."

Will you revisit Board Order 28 once the new members are on Board?

Dr. LEMOS. So the question is whether we will revisit Board Order 28 once new Board members join.

I want to establish that our Board orders, as I found them when I joined, were not in alignment with our enabling legislation. They were not empowering the Board members to actually carry out their functions and staff to carry out their functions.

So what I did, if someone says it's a power grab, the changes in Board Order 28 have nothing to do with a quorum of one. It's simply allowing the Board to carry out their functions successfully and staff to carry out, with responsibility, their functions.

Mr. TONKO. OK. So then let me ask this: Will you commit to ensuring that the new members are empowered to both carry out their duties and revise Board orders by a majority vote?

Dr. LEMOS. Absolutely. Board orders should be a democratic process.

Mr. TONKO. So that you would commit to ensuring that they're all recognized and having their input?

Dr. LEMOS. All Board orders should be in compliance with the law and should be voted on to the extent that we have the room, right?

Mr. TONKO. Thank you. Yes, thank you.

Look, we all want to avoid the issues that have prevented CSB from performing effectively in the past. So I do look forward to seeing the agency get back to excellence.

And with that, Madam Chair, I yield back.

Ms. DEGETTE. I thank the gentleman.

The Chair now announces that the committee will be in recess for 10 minutes.

[Recess.]

Ms. DEGETTE. The committee will come to order.

And the Chair now will note that Mr. Burgess has solved his technology problems by appearing in person, and she will recognize him for 5 minutes.

Mr. BURGESS. I thank the Chair.

Thank you, Dr. Lemos, for being here with us today. I will tell you, I have been looking forward to your appearance today because the experience I had with—it's not in my district, but just outside my district in the town of West, Texas, several years ago. I was interested in your responses to Mr. Tonko's questions, because that was largely the type of question I had.

When I visited West, Texas, shortly after the accident, I mean, you name the Federal agency and they were on site. So you had the FBI, you had DOJ, you had ATF, you had—I didn't see Customs and Border Protection, but I suspect they were there somewhere. FEMA was very much in evidence.

And all of these agencies collected at this Emergency Operations Center, and there's no Chemical Safety Board. And yet they were there, but they didn't interact with the other agency personnel who were there doing the investigation and taking—getting the evidence.

In fact, when FEMA took me on an automobile trip through the neighborhoods that were affected, and seeing all the houses in an unusual type of situation because the roofs were lifted off the houses and they came right back down so there was no vertical—it was only the vertical displacement, no horizontal displacement. But, obviously, the houses were destroyed in that process.

The Chemical Safety Board was not part of that, but they were in a trailing car, like several cars behind, and I never understood quite why, why we wouldn't all be working to the same end.

Presumably, if the FBI finds something interesting, then the Chemical Safety Board might find it interesting as well, or the Chemical Safety Board might have a question that would be important for the law enforcement branch of the Federal Government to know.

So can you help me there? Are you more aligned now where there's less likely to be that silo? Because it was almost like there was a physical silo around the Chemical Safety Board that day.

Dr. LEMOS. Thank you for that question.

The siloing, just to repeat, the siloing, why was the CSB not working intimately with the other Federal agencies and local, and why was their presence not noticed? And that is something we have been focusing on by building stronger coalitions with our Federal counterparts and local.

I did not understand that as well. When I joined the agency, it was very foreign to me as a process. So I can't explain why that had occurred in the past.

But I can tell you that moving forward we have already started to interact much more closely, not just with our Congress and the local representatives, the local responders, immediately to ensure. And OSHA and EPA, we have contacts we started last year to say who's the regional, who's the Federal, here are the phone numbers. And that's the type of connection that we are building moving forward.

Mr. BURGESS. One of our counsels here on the subcommittee—I don't think he is here today—but referred to the Chemical Safety Board, when I asked him a question about it many, many years ago, he said it's like the NTSB for chemical accidents.

So you have the National Transportation Safety Board if there's an airline accident or train accident. The Chemical Safety Board performs that same function if there's a chemical incident, which seemed like a good idea.

But if indeed patterned after the NTSB, they probably work pretty well with their counterparts in law enforcement, and in the case of air traffic, with the air traffic controllers and everyone who would be involved in providing them the data. It seems like that's a good model to follow.

Dr. LEMOS. Absolutely, the NTSB is a good model to follow in that respect.

One difference I will point out: In the chemical industry, it's much more distributed in terms of the regulation oversight than the aviation industry is.

So if you look at the other transportation domains, you will see some of the same fragmentation and extra effort required to pull those entities together. Like a bridge collapse or a pipeline explosion, you're going to have other local entities.

But it's a great model. We need to have that presence. We need to have that collaboration and strengthen it.

Mr. BURGESS. Well, I appreciate your testimony today and your service to the Safety Board.

And I yield back.

Ms. DEGETTE. I thank the gentleman.

The Chair now recognizes Mr. Peters for 5 minutes.

Mr. PETERS. Thank you, Madam Chair.

Some of our colleagues, we're hearing them say that the CSB should not be using its scarce staff resources to make recommendations or issue regulations to protect public health and public welfare. But that's a key component of the CSB's mission, and preventing future incidents has to remain a top priority.

Prior to my time in public office, I worked at EPA for a short time on toxic substances and later spent 15 years as an environmental lawyer. I've got a keen interest in CSB's role in updating EPA's Risk Management Plan, or RMP, requirements.

Under the RMP, known also as the Chemical Disaster Rule, industrial facilities are required to follow rules that help prevent accidental releases of chemicals that can cause death, injury, property or environmental damage, or require evacuation of surrounding communities.

Now, EPA is now in the process of updating the RMP rule, and given CSB's years of identifying the root causes of exactly the kinds of chemical disasters the RPM is intended to prevent, I think CSB has an important role to play.

Chair Lemos, I understand you sent a letter to EPA in July with high-level recommendations for how to update the RMP. Are you preparing to give more detailed recommendations during the public comment period on the proposed RMP rule?

Dr. LEMOS. I want to make sure I hear you correctly because it's a little bit muffled. But you're asking me if I'm prepared to make more specific recommendations to RMP than we have in the past? I know that we—

Mr. PETERS. Yes, as part of the public comment period.

Dr. LEMOS. So we were engaged in the listening sessions—I'm hoping I'm understanding your question correctly—but we were engaged in the listening sessions over the past several months. I understand that OSHA is also going to have similar listening sessions for PSM. We reiterated three specific recommendations that have been open with regards to RMP for a long time and that are critical: two on chemical reactives and one on inherent safety design in the PSM process.

Mr. PETERS. OK. Among other things, I understand that you recommended that EPA consider mandating evaluations for inherent safety, which I gather means implementing inherently safer product technologies and practices that permanently eliminate or reduce potential hazards; for example, minimizing the amount of chemicals on a site. And I imagine that CSB has a long list of inherently safer technologies and practices.

Are you prepared to provide all that information to the EPA?

Dr. LEMOS. Absolutely. In fact, in preparation for the letter to the EPA regarding inherent safety, which we reiterated—and I'm a strong believer in the life cycle and design in inherent safety at all levels of the process—I counted how many—or I worked with our staff to count how many recommendations we've made to entities, industry, any recommendation that was related to inherent safety, and that sort of data I think would be very useful and powerful.

Mr. PETERS. Great. So closely related to the RMP program is the Occupational Safety and Health Administration's, OSHA's, Process Safety Management program. That PSM program is similarly focused on preventing the mishandling or release of highly hazardous chemicals. To my knowledge, OSHA has not announced its intention to update its program the way EPA is updating its RPM program.

In the absence of an active effort by an agency to update a program like this, what do you see is the advocacy role for CSB to push for regulatory changes that could reduce the risk of chemical disasters for workers?

Dr. LEMOS. So some of the efforts—you're asking about specifics for PSM that we have been recommending, just to confirm?

Mr. PETERS. Yes. How would you want to effect the PSM, right.

Dr. LEMOS. So we, last year, myself and some of the new staff met with OSHA and EPA to speak about both of their programs and the most highly prioritized recommendations. After the explosion in Beirut, we also reiterated some of our recommendations for PSM that came out of the West, Texas, event.

So that is the PSM modernization, and to take into account similar things that we're asking for EPA to account for as well, to include reactives.

So we will do a comprehensive analysis. We have an advocacy team. And we will also look at what are the gaps in the PSM. We already have an analysis on that. I don't have it in front of me, but I would be absolutely pleased to provide it to you.

Mr. PETERS. I would love if you could provide it to the subcommittee. I just urge you to work closely with EPA as they update the rule and make sure they have all of the relevant information to prevent future chemical incidents.

And my time has expired. I yield back. Thank you.

Ms. DEGETTE. I surely thank the vice chair.

I'm now pleased to recognize Mr. Palmer for 5 minutes.

Mr. PALMER. Thank you, Madam Chairman.

Ms. Lemos, my colleague Mr. Peters was talking about the EPA, and I want to ask some questions related to that in the context of who investigates the investigators.

The EPA was involved in a couple of major chemical spills, the Gold King Mine in Colorado—which, frankly, the remedy that should have been afforded to the people impacted by that hasn't yet been afforded them. But there was another EPA-caused spill in Georgia along the—in Greensboro, Georgia, that EPA I think attempted to cover up.

Does the Chemical Safety Board have a role or even a responsibility to engage in the investigations of spills like that where it's caused by another Government agency?

Dr. LEMOS. So I want to make sure I understand your question. I'm having a little difficulty hearing.

Mr. PALMER. Yes, it was really long.

Dr. LEMOS. So you're asking if the CSB has a role in investigating accidents—and I didn't hear the rest of the sentence. Sorry.

Mr. PALMER. Accidents caused by another Federal agency. In this case, the EPA, they caused the Gold King Mine spill that dumped millions of gallons of toxic water and polluted zinc and other chemicals, cadmium, lead, down the Animas River, that impacted Indian reservations, impacted everything pretty much downstream.

A few weeks after that they were involved in another spill, in Greensboro, Georgia, which my understanding is they attempted to cover that up. It was just a few weeks, like I say, after the Gold King Mine spill.

So who investigates the investigators? Would the Chemical Safety Board have a role in going in to investigate something like that?

Dr. LEMOS. So I don't know all the particulars for the events that you're describing, but if it meets our rules for deployment or in our

scope, in the CSB scope, it is an inadvertent release that has significant impact for——

Mr. PALMER. Reserving my time.

Ms. DEGETTE. Would the gentlelady suspend?

Please, all Members online, please make sure you're on mute.

The gentleman may continue.

Mr. PALMER. Thank you, Madam Chairman.

Well——

Dr. LEMOS. I can answer.

So the Chemical Safety Board has the responsibility to investigate. That doesn't mean the EPA does not investigate as well, similar to the NTSB and the FAA. I worked on both sides of the fence.

But the CSB is an independent investigation that is not focused on the oversight or punitive element. It is to determine the root cause, as we've heard many of you say today.

Mr. PALMER. Well, in the case of the EPA, they denied responsibility I think for the Greensboro spill. And I would just think that the Chemical Safety Board would have some responsibility. It might be a jurisdictional issue that would be argued.

But sometimes it might not be a bad idea for those who are responsible for that, who normally would be investigating, to be at least under the—in some way under the investigative powers of another agency.

Dr. LEMOS. So there are some circumstances—and we're facing some of those today—where some parts of the EPA have jurisdiction because it could be of a criminal nature. Just as if there is a malicious intent, ATF would take over.

So I'm not positive, but there are some circumstances where we defer to other Federal agencies in those circumstances. We still continue to investigate.

Mr. PALMER. Well, I know you're a Board of one right now, but I think you may have been on the Oversight Committee when we were looking into the employee dissatisfaction, what was going on with the Board, and the retaliation against whistleblowers.

Are there any plans in place to improve employee satisfaction, to protect whistleblowers and others who work at the Chemical Safety Board?

Dr. LEMOS. Absolutely. In terms of employee engagement and maintaining, I believe that having career staff stability, stability at the Board member level, stability at the leadership level, and commitment for funding from Congress is super important to helping staff members feel appreciated for their contributions and feel that their progress is meaningful to the world.

Mr. PALMER. I thank you for your answers.

Madam Chairman, in regard to my line of questioning about who investigates the investigators, I do think it's something that this committee might ought to consider looking into, considering the fact that I'm not sure that the remedies that were expected as a result of the Gold King Mine spill have been implemented to the satisfaction of the people who were impacted by it.

And with that, I yield back.

Ms. DEGETTE. I thank the gentleman for the suggestion, and Mr. Griffith and I will discuss that.

The Chair now recognizes Ms. Schrier for 5 minutes.

Ms. SCHRIER. Thank you, Madam Chair.

And thank you for being here today, Chair Lemos.

CSB has a long history of working with other agencies to conduct its investigations, as we've been discussing today. In fact the EPA, OSHA, Department of Homeland Security, DHS, all have some jurisdiction over chemical facility management. So it's critical that CSB maintain productive relationships with those agencies.

However, CSB's role to investigate the root causes of these incidents is unique and distinct from the roles of EPA, OSHA, and others. So while there may be opportunities for efficiencies in working together, I am concerned that CSB's understaffing has led to an overreliance on findings from other agencies.

So could I ask you, Chair Lemos, how do you see CSB's role versus that of the EPA, OSHA, and DHS when it comes to industrial safety?

Dr. LEMOS. The roles are very different. Working together and collecting information, each of those investigations are for different purposes, and the role of the Chemical Safety Board is an independent, nonregulatory investigation.

This model works very well at the NTSB, where you take the information from the company, from the different Federal agencies. You don't rely on them for their conclusions. You take the facts, and with those facts, we come up with our own findings and conclusions.

Ms. SCHRIER. And do you feel like you have the appropriate support to take that information and come up with independent findings? And I understand the fact finding together, but I would imagine you have slightly different angles. Can you talk about that a little bit, EPA versus OSHA versus DHS?

Dr. LEMOS. I don't know why I'm having a little bit of a challenge hearing. So the question is, can I talk about the difference in the perspective of the findings for those three different agencies?

Ms. SCHRIER. Well, so if you go in together and you gather facts together, do you feel like—you're the only person on the Board—do you feel like you have enough support to independently come up with the recommendations?

I mean, I guess here is how I would state that question: Like, how do you balance the efficiencies of working together, gathering that data together, and working with other agencies while also ensuring your own independence? And do you have enough support to do that?

Dr. LEMOS. We certainly are asking for more support. That's the theme that we gather today. I hope that everybody gathers that we need more support. OSHA and EPA certainly have far more staff to carry out their work.

We exchange information. If we collect information, for example, and interview together, the information that we ask is not used for punitive purposes. So it has to be collected separately by those other agencies.

Our staff is incredibly knowledgeable. They are able to sift through the facts and the circumstances, and they continue to ask additional questions. So it's not relying on any one source of report

when we are working together and collaborating with our Federal counterparts, despite the fact that they're regulators.

Ms. SCHRIER. Just because of my time constraints, also I just wanted to touch on the importance of public comment. And I wondered if you could comment on reinstating public comments, because we have heard that, according to the July 2021 stakeholder letter, that United Steelworkers and other organizations did not have opportunities to provide public comment at two recent meetings, March 5 and April 2.

Can you touch on that, tell us if that is true or not? Are you providing notice of your meetings? And if not, why not? And also, can you commit to providing a 60-day notice for when your meetings are coming up so that there is transparency and public comment?

Dr. LEMOS. Yes. So I'll be efficient.

Two things. One is the notice. Sixty days is in our internal policies. I believe it's 2 days or 10 days, I think 2 days in our CFRs. We have been doing a better job at providing advance notice.

In terms of public comment, it's important, and, in fact, even during public meetings, we have been receiving public comments and responding to them, just not in the verbal format. We have emails when we respond to their questions.

So I think it's really important to distinguish between a public meeting where we discuss Board issues, business issues, which is unheard of at the NTSB, frankly, and Board meetings where the public can have insight, similar to this meeting where the public can view and have insight into the process but not be weighing in.

So I do believe in enhanced transparency, and that's what our public meetings are doing. We have been putting all of our public meeting notes and comments on the website, the transcripts in verbatim, my specific notes that we speak.

So we will be addressing that, and I believe that additional Board members will help with that community engagement and public voice.

Ms. SCHRIER. Thank you.

I yield back.

Ms. DEGETTE. I thank the gentlelady.

The Chair now recognizes Mr. Dunn for 5 minutes

Mr. DUNN. Thank you, Madam Chair.

I yield my time to the ranking member, the Honorable Morgan Griffith.

Ms. DEGETTE. The gentleman is recognized.

Mr. GRIFFITH. I appreciate that. Thank you. I appreciate it.

Oh, let's go ahead and finish up that last question. Part of the question dealt with steelworkers, and you dealt with all kinds of things, but you didn't talk about that specific situation.

Could you—because I think my colleague would like to know—can you specifically reference the complaint by the steelworkers that they didn't have an opportunity to be heard?

Dr. LEMOS. So I have had numerous engagements with the USW via stakeholder meetings on video as well as through letter. I haven't heard a complaint specifically, only from the USW, that they were not allowed to comment.

Mr. GRIFFITH. I suspect there will probably be some questions, followup, because it wasn't my area that I had prepared for, but

I suspect there will be some questions after this hearing in regard to that matter.

Let me move on. At the beginning of the questions, you were asked by Chair DeGette about your plans for removing the backlog and addressing incoming cases. You promised to submit that plan for the record.

I'm curious about this plan. Did you approve some of it? Did you approve all of it? What was your role in preparing this plan to deal with the backlog?

Dr. LEMOS. Thank you.

I have been pushing for a resource allocated plan since I joined the agency, and because it's important and because the community, not just our leaders here, but the community and the stakeholders deserve our accountability to the plan.

Mr. GRIFFITH. So as a part of that then, you did approve this plan that's coming forward?

Dr. LEMOS. Yes, sir.

Mr. GRIFFITH. And can you share with us any of the details you remember of the plan that you approved?

Dr. LEMOS. Well, I can tell you the four that are coming up for closure, and I've tasked this plan and am working that with my managing director, who is sitting right behind me, who will be presenting that to you all.

Mr. GRIFFITH. OK. I appreciate that.

Regarding extreme weather, setting aside that the statute is agnostic about causes that you investigate, how much is the climate extreme weather work you told Chair Pallone that you're doing—how much is that taking away from the investigations that you need to do and to complete?

Dr. LEMOS. So today we've only had one completed investigation that was attributed to extreme weather, which was Arkema. There are other investigations in the past that we could go back and find. We have one other currently which was due to extreme weather that's under investigation. That's BioLab.

So as they come up, we're going to attend to them. So I can't say that we're—we're not taking a—time away from any other investigation.

Mr. GRIFFITH. OK. So I guess my—and maybe I misunderstood, That's certainly possible, which is why we have hearings to try to sort this stuff out.

My understanding was that you all were also working on some things that people ought to be doing, recommendations to prevent extreme weather having consequences in the future for other facilities. Was I correct in that?

Dr. LEMOS. So there are no staff that are currently tasked to studying extreme weather or any other specific thing because—

Mr. GRIFFITH. Except as an outgrowth of the two investigations you just mentioned?

Dr. LEMOS. I'm sorry?

Mr. GRIFFITH. Except as an outgrowth of the two investigations you just mentioned?

Dr. LEMOS. Correct, correct, and our GAO report which we had—the GAO report which we had to engage with, and their report is

coming out, and that involves extreme weather, climate change, and the EPA and the CSB and a number of other agencies.

Mr. Griffith. OK. I just wanted to get that clarified.

With that, I will yield back to my colleague, Dr. Dunn.

Mr. DUNN. Madam Chair, I have no further questions. I yield back the remainder of my time.

Ms. DEGETTE. I thank the gentleman.

The Chair now recognizes Mr. Joyce for 5 minutes.

Mr. JOYCE. Thank you, Chair DeGette, for having this subcommittee hearing today.

And thank you to Chair Lemos for appearing today.

Government entities, like the U.S. Chemical Safety and Hazard Investigation Board, keep our constituents safe from industrial and environmental accidents. That is why it is so critical for the missions of these institutions to be well defined so that they can execute the tasks that are given to them.

Chair Lemos, the CSB's mission—and I'm quoting from your mission statement—"is to drive chemical safety change through independent investigations to protect people and the environment." That's a fairly broad mission statement.

What is CSB's process for writing a mission statement?

Dr. LEMOS. So I believe that mission statement, along with the strategy, was crafted by a previous Board member, and that this goes back to the process of the mission, the vision, and the strategy. Then that is up for renewal, in which case I sincerely hope to have other Board members to work through that with me.

I can't tell you the genesis of that particular mission statement, but I will work on that, and I can get back to you.

Mr. JOYCE. Thank you. I would appreciate the followup in that regard.

My question—my second question for you, is that the government works best when it is small and yet effective. Attempts at government expansion or overreach inevitably end up in waste, low productivity, and failure of the original mission, even an ill-defined mission.

I want to be clear that CSB's mission is critical, which is why it needs to be narrowly and clearly defined to give the best chance for success.

If President Biden's three new CSB member nominees are confirmed, how do you see them changing the mission statement, as you just addressed, on the CSB-based backgrounds of the three new appointees?

Dr. LEMOS. I can't speak to how they will influence the mission statement, in which ways, because I haven't personally met them, but I can tell you that I will ensure a nonpolitical process and ensure that the mission is scoped appropriately, because already now, as you know, we need to prioritize which events we focus on.

Mr. JOYCE. Couldn't it be problematic that maintaining this wide-ranging mission statement could be interpreted by different members, depending on what the new member's agenda might be?

Dr. LEMOS. It's possible, yes.

Mr. JOYCE. Do you think it is imperative that a new mission statement is crafted, a concise and narrowly focused mission statement?

Dr. LEMOS. I believe that we need to be in alignment with our enabling legislation, which is pretty broad. I believe that through specifically scoping and detailing what we will prioritize will help the entire community.

Mr. JOYCE. On that note, the Senate legislative history states: "The principal role of the new Chemical Safety Board is to investigate accidents to determine the conditions and the circumstances that led up to the event and to identify the cause or causes so that similar events might be prevented."

Do you believe that the CSB is effectively carrying out that role currently?

Dr. LEMOS. I believe that we are working towards fulfilling our mission, but that we have a long way to go to fulfill that completely.

Mr. JOYCE. I concur. It seems like there is a long way to go.

And we've already heard in this hearing about the backlog of accident investigations and the continued need for them going forward.

Would the CSB, as it is currently proposed to be made up, be effective for those responsibilities along with the current obligations?

Dr. LEMOS. So the question is, if we staffed up according to the staffing plan, which we will provide, will we be effective in meeting our mission?

Mr. JOYCE. Yes.

Dr. LEMOS. Yes.

Mr. JOYCE. Thank you, Chair DeGette. I think this is an important hearing. I thank you for convening it. I yield my remaining time.

Ms. DEGETTE. I thank the gentleman, and I thank all of the Members.

This now concludes the hearing. And I want to thank—again, I want to thank the witnesses for participating in this hearing.

I want to remind Members that, pursuant to committee rules, you have 10 business days to submit additional questions for the record to be answered by witnesses who appeared before the subcommittee.

And I'll ask the witness to respond promptly to any questions should you receive any and also to the commitment you made to submit the various plans.

We want to insert in the record by unanimous consent a letter from the ACC and AFPM to me and to Representative Griffith dated September 28, 2021; a letter from Representative Pallone and others to the CSB dated May 20, 2021; a letter to the CSB to Representative Pallone and others dated June 10, 2021; and a letter from 22 labor, environmental, community, and scientific organizations to CSB dated July 8, 2021. This is the letter several Members referred to as the steelworkers letter.

And without objection, so ordered.

[The information appears at the conclusion of the hearing.]

Ms. DEGETTE. Chairperson Lemos, the letter from the 22 organizations is comprehensive in their recommendations to many of the challenges you're facing at CSB. Does the agency plan to provide a formal response to that letter?

Dr. LEMOS. Yes. Thank you for clarifying that point, because that certainly helps the questions.

We have already responded to them, but we would not respond prior to our continuing our conversation with you and being here today. Knowing that this was up and coming, we feel like that you are our priority to communicate with.

But we already have responded and engaged back. In fact, we had engagements with them several times this spring and last fall. So I—we told them that we looked forward to continued engagement with them.

Ms. DEGETTE. Super. I would ask if you could, please, Chairperson Lemos, if you do respond in writing to the organizations, if you could provide a copy to this committee, that would help us in our investigation.

Dr. LEMOS. Absolutely. We can immediately provide you a copy of our response after we receive the letter and any details moving forward.

Ms. DEGETTE. We appreciate that. And, again, we appreciate your agency's continued cooperation. As you can see from both sides of the dais, we're all eager to help you in fulfilling your important public safety mission.

And with that, this hearing is adjourned.

[Whereupon, at 12:37 p.m., the subcommittee was adjourned.]

[Material submitted for inclusion in the record follows:]

FRANK PALLONE, JR., NEW JERSEY
CHAIRMAN

CATHY McMORRIS RODGERS, WASHINGTON
RANKING MEMBER

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Minority (202) 225-3641

May 20, 2021

The Honorable Katherine A. Lemos, Ph.D.
Chairman and CEO
U.S. Chemical Safety and Hazard Investigation Board
1750 Pennsylvania Avenue, NW, Suite 910
Washington, DC 20006

Dear Dr. Lemos:

Pursuant to Rules X and XI of the U.S. House of Representatives, we write to request information regarding ongoing management, resource, and personnel challenges at the U.S. Chemical Safety and Hazard Investigation Board (CSB). The CSB serves a critical mission to investigate independently the causes of chemical incidents and make recommendations to reduce the risk of future accidents.¹ Given the Committee's longstanding interest in ensuring that the CSB is effective, we are concerned about recent reports indicating that both persistent and emergent issues may be undermining the CSB's ability to protect American communities and workers.²

Over its history, the CSB has deployed to over 130 chemical incidents and issued hundreds of safety recommendations, leading to progress across many different industries.³ Although the CSB was authorized by the Clean Air Act Amendments of 1990, it was not funded

¹ 42 U.S.C. § 7412(r)(6).

² See, e.g., U.S. Environmental Protection Agency, Office of the Inspector General, *Fiscal Year 2020 U.S. Chemical Safety and Hazard Investigation Board Management Challenges* (Jul. 6, 2020) (20-N-0218); *Understaffed Chemical Safety Board Ripe for Revamp as Probes Lag*, Bloomberg Law (Mar. 15, 2021) (reporting on concerns about the CSB's lack of sufficient numbers of investigators, board member support, and backlog in investigations).

³ U.S. Chemical Safety and Hazard Investigation Board, Home Page (www.csb.gov) (accessed Feb. 10, 2021).

The Honorable Katherine A. Lemos, Ph.D.

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until 1998.⁴ In the decades since, management problems and resource limitations have compromised the effectiveness of the CSB. These challenges have included insufficient staffing for investigations, investigation backlogs, tensions among board members, and employee dissatisfaction.⁵

We are concerned that some of these challenges continue to plague the CSB, and also that new issues have emerged. For example, the CSB has had perennial, and apparently ongoing, difficulties in hiring qualified chemical safety investigators.⁶ According to the CSB's 2019 Federal Employment Viewpoint Survey, nearly half of the employees surveyed believed that the CSB was unable to recruit staff with the appropriate skills for the job.⁷ While several new investigators were hired in 2020, today there are as few as 12 investigators, a significant drop from the 20 investigators previously at the CSB.⁸

Additionally, the CSB has failed to address its investigations backlog. Currently, the CSB has 20 open investigations, including one from 2016.⁹ And at least two investigations were put on hold in 2020 due to staffing constraints.¹⁰ We are concerned a mounting backlog could

⁴ U.S. Chemical Safety and Hazard Investigation Board, *Fact Sheet* (www.csb.gov/assets/1/6/csb_fact_sheet.pdf) (accessed Feb. 22, 2021).

⁵ See, e.g., U.S. Environmental Protection Agency, Office of the Inspector General, *Fiscal Year 2017 U.S. Chemical Safety and Hazard Investigation Board, Management Challenge* (July 27, 2017) (17-N-0342) (noting the CSB's challenges in obtaining qualified technical staff); U.S. Environmental Protection Agency, Office of the Inspector General, *U.S. Chemical Safety and Hazard Investigation Board Needs to Complete More Timely Investigations* (July 30, 2013) (13-P-0337); U.S. Environmental Protection Agency, Office of the Inspector General, *Fiscal Year 2018 U.S. Chemical Safety and Hazard Investigation Board Management Challenges* (June 4, 2018) (18-N-0208) (recounting divisions among board members and employee morale issues).

⁶ See, e.g., U.S. Environmental Protection Agency, Office of the Inspector General, *Fiscal Year 2017 U.S. Chemical Safety and Hazard Investigation Board, Management Challenge* (July 27, 2017) (17-N-0342).

⁷ Office of Personnel Management, 2019 Federal Employee Viewpoint Survey, Annual Employee Survey (AES) Report: Chemical Safety and Hazard Investigation Board (www.csb.gov/assets/1/6/2019_opm_fevs_aes_chemical_safety_and_hazard_investigation_board.pdf) (accessed May 14, 2021).

⁸ *Beleaguered Chemical Safety Board Could Get More Support*, Chemical & Engineering News (Feb. 1, 2021).

⁹ U.S. Chemical Safety and Hazard Investigations Board, Current Investigations (www.csb.gov/investigations/current-investigations/?Type=1) (accessed May 18, 2021).

¹⁰ *Staffing Shortage Pauses Chemical Safety Board Investigations*, Bloomberg Law (Apr. 29, 2020).

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potentially result in some recommendations from older investigations being outdated by the time they are finally issued.¹¹ Furthermore, last year, the CSB did not approve any new recommendations.¹² The reasons for these delays must be understood.

Since June 2020, the CSB's five-member board has operated with four vacancies.¹³ President Biden recently announced the nomination of three additional CSB board members,¹⁴ but long-standing vacancies have raised fundamental concerns about the CSB's capabilities. The Environmental Protection Agency's Office of Inspector General (OIG), which also serves as the OIG for the CSB, reported in July 2020 that the CSB's mission is impaired due to "workload limitations arising from one board member attempting to perform the work of five."¹⁵ The report outlined a series of associated issues, including concerns that with just one board member, the CSB is limited in meeting its diverse technical responsibilities in the fields of accident reconstruction, safety engineering, human factor identification, toxicology reviews, and air pollution regulation assessments.¹⁶ The CSB recently finalized a new board order to allow staff members to take on certain administrative responsibilities to make up for the missing board members,¹⁷ raising concerns about potential conflicts of interest.¹⁸

As the Committee with jurisdiction over chemical safety and the CSB, we want to ensure that the CSB has the tools it needs during this time of transition to conduct and complete its important investigations. While the Committee appreciates earlier staff briefings with the CSB, we remain concerned about ongoing challenges impacting the agency's ability to mitigate the risks of future chemical accidents, and therefore request you address the following:

¹¹ *Understaffed Chemical Safety Board Ripe for Revamp as Probes Lag*, Bloomberg Law (Mar. 15, 2021).

¹² U.S. Chemical Safety and Hazard Investigations Board, Recommendations Search (www.csb.gov/recommendations/?F_ReportIssueDateLBound=01/01/2020&F_ReportIssueDateUBound=12/31/2020&F_InvestigationStatus=1134,1133,1135) (accessed May 13, 2021).

¹³ U.S. Environmental Protection Agency, Office of the Inspector General, *Fiscal Year 2020 U.S. Chemical Safety and Hazard Investigation Board Management Challenges* (Jul. 6, 2020) (20-N-0218).

¹⁴ The White House, *Nominations Sent to the Senate* (Apr. 29, 2021) (press release).

¹⁵ *Id.*

¹⁶ *Id.*

¹⁷ U.S. Chemical Safety and Hazard Investigations Board, *Board Member Roles and Responsibilities* (Apr. 1, 2021) (Board Order 028).

¹⁸ *Understaffed Chemical Safety Board Ripe for Revamp as Probes Lag*, Bloomberg Law (Mar. 15, 2021).

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1. With respect to staffing at the CSB, please provide the number of vacancies for each job category, including investigators, and an update on the status of filling each vacancy. Please also indicate whether current budget allocations are sufficient to fill every outstanding vacancy.
2. With respect to addressing the investigation backlog, please provide a copy of the CSB's most recent investigation plan, including the status of all open investigations, the expected timeframe for completing each investigation, and the number of investigators assigned to each investigation. Please also provide a status update regarding any investigations that have been terminated, paused, or otherwise put on hold due to staffing or resources constraints.
3. With respect to the recommendations approval process, please describe what factors contributed to the CSB's failure to approve any recommendations during the last fiscal year, and the steps, if any, you are taking or planning to address any deficiencies in the process.
4. With respect to the significant number of board vacancies, please explain the impact and limitations of having a single board member, given the CSB's wide-ranging technical responsibilities, in addition to your administrative responsibilities as its chair.
5. To the extent not discussed in your responses to the previous requests, please describe any additional operational, staffing, and management challenges currently affecting the CSB, and what is being done to address these challenges. Please also describe what additional resources or changes to the CSB's structure and operations, if any, are needed for the CSB to execute its mission fully and effectively.

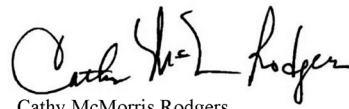
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Please provide all requested information no later than June 10, 2021. If you have questions, please contact Jon Monger or Bekah Jones with the Energy and Commerce Committee Majority Staff at (202) 225-2927, and Alan Slobodin or Jerry Couri with the Energy and Commerce Committee Minority Staff at (202) 225-3641. Thank you for your attention to this matter.

Sincerely,



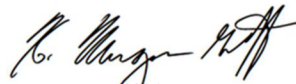
Frank Pallone, Jr.
Chairman



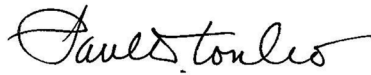
Cathy McMorris Rodgers
Ranking Member



Diana DeGette
Chair
Subcommittee on Oversight
and Investigations



H. Morgan Griffith
Ranking Member
Subcommittee on Oversight
and Investigations



Paul D. Tonko
Chairman
Subcommittee on Environment
and Climate Change



David B. McKinley
Ranking Member
Subcommittee on Environment
and Climate Change

U.S. Chemical Safety and Hazard Investigation Board

Honorable Katherine A. Lemos
Chairman and CEO

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June 10, 2021

The Honorable Frank Pallone, Jr.
Chairman
Committee on Energy and Commerce
United States House of Representatives
Washington, D.C. 20515

The Honorable Diana DeGette
Chair
Subcommittee on Oversight and Investigations
United States House of Representatives
Washington, D.C. 20515

The Honorable Paul D. Tonko
Chairman
Subcommittee on Environment and Climate Change
United States House of Representatives
Washington, D.C. 20515

The Honorable Cathy McMorris Rodgers
Ranking Member
Committee on Energy and Commerce
United States House of Representatives
Washington, D.C. 20515

The Honorable H. Morgan Griffith
Ranking Member
Subcommittee on Oversight and Investigations
United States House of Representatives
Washington, D.C. 20515

The Honorable David B. McKinley
Ranking Member
Subcommittee on Environment and Climate Change
United States House of Representatives
Washington, D.C. 20515

To Committee Leadership,

Thank you for your letter of inquiry on May 20, 2021, regarding ongoing management, resource and personnel challenges at the U.S. Chemical Safety and Hazard Investigation Board (CSB). The attached response addresses the five questions raised in the body of your letter. When I joined the CSB at the end of April 2020, there were several immediate challenges to be met. CSB's management priorities are aligned across the following areas:

Management priorities:

- **Focus on the mission:** To drive chemical safety change, we need to continue delivering high-quality safety product to the community. In March we announced that, in the first quarter of FY 2021, we had made progress on 28 recommendation status changes. I am pleased to report that, in the past three months, we have made progress on 10 more safety recommendation status changes.

In addition, the final investigation report for the incident that occurred in Odessa, TX in October 2019 at the Aghorn Waterflood Station Operating facility was prepared by staff and approved by the Board during our most recent public Board meeting – the first time this has been done since 2016.

- **Drive efficiency of operations:** Expand our workforce and improve business partnerships.

Toward this priority, the CSB is processing four investigator positions with our HR business partner that are expected to be posted and closed on USA Jobs this month, with another round of investigator positions to follow.

- **Strengthen stakeholder and federal counterpart relationships to maximize our resources:** My objective is to keep the CSB moving forward with a focus on transparency and communication. We are learning,

U.S. Chemical Safety and Hazard Investigation Board

benchmarking and analyzing the lessons learned at our Federal partners – the Environmental Protection Agency (EPA), Occupational Safety and Health Administration (OSHA), Pipeline and Hazardous Materials Safety Administration (PHMSA), National Transportation Safety Board (NTSB), Defense Nuclear Facility Safety Board (DNFSB), Cybersecurity and Infrastructure Security (DHS-CISA), Alcohol, Tobacco, Firearms and Explosives (ATF), and others.

- **Board Member Roles and Responsibilities (BMRR):** We have invested many hours over the past year, investigating the best approach for the CSB moving forward. I am pleased to report that we have now finalized changes in response to the EPA OIG management challenge reports dating back to at least 2018.

This is a major step forward for the efficiency of the agency, will allow me to focus on my work as a board member and Chairman, as well as provide a governance architecture that allows new board members to be successful.

The new Board Order more closely aligns board member roles and responsibilities to our enabling legislation, which requires all board members to be appointed on the basis of technical qualification, professional standing, and demonstrated knowledge in the fields of accident reconstruction, safety engineering, human factors, toxicology, or air pollution regulation.

The new Board Order allows board members to better focus on their mission through engaging in technical reviews, stakeholder collaboration and community outreach, and empowers the Chairman and CSB staff through delegation to act in the administration of the agency.

The agency continues to improve every day as we re-engage/develop core processes, identify and hire new talent, and address the primary mission areas defined in our enabling legislation.

The nominations of three potential Board Members will provide the CSB with additional skilled technical resources and community advocacy voices as we perform our valuable work. Responding to chemical accidents across the country requires dedicated science and engineering resources to conduct investigations, develop recommendations at the Federal, State and local levels, and finally prepare and present our findings. I am proud of the team we have at the CSB and look forward to welcoming new Board members as we rebuild the agency. One of the fundamental elements of our process – advocacy – is a key role performed by the Board. Each member, based on their experience, technical background, and interest, selects one or two key advocacy efforts from our Critical Drivers List (CDL) to present the CSB's perspective to our industries, communities, and regulating bodies. This dramatically improves the impact and activity around chemical plant operations with a direct effect on worker, community, and environmental safety.

Sincerely,



Dr. Katherine A. Lemos
Chairman and CEO
U.S. Chemical Safety and Hazard Investigation Board
1750 Pennsylvania Ave. NW, Suite 910
Washington, DC 20006

Attachment: CSB FY 2020 Impact Report

Attachment: CSB 04 April 2021 Excerpt of Response to Energy and Commerce Request 10 December 2020

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1. With respect to staffing at the CSB, please provide the number of vacancies for each job category, including investigators, and an update on the status of filling each vacancy. Please also indicate whether current budget allocations are sufficient to fill every outstanding vacancy.

The Agency has made significant progress in human capital planning. The recent addition of a term-limited SES to serve as Acting Managing Director allows CSB ("the Agency") to re-organize and backfill critical SES and non-SES career roles across the Agency. To produce quality and timely safety investigations and products, the number of positions and roles are being re-aligned to reflect the Agency's operational needs and growth plan.

For the Mission Product Team, operational efficiency and mission efficacy will be achieved through enhanced partnering agreements with our federal counterparts and contracts with subject matter experts. In addition to chemical safety domain experience, the Agency is seeking Mission Product Team members with expertise in policy, safety management systems, data management, and software to support our agency's mandate for incident tracking and advocacy. The following are priority hires for the Mission Product Team: Investigators (4) and Recommendations Specialists (2).

For Support and Leadership staff, operational efficiency and mission efficacy will be achieved through improved business partnerships for human resources and procurement. To support the Mission Product Team in producing quality and timely safety investigations and products, the following are priority hires: Managing Director (1), General Counsel (1), Human Resources (1), and Procurement (1).

The number and types of subsequent posts will be based on the skillsets obtained through this round of hires. In the meantime, the Agency is seeking Detailees to fulfill critical administrative functions.

The Agency is pleased that three new board members have been nominated by the Administration and look forward to their contributions to the agency through their technical perspectives, advocacy and strategic direction.

Current budget allocations are insufficient to fill every needed position.

2. With respect to addressing the investigation backlog, please provide a copy of the CSB's most recent investigation plan, including the status of all open investigations, the expected timeframe for completing each investigation, and the number of investigators assigned to each investigation. Please also provide a status update regarding any investigations that have been terminated, paused, or otherwise put on hold due to staffing or resources constraints.

All open investigations are currently staffed and actively being worked. No investigations have been terminated, paused, or otherwise put on hold since Dr. Lemos assumed her position. Prior to this, three investigations were suspended in FY 2019 due to a lack of resources, along with another in early FY 2020. These investigations are now progressing under the tenure of Dr. Lemos. The Agency hired four new investigators in FY 2019, four in FY 2020, and two thus far in FY 2021.

Consistent career leadership is expected to enhance staff engagement, expectations and tenure.

There are currently 19 open investigations (see *Figure 1: List of Open Investigations*). Of the 19, five are in the early investigative phase, and 14 are in the mid-phase of analysis or report development. Several are nearing the advanced phase of report review and revision.

The number of Mission Product Team members assigned to each investigation varies by phase. More investigative support in the early phase allows for efficient fact collection, especially for perishable evidence. During the mid-phase, there are one to two investigators assigned, with one as the Investigator-In-Charge. In

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the advanced phase, reviews are conducted by multiple investigators. In addition, there is one recommendations specialist assigned throughout the investigation from the Mission Product Team.

The timeframe for completing investigations is a dynamic re-assessment based on numerous factors. The Agency plans to continue closing investigations with increased transparency through the public board meeting process, as initiated last month, and to improving the timelines as the Agency rebuilds our staff and processes.

By way of comparison, the Agency is modeled after the NTSB, though they are a larger organization with approximately 270 technical staff. NTSB can designate other organizations to assist in an investigation. Their investigative process can take five or more years. The NTSB Accident Database contains preliminary and final reports. The average time for an investigative process is two to three years. The NTSB currently lists 27 open major investigations on its website.

- 3. With respect to the recommendations approval process, please describe what factors contributed to the CSB's failure to approve any recommendations during the last fiscal year, and the steps, if any, you are taking or planning to address any deficiencies in the process.**

During FY 2020, three previous board members completed their five-year terms. There was only a one week overlap between Dr. Lemos and one remaining board member. Mission performance across the safety product domains, not just for new safety recommendations issued, was lower than in previous fiscal years. To meet the Agency's mandate, all elements of the investigative and recommendations lifecycle are required.

For FY 2020, one investigation was closed in December 2019 (Midland Resource Recovery Explosion), which did not yield recommendations. The 15 safety recommendations closed or advanced in FY 2020 occurred during Dr. Lemos' tenure as the sole board member, as did the Agency's issuance of a Safety Alert (2020 *Hurricane Season: Guidance for Chemical Plants During Extreme Weather*) and a Safety Spotlight (*Implementation of a Safety Management System is Key to a Safer Chemical Industry*).

In FY 2021, the Agency continues to make solid progress. The CSB has closed one investigation, issued nine new safety recommendations, and has closed or advanced 38 safety recommendations. Dr Lemos has also re-engaged with the Agency's counterparts in leadership at both the EPA and OSHA to achieve a more focused dialogue regarding our recommendation priorities.

Urgent safety recommendations can be issued at any time in the investigative process, though they are most often issued with an investigation closure. Safety Studies also produce new recommendations, through the research of potential hazards, where there is evidence to support such an investment. This element of our authority is not currently staffed. To accelerate these activities, we are seeking to partner with other Federal agencies having emergency response authorities, State and local governmental agencies and associations and organizations from the industrial, commercial, and nonprofit sectors.

Another element of the safety lifecycle yielding new safety recommendations that demands attention is the Critical Drivers List (CDL). As the NTSB accomplished in response to 2020 Governmental Accountability Office (GAO) recommendations for their Most Wanted List, the CSB looks to provide documented rigor to consideration of the criteria, process and technology used to identify, refine, and update changes to this list for Board approval and advocacy. These CDL enhancements will ensure outcomes that yield safety change with process transparency as would any investigation and provide data to support advocacy priorities.

Finally, closing and advancing safety recommendations is a key priority for the Agency and deserves heightened focus in effecting safety change, to which the Agency is applying additional resources moving forward.

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4. With respect to the significant number of board vacancies, please explain the impact and limitations of having a single board member, given the CSB's wide-ranging technical responsibilities, in addition to your administrative responsibilities as its chair.

The Chairman role entails two separate duties, that of the CEO, exercising both the executive and administrative functions of the Board, and that of a board member, to promote the technical integrity of the CSB's investigations, approve findings and safety recommendations, and to advocate for these priorities.

Per our enabling legislation, board members are appointed based on technical qualification, professional standing, and demonstrated knowledge in the fields of accident reconstruction, safety engineering, human factors, toxicology, or air pollution regulation. First and foremost, board members are subject matter experts to guide the Agency in meeting its mission to reduce the risk and consequences of chemical accidents.

Additional board members are needed to expand the diversity of subject matter expertise and perspective brought to the voting process, and force multiply the Agency's advocacy of priority recommendations and critical drivers across the community.

Due to staffing gaps for key leadership roles, as well as a governance structure that was mis-aligned with our enabling legislation, a substantial portion of the Chairman's time over the past year was spent in her role as CEO. This has been a worthwhile time investment, through identifying and hiring temporary staff instrumental to the progress made in operational improvements, and in our enhanced communications with the public and stakeholders, especially in the areas of government and congressional affairs.

One operational improvement was updating internal policies regarding board member roles and responsibilities in response to multiple requests from the EPA's Office of Inspector General (OIG) in their yearly Management Challenges Reports backdating to 2017. As benchmarked against other independent safety agencies, these updates utilize best practices and are a leap forward in efficiency, as senior staff manages administrative matters to their level of responsibility, as intended, and board members focus on mission strategy and mission performance. The Agency continues to improve policies to ensure strong internal controls and additional transparency in executing decisions.

An analysis of board member tenure and overlap (see *Figure 2: List of CSB Board Members and Tenure*) indicates that only half of Senate confirmed members served out their full term or close to it. The average length for the remaining members is less than two years, with one term as short as one month. The newly created clarity in roles and responsibilities for board members is expected to contribute to more engaged members and an enhanced collegial environment.

5. To the extent not discussed in your responses to the previous requests, please describe any additional operational, staffing, and management challenges currently affecting the CSB, and what is being done to address these challenges. Please also describe what additional resources or changes to the CSB's structure and operations, if any, are needed for the CSB to execute its mission fully and effectively.

The CSB has had historical issues in both recruiting and retaining board members. Agency efforts to define board member roles and responsibilities and adoption of remote work guidelines from OPM and OMB will help in recruitment and retention of board members; however, challenges such as statutory pay instead of tying pay to preexisting executive pay bands, non-staggered board member terms, and the lack of flexibility for board members to extend their term to provide continuity of operations are areas in which congressional assistance may help.

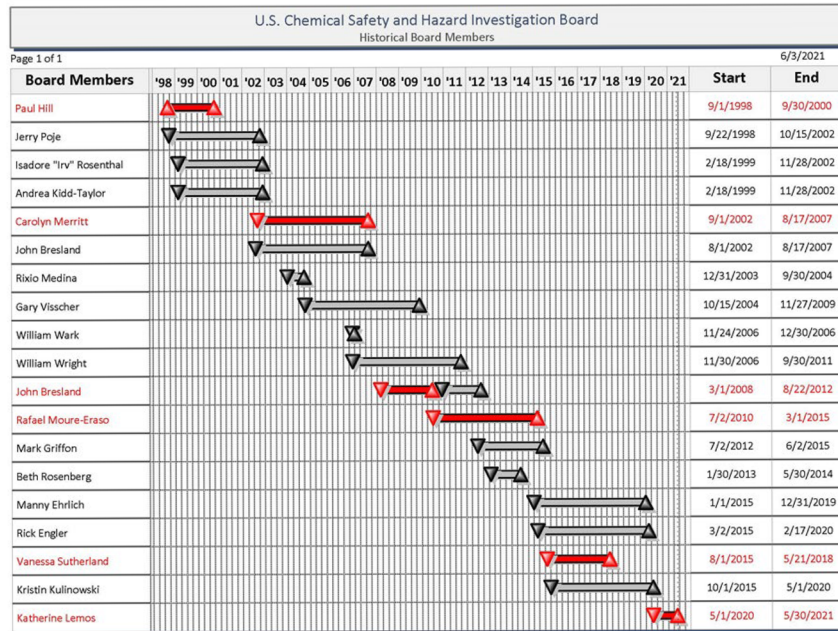
**U.S. Chemical Safety and
Hazard Investigation Board**

Figure 1: List of Open Investigations

	Incident Date	Incident Name	Incident Location
1	4/8/2021	Yenkin-Majestic Paint And OPC Polymers Corporation	Columbus, OH
2	1/28/2021	Foundation Food Group Fatal Chemical Release	Gainesville, GA
3	12/9/2020	Optima-Belle LLC Explosion and Fire	Belle, WV
4	11/13/2020	Wacker Polysilicon Chemical Release	Charleston, TN
5	9/21/2020	Evergreen Packaging Mill Chemical Fatal Fire	Canton, NC
6	9/14/2020	Bio-Lab Chemical Release	Conyers, GA
7	8/27/2020	Bio-Lab Chemical Fire and Release	Lake Charles, LA
8	1/29/2020	Wendland 1H Well Fatal Explosion	Burleson County, TX
9	1/24/2020	Watson Manufacturing and Grinding Fatal Explosion and Fire	Houston, TX
10	11/27/2019	TPC Group Explosion and Fire	Port Neches, TX
11	6/21/2019	Philadelphia Energy Solutions (PES) Refinery Fire and Explosions	Philadelphia, PA
12	5/3/2019	AB Specialty Silicones, LLC	Waukegan, IL
13	4/2/2019	KMCO LLC Fatal Fire and Explosion	Crosby, TX
14	3/17/2019	Intercontinental Terminals Company (ITC) Tank Fire	Deer Park, TX
15	5/19/2018	Kuraray America EVAL Explosion	Pasadena, TX
16	4/26/2018	Husky Energy Refinery Explosion and Fire	Superior, WI
17	5/31/2017	Didion Milling Company Explosion and Fire	Cambria, WI
18	4/3/2017	Loy-Lange Box Company Pressure Vessel Explosion	St. Louis, MO
19	8/12/2016	Sunoco Logistics Partners Flash Fire	Nederland, TX

U.S. Chemical Safety and Hazard Investigation Board

Figure 2: List of CSB Board Members and Tenure





U.S. Chemical Safety and Hazard Investigation Board



The Chairman's
FY 2020
Chemical Safety Board
IMPACT
REPORT



BY THE NUMBERS

7 Deployments

6 Investigators
Hired

15 Recommendation
Status Changes

4 Factual Updates

1 Investigation Closed

CHAIRMAN'S MESSAGE

The U.S. Chemical Safety Board (CSB) has successfully carried out its core mission work in FY 2020, despite an unprecedented impact from COVID-19. To this end, I am pleased to share that the CSB continued to deploy to chemical incidents, advance investigative factual and final reports, advance and close on critical safety recommendations, put forth high-priority safety messages and web-based products for maximum impact of our findings and recommendations, and to share these outcomes via public business meetings. In addition, to meet our mission most effectively, we have made significant progress in hiring and training a diverse team of investigators distributed throughout the nation. We continue to prioritize the safety of our employees in carrying out our mission.



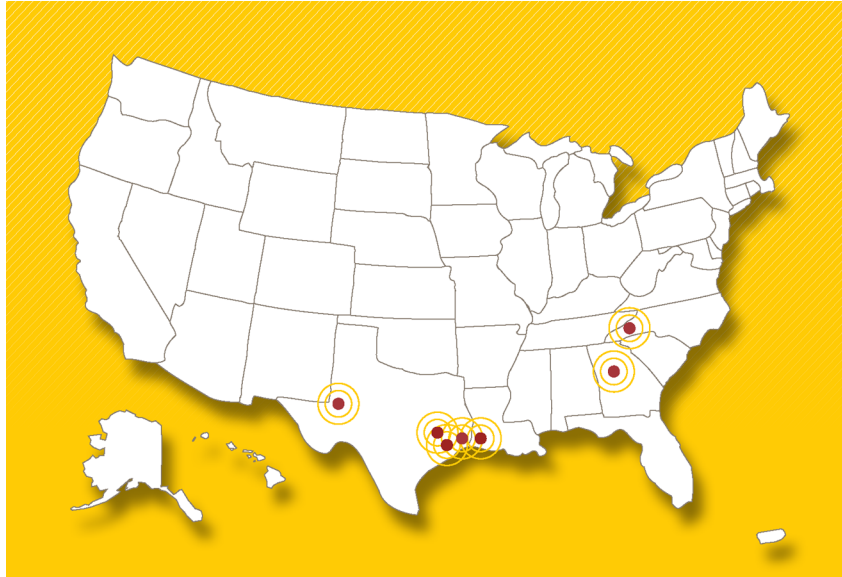
Katherine A. Lemos, PhD
Chairman and CEO

As Chairman, I am proud of the work that the agency has accomplished in FY 2020. Since starting late April, I have engaged heavily with stakeholders and our federal counterparts to communicate the CSB's vision and promote action on the agency's Critical Driver's List (CDL): participating in committee meetings, symposiums and conferences, delivering keynote presentations and accepting media interviews, visiting refineries, and discussing safety assessment processes and process safety practices across the communities in the chemical industry. I have also worked closely with the staff leadership and their teams, gaining an intimate understanding of CSB's day-day operations.

In FY 2021 I look forward to an even more productive set of outcomes, as we work transparently and with accountability in fulfilling the CSB's mission to "drive chemical safety change through independent investigations to protect people and the environment." Our top priorities are to:

- Focus on the mission: Continue delivering high-quality safety product to the community
- Drive efficiency of operations within the agency, expanding our workforce and improving business partnerships
- Strengthen stakeholder and federal counterpart relationships to maximize our resources

I look forward to both the challenges and progress which will come in this new year, and I continue to be impressed by the commitment from staff to achieving our goals and objectives. Already in these first few months of FY 2021, we have made unprecedented progress on advancing and closing safety recommendations. This type of dedication is essential to meeting our vision of **a nation safe from chemical accidents.**



FY 2020 DEPLOYMENTS

Investigation	Location	Incident Date
Aghorn Energy Fatal Chemical Release	Odessa, TX	October 26, 2019
TPC Group Chemical Fire and Explosion	Port Neches, TX	November 27, 2019
Watson Grinding Massive Explosion and Fire	Houston, TX	January 24, 2020
Wendland 1H Well Fatal Explosion	Burleson County, TX	January 29, 2020
Bio-Lab Chemical Fire Following Hurricane Laura	Westlake, LA	August 27, 2020
Bio-Lab Chemical Decomposition	Conyers, GA	September 14, 2020
Evergreen Packaging Mill	Canton, NC	September 21, 2020



SAFETY VIDEOS

The CSB develops computer-animated safety videos, which are available on the CSB website and on YouTube for public viewing. In FY 2020, the CSB released three incident animations, two safety videos and one safety message.



Superior, WI

Texas City, TX

Philadelphia, PA

- Incident animations include the 2018 refinery explosion in Superior, WI, the 2005 BP Texas City refinery explosion, and the 2019 fire and explosion at the PES refinery in Philadelphia, PA.
- A training video for the onshore drilling industry titled, *"Blowout in Oklahoma."*
- A safety video titled, *"Uncovered Hazards: Explosion at the DeRidder Pulp and Paper Mill."*
- Released a video safety message focusing on extreme weather and hurricane season



Animation still from *"Blowout in Oklahoma."*



Animation still from *"Uncovered Hazards: Explosion at the DeRidder Pulp and Paper Mill."*

RECOMMENDATIONS

In FY 2020, the CSB:

- **closed 8 recommendations**
- **advanced 7 recommendations.**
- **83% of the agency's recommendations are closed successfully.**

KEY RECOMMENDATION CLOSED

On August 31, 2017, fires erupted at the Arkema Chemical Plant in Crosby, Texas, as a result of heavy rain from Hurricane Harvey. Plant equipment flooded and failed, causing chemicals stored at the facility to decompose and burn, releasing fumes and smoke into the air. Twenty-one people sought medical attention from reported exposures to the fumes. More than 200 residents living near the facility was evacuated and could not return home for a week.



View of the 2017 fire at the Arkema Chemical Plant in Crosby, Texas

The CSB's investigation found a significant lack of industry guidance on planning for flooding or other extreme weather events and called on the CCPS to produce such guidance so that incidents like the one at the Arkema plant can be prevented. In FY 2020, the CCPS released that guidance, titled "*Assessment of and Planning for Natural Hazards*," which provides an updated approach for assessing natural hazards, the means to address the hazards, and emergency planning information.

The CSB issued a **safety alert** and **video safety message** to broadly communicate the CCPS guidance and outline specific procedures to assure safe restarts following a severe weather event. For example, facilities are urged to follow established startup procedures and checklists, as well as to recognize that "human performance may be compromised due to crisis conditions." This guidance, and the CSB's outreach to promote it, is a prime example of how the CSB and its recommendations have a **national** lifesaving impact across the industry.

ADDITIONAL ADVOCACY:

Throughout FY 2020, the CSB targeted its outreach to advance strategic safety topics described in the agency's *Drivers of Critical Chemical Safety Change Program*. This program identifies the most critical chemical safety improvements needed to protect both people and the environment. The CSB staff and board members use this program to target outreach opportunities and optimize the agency's limited resources to address the most critical chemical hazards facing the nation. In addition to outreach events, the following documents were published to promote the CSB's investigative work:

April 2020 - "*CSB Best Practice Guidance for Corporate Boards of Directors and Executives in the Offshore Oil and Gas Industry for Major Accident Prevention*," which targeting safety improvements at the executive level.

May 2020 - "*Implementation of a Safety Management System is Key to a Safer Chemical Industry*," which highlighted positive safety changes resulting from an investigation into a fatal explosion at an Airgas facility in Pascagoula, Florida.

COMPLETED INVESTIGATIONS

In December of 2019 the U.S. Chemical Safety Board (CSB) released its [final investigation report](#) on two pressure vessel explosions that occurred at the Midland Resource Recovery (MRR) facility in Philippi, West Virginia. Two workers were fatally injured, and another was severely injured during the first incident, which occurred on May 24, 2017. During the CSB's investigation of the first explosion, the MRR facility experienced a second explosion on June 20, 2017. The second explosion fatally injured a company contractor employed to investigate the May 24th incident.

The CSB's report included the following key lessons:

- Companies need a robust safety management system in place to prevent reactive chemical incidents. If a process has the potential for uncontrolled chemical reactions to occur, the company should conduct a formal evaluation of the reactive chemistry, perform a hazard analysis, and ensure that sufficient safeguards are in place to prevent reactive chemical incidents.
- Companies should have a thorough and complete understanding of their reactive chemistry under design conditions and under all foreseeable abnormal conditions. For example, companies should avoid treating uncharacterized waste materials with sodium hypochlorite because of the potential explosive hazards associated with its complex chemistry.



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ONLINE OUTREACH



YouTube

@USCSB: The CSB's safety videos have totaled over 30 million views with more than 154,000 subscribers



Twitter

@chemsafetyboard: more than 8,500 followers



Facebook

@US Chemical Safety Board:
more than 15,100 likes and 16,300 followers



Website - www.csb.gov

Our website provides information on investigations, status of recommendations and information on Board activities.

Energy and Commerce Informal Information Request to CSB
Meeting Dated 10 DEC 2020; Excerpt Response 04 April 2021

Questions: *Provide current versus historical maximum number of investigators at the CSB and Staffing Plans moving forward.*

Note: We were able to obtain personnel data starting 2003, five years after the CSB was initially funded.

Investigators: The number of dedicated investigators has been inconsistent between 2003 to 2020, with a maximum of 20 in 2015, to a minimum of 11 in 2019.

- **The current number of investigators is 15 FTE** (two new investigators in Jan/Feb 2021)
- This does not include the use of contractors to complement our investigative expertise, such as structural and metallurgical engineers.
- This also does not reflect the number of retired/departing versus new investigators, which requires training and resources of other investigators.
- The significant majority of investigators have been hired within the past 18 months.
- **We are diligently working to hire and train new investigators and supervisors to produce high quality mission product in a timely manner.**

Mission Product Team: In addition to investigators, the mission product team includes recommendations specialists that work integrally with the investigators on report development, as well as following up with recommendation recipients.

- **The current mission product team includes a total of 18 FTE.**
- The mission product team was most robust in 2005, with **25 FTE** (19 investigators and 6 recommendations specialists).
- We are coordinating a mission deployment rotation schedule, which will be driving our staffing plan. We are also initiating approaches to increase the productivity of our investigators through partnering with our federal counterparts.
- **In addition to hiring new investigators, we look forward to hiring more recommendations specialists to ensure the quality of our recommendations and to support a strong advocacy program for our Mission Product Team and Board Members alike.**

Diversity of Experience Levels: Between 2003 and 2020 the expense for mission product team FTEs has increased dramatically, even accounting for annual raises and cost of living increases.

- For 15 FTE in 2003 to 2020, the cost rose from \$1.4M to \$2.2M.
- The agency has continued to employ and seek mission staff at higher GS-levels, without backfilling early career employees.
- There are operational, administrative and productivity costs associated with not balancing the skill level across the agency.

Support Staff and Leadership: Our agency has been chronically understaffed with support roles.

- To meet our mission, a strong core support staff is required for IT, general counsel, human resources, records management, contracting and finance.
- We will need to backfill key support staff and leadership positions to develop a stable environment and consistent processes.

We recently requested and hired a term-limited SES to serve as Acting Managing Director, and to backfill critical SES and non-SES career roles across the agency.

July 8, 2021

Dear Chairperson Lemos,

We write to you on behalf of the 22 undersigned labor, environmental, community and scientific organizations over our growing concerns with the functionality and ability to execute the mission of the Chemical Safety and Hazard Investigation Board (CSB). We have compiled this list of recommendations to right the path of the CSB and assist in fulfilling the goals of protecting communities, workers, and our planet.

Recommendations for Preventing Chemical Disasters to the U.S. Chemical Safety and Hazard Investigation Board

More than 180 major incidents occur on average each year at our nation's oil refineries, chemical plants, water and sewage treatment operations, and other facilities that use hazardous chemicals.¹ These incidents result in deaths and injuries, community evacuations and shelter in place orders, environmental contamination, and facility shutdowns with permanent job loss. Often, they disproportionately harm workers in these facilities and low income and people of color living near disaster sites. These incidents are preventable.

The U.S. Chemical Safety and Hazard Investigation Board (CSB) is an independent, non-regulatory agency whose unique mission is to investigate the causes of major chemical releases, issue reports, and make recommendations to prevent future incidents.

In the agency's 22-year history, CSB recommendations have helped lead to significant safety changes. For example, New York City adopted a new fire code that better addressed chemical risks; California adopted stronger rules for oil refineries that focused on hazard prevention and worker participation; revised national codes prohibit use of flammable gases to clean piping; and firefighters receive improved training for responding to chemical emergencies.²

Today, however, CSB needs to rebuild its investigative and recommendations capacity; set clear priorities for agency action; reform its governance policies; and increase public transparency and engagement.

To accomplish these objectives, this document outlines 21 practical and measurable actions. All are feasible with the current CSB budget of \$12 million.³

The proposed actions, discussed below, address:

¹ [2020-02418.pdf \(csb.gov\)](#), page 10078.

² https://www.csb.gov/assets/1/6/csb_key_successes.pdf

³ [fy 2021 budget request.pdf \(csb.gov\)](#), page 3.

- A) Incident Investigations;
- B) Safety Studies;
- C) Safety Recommendations;
- D) Agency Governance; and
- E) Public Transparency and Engagement.

A) Incident Investigations

Problem: A Record Backlog of Investigations

CSB investigations and recommendations can help prevent future chemical incidents and their tragic consequences.

As of June 17, 2021, CSB had 19 open site investigations of incidents that in total killed 32 people, injured at least 87 people, led to thousands of residents sheltering in place or evacuating, and resulted in many millions of dollars in property damage (see Table 1 and CSB factual updates).⁴ **The number of open investigations is the largest number in CSB history.**⁵

CSB is still investigating three incidents from 2016 and 2017.⁶ During your term, which began April 23, 2020, the CSB Board has approved just one final report.⁷

In FY2020, CSB did not issue any new safety recommendations.⁸

There is no publicly available plan indicating how and when CSB will complete these 19 investigations and issue reports and recommendations to prevent future tragedies. It is also unclear if investigations have been terminated or suspended because of staffing constraints.

Requested Action

- 1) Issue an accounting of the current investigative backlog and a plan explaining how CSB will complete each open site investigation, with a target date for issuing final reports and recommendations. Post the plan on the CSB website and update it periodically.

Table 1

⁴ csb.gov, Investigations, Current Investigations.

⁵ This conclusion is based on discussions with former CSB Board Members and CSB staff.

⁶ csb.gov, Investigations, Current Investigations.

⁷ csb.gov, Investigations, Completed Investigations. The report on a hydrogen sulfide release which killed a worker and his spouse at the Aghorn Operating Waterflood Station in Odessa, Texas was approved on May 21, 2021. See [board action report dlc signed- notation item 2021-31.pdf \(csb.gov\)](https://www.csb.gov/assets/1/17/csb_impact_report_2021-final1.pdf?16624)

⁸ https://www.csb.gov/assets/1/17/csb_impact_report_2021-final1.pdf?16624

	Corporation Name	Location	Incident Date	Deaths	Approximate # of Injuries
1					
9	Yenkin-Majestic Paint & OPC Polymers	Columbus, Ohio	April 8, 2021	1	8
1					
8	Foundation Food Group	Gainesville, Georgia	January 28, 2021	8	12
1					
7	Optima Belle LLC	Belle, West Virginia	December 8, 2020	1	NI
1					
6	Wacker Polysilicon	Charleston, Tennessee	November 13, 2020	1	3
1					
5	Evergreen Packaging Mill	Canton, North Carolina	September 21, 2020	2	NI
1					
4	Bio-Lab	Conyers, Georgia	September 14, 2020	0	NI
1					
3	Bio-Lab	Lake Charles, Louisiana	August 27, 2020	0	NI
1					
2	Wendland 1H Well	Burleson County, Texas	January 29, 2020	3	NI
1					
1	Watson Grinding	Houston, Texas	January 24, 2020	2	NI
1					
0	TPC Group	Port Neches, Texas	November 27, 2019	0	2
9	Philadelphia Energy Solutions	Philadelphia, Pennsylvania	June 21, 2019	0	5
8	AB Specialty Silicones, LLC	Waukegan, Illinois	May 3, 2019	4	1
7	KMCO LLC	Crosby, Texas	April 2, 2019	1	2
6	Intercontinental Terminals	Deer Park, Texas	March 17, 2019	0	0
5	Kuraray America	Pasadena, Texas	May 19, 2018	0	21
4	Husky Energy	Superior, Wisconsin	April 26, 2018	0	11
3	Didion Milling	Cambria, Wisconsin	May 31, 2017	5	14
2	Loy Lange Box	St. Louis, Missouri	April 3, 2017	4	1
1	Sunoco Logistics Partners	Nederland, Texas	August 12, 2016	0	7
			Total	32	87

NI = Not indicated by CSB on website.
Table does not include any off-site evacuations and any property damage.

Source: [csb.gov](https://www.csb.gov), Investigations, Current Investigations.

Problem: Investigative Staff Vacancies

The core of CSB's mission is to conduct on-site investigations of the technical and underlying causes of chemical incidents and to make recommendations for preventing them to facility

management, trade associations, unions, professional safety organizations, government agencies and other entities.

CSB's investigative capacity is broken. CSB now has 12 (or even fewer) staff members dedicated to investigations, down roughly nine staff from earlier periods.⁹ The CSB's 2019 Federal Employment Viewpoint Survey found that nearly 50% of the employees surveyed believed that CSB was unable to recruit staff with appropriate skills.¹⁰

While cumbersome federal requirements have been blamed for the slow pace of hiring new investigators, CSB also appears to have taken inadequate steps to address known obstacles.

Requested Actions

- 2) Issue a staff recruitment, training, and retention plan. Post this plan on the CSB website.
- 3) Request "direct hiring authority" and/or other measures from the U.S. Office of Personnel Management to help accelerate staff recruitment and hiring.

Problem: Inadequate Skills and Experience of Investigative Staff

Most, if not all, current CSB investigators are engineers. While engineering (and particularly chemical engineering) is one key expertise, CSB needs investigation teams with diverse expertise and experience to conduct effective investigations that consider *all* causes of incidents, including production and cost-cutting pressures, inadequate management oversight, deficient worker and union participation, and gaps in government regulation and enforcement.¹¹

⁹ <https://republicans-energycommerce.house.gov/wp-content/uploads/2021/05/Bipartisan-Letter-to-Dr.-Lemos.pdf>, page 2.

¹⁰ 2019 Federal Employee Viewpoint Survey, Annual Employee Survey Report: Chemical Safety and Hazard Investigation Board, Office of Personnel Management, 2019.
www.csb.gov/assets/1/6/2019_opm_fevs_aes_chemical_safety_and_hazard_investigation_board.pdf

¹¹ The Organization for Economic Cooperation and Development suggests that "The team should have a diverse membership with participants from different disciplines, with different skills, including members with knowledge of the specific installation subject to the investigation." OECD Guiding Principles for Chemical Accident Prevention, Preparedness and Response; Guidance for Industry (including Management and Labour), Public Authorities, Communities, and other Stakeholders, 2nd Edition, Organization for Economic Cooperation and Development, 2003. The Center for Chemical Process Safety says that a team approach with individuals that have diverse skills and perspectives is more likely to be objective and produce high quality investigations. Guidelines for Investigating Process Safety Incidents, Third Edition, Center for Chemical Process Safety, Wiley, 2019, Chapter 6, Building and Leading An Incident Investigation Team, page 97.

<https://books.google.com/books?id=IjgUDwAAQBAJ&pg=PA97&lpg=PA97&dq=chemical+incident+diverse+team&source=bl&ots=8SMgNlgevo&sig=ACfU3U38kLcwM78BGkPEXKFO8wkxQxiPpw&hl=en&sa=X&ved=2ahUKewjG3YObqrPmAhUQivkKHwYxCKQQ6AEwCXoECAoQAQ#v=onepage&q=chemical%20incident%20diverse%20team&f=false> The Occupational Safety and Health Administration suggests that "A multi-disciplinary team is better able to gather the facts of the event and to analyze them and develop plausible scenarios as to what happened, and why." OSHA, Compliance Guidelines and Recommendations for Process Safety Management, February 8, 2013.
https://www.osha.gov/pls/oshaweb/owadisp.show_document?p_id=9763&p_table=STANDARDS

Requested Action

- 4) In addition to engineers with process safety experience, hire investigators with expertise in such fields as toxicology, industrial hygiene, environmental, occupational, and public health, human factors, and economics/risk assessment. New staff should also be recruited from diverse backgrounds, including corporate process safety departments, labor union safety initiatives, etc. and not just those with chemical industry experience.

Problem: Reliance on Corporate Information

CSB disaster investigations are first conducted on-site, where independent investigators examine the incident scene, conduct interviews with workers and managers to learn the facts, and secure physical evidence.

CSB now appears to be conducting “desk audits”, in addition to its 19 open on-site investigations. One source states that “We understand that the CSB presently has approximately 30 open desk investigations.”¹² These limited investigations, however, appear to rely entirely on information supplied by facility management, with no apparent plans for CSB to interview on scene workers and community residents or to make corporate data publicly available for scrutiny. If this desk audit approach is continued, CSB is missing the vital role of workers, and their representatives, participation, will likely get the wrong facts, findings, and conclusions. Desk audits are fundamentally at odds with CSB’s role as an independent agency that conducts its own investigations, as well as agency past practice.

Requested Action

- 5) Stop reviewing incidents through “desk audits” unless management incident investigation reports, union investigation reports, other information received about the incident, and any CSB assessment are posted on CSB’s website with a disclaimer that fully explains CSB’s limited investigative approach.

Problem: Involvement by ICE Will Harm CSB Investigations

If workers are afraid to be witnesses during CSB investigations, CSB’s findings and reports will be fundamentally deficient.

CSB is currently investigating an incident at the Foundation Food Group poultry plant in Gainesville, Georgia where six workers died and 12 were hospitalized after a leak of liquid nitrogen in January 2021.¹³ A report from the Project on Government Oversight (POGO) alleges that there was “highly unusual” communication between the Immigration and Customs Service (ICE) and a CSB senior official about the immigration status of workers.¹⁴ POGO’s report states

¹² <https://news.bloomberglaw.com/pfas-project/the-chemical-safety-board-quietly-expands-its-incidents-review>

¹³ [csb.gov, Investigations, Current Investigations.](https://www.csb.gov/investigations/current-investigations/)

¹⁴ <https://www.pogo.org/investigation/2021/02/specter-of-ice-looms-over-investigation-of-fatal-poultry-plant-disaster/>

that “plant workers—many of whom are undocumented—fear being arrested or monitored by ICE while going to and from witness interviews.

The U.S. Department of Labor, OSHA’s parent agency, has a Memorandum of Understanding (MOU) with ICE’s parent agency, the Department of Homeland Security (DHS), which limits ICE enforcement activity during federal Investigations of safety violations, wage theft and other labor law violations.¹⁵ “Effective enforcement of labor law,” the MOU states, “is essential to ensure proper wages and working conditions for all covered workers regardless of immigration status.”¹⁶ There is no such memorandum in effect between DHS and CSB.

Requested Action

- 6) Negotiate a CSB Memorandum of Understanding with the Department of Homeland Security, to prevent ICE enforcement activity at facilities with open CSB investigations.

Problem: CSB Continues to Omit the Names of Victims in Reports

Those who die in chemical incidents are human beings and deserve to be recognized as part of the complete historical record that CSB reports compile.

In January 2018, five workers died in an explosion and fire at the Pryor Trust gas well in Pittsburg County, Oklahoma. Killed were Josh Ray, Cody Risk, Matthew Smith, Roger Cunningham, and Parker Waldrige.¹⁷ The CSB omitted their names from its final report issued June 12, 2019.¹⁸

On September 12, 2019, however, the CSB Board voted to amend Board Order 47 to include the names of those killed in future agency reports *and* to update the already issued Pryor Trust report with this information.¹⁹

This Board vote is apparently being ignored. The Pryor Trust report was never updated²⁰ and the latest CSB report, on a hydrogen sulfide release which killed a worker, Jacob Dean, and his spouse, Natalee Dean, at the Aghorn Operating Waterflood Station in Odessa, Texas, in October 2019 omits their names.²¹

And despite being in effect, Board Order 47 no longer appears on CSB’s website.²²

¹⁵ <https://www.nilc.org/wp-content/uploads/2020/10/DHS-DOL-MOU-2011-12-07.pdf>

¹⁶ *Ibid*, page 1.

¹⁷ <https://kfor.com/news/jury-awards-20-million-to-families-of-men-killed-in-rig-explosion/>

¹⁸ <https://www.csb.gov/pryor-trust-fatal-gas-well-blowout-and-fire/>

¹⁹ https://www.csb.gov/assets/record/board_action_report_-_notation_item_2019-622.pdf

²⁰ <https://www.csb.gov/pryor-trust-fatal-gas-well-blowout-and-fire/>

²¹ <https://www.eenews.net/stories/1063594445> and <https://www.csb.gov/csb-releases-final-aghorn-investigation-report/>

²² [csb.gov](https://www.csb.gov), About CSB, Open Government, Board Orders.

Requested Action

- 7) Update and post on the agency website the policy *Accident Victim and Family Communication Program* (Board Order 47) to include Board ordered changes approved on September 12, 2019 to include the names of victims. Update all final investigation reports issued since September 12, 2019 to include the names of victims.

B. Safety Studies

Problem: A Release of Hydrofluoric Acid Poses an Enormous Safety Risk

If released to the atmosphere, hydrofluoric acid (HF) can form a dense, low-lying vapor cloud that can travel great distances. Like other powerful acids, HF can cause deep severe burns and damage the eyes, skin, nose, throat and lungs. HF entering the body through a burn or lungs can cause internal damage throughout the body. At high exposures, HF can kill. The Occupational Safety and Health Administration and the Environmental Protection Agency regulate HF as highly toxic.

A 2014 report by the Environmental Justice and Health Alliance for Chemical Policy Reform found that more than 17 million U.S. residents lived in the vulnerability zones of fifty U.S. oil refineries that operate HF alkylation units to make gasoline components.²³

At Exxon-Mobil (Torrance, California in May 2017)²⁴ and Husky (Superior, Wisconsin in April 2018)²⁵, there were likely near misses involving a potential HF release resulting from impact of debris on or near vessels holding HF. At PES (Philadelphia, Pennsylvania in June 2019),²⁶ leaking process fluid formed a large ground-hugging vapor cloud which ignited, causing a massive fire and explosions. More than 5,000 pounds of HF was released. Surrounding communities were put at risk. The refinery was permanently shut-down and more than 1,000 jobs were destroyed.²⁷

On April 23, 2019, CSB requested that the U.S. Environmental Protection Agency update a 1993 HF study and assess the effectiveness of their Risk Management rule to ensure refinery safety

²³ <https://comingcleaninc.org/assets/media/images/Reports/Who's%20in%20Danger%20Report%20FINAL.pdf>
Page 34, Table 13.

²⁴ https://www.csb.gov/assets/1/20/exxonmobil_presentation_2016.01.pdf?15595

²⁵ https://www.csb.gov/assets/1/6/husky_factual_update.pdf?16317

²⁶ https://www.csb.gov/assets/1/20/pes_factual_update_-_final.pdf?16512

²⁷ <https://www.phila.gov/media/20191202091559/refineryreport12219.pdf>, page 14.

and the viability of adopting safer, commercially viable alkylation technologies.²⁸ Five months later, EPA refused CSB's request.²⁹

Requested Actions

- 8) Complete the CSB reports on the Husky and PES incidents, including analyses of the potential near misses involving HF acid.
- 9) Conduct a study of alternatives to HF acid alkylation in oil refineries that addresses potential technology and regulatory gaps and issue safety recommendations.

C) Safety Recommendations

Problem: Current Process Safety Rules Fail to Protect Workers and Communities

"Process safety" focuses on preventing fires, explosions and releases in chemical process facilities. It often involves addressing the risks to workers and communities of multiple chemicals in interconnected processes at sites that operate continuously, 24 hours a day, at high pressures and temperatures.

Elements of process safety include process safety information; process hazard analysis; assessing safer alternatives; operating procedures; training; mechanical Integrity; management of change; pre-startup safety reviews; management of change; compliance audits; incident investigations; and workers and union participation.

Process safety regulations in the U.S., however, are out of date. CSB identifies process safety modernization as an advocacy priority on its website.³⁰ CSB has supported strengthening Occupational Safety and Health Act's Process Safety Management of Highly Hazardous Chemicals (PSM) standard³¹ and Section 112(r) of the Clean Air Act's amendments Risk Management Plan (RMP) rule.³² The RMP rule covers approximately 12,500 U.S. facilities that use extremely hazardous substances.³³

In 2017, the EPA made modest improvements to the RMP rule.³⁴ In 2019, however, the Trump Administration rescinded important provisions of the 2017 RMP rule on safer technology and

²⁸ https://www.csb.gov/assets/1/6/letter_to_epa_4.23.2019.pdf?16464

²⁹ <https://www.inquirer.com/business/pes-philadelphia-refinery-fire-hf-hydrofluoric-csb-report-stalled-20210326.html>

³⁰ CSB.gov, Advocacy Priorities, Drivers of Critical Safety Change, Process Safety Management for the 21st Century.

³¹ https://www.csb.gov/assets/1/6/csb_rficommments1.pdf

³² https://www.csb.gov/assets/1/6/epa_rfi2.pdf

³³ Regulatory Impact Analysis, Reconsideration of the 2017 Amendments to the Accidental Release Prevention Requirements: Risk Management Programs Under the Clean Air Act, Section 112(r)(7), U.S. Environmental Protection Agency, April 27, 2018, page 8.

³⁴ <https://www.govinfo.gov/content/pkg/FR-2017-01-13/pdf/2016-31426.pdf>

alternatives analyses, third-party audits, incident investigations, and public access to information.³⁵

EPA's own analysis admits that this rollback would disproportionately and negatively impact people of color and low-income communities near industrial facilities.³⁶

CSB submitted comments to EPA opposing their 2017 action.³⁷

These rollbacks are under review by the Biden EPA and they are considering whether to restore the 2017 rule and to propose additional prevention measures.³⁸ Reforming the RMP and PSM regulations would be high impact policy changes that could help safeguard workers and communities across the nation.

California in 2017 adopted refinery safety rules that offer important precedents for national reform of PSM and RMP, including a greater focus on preventing hazards through the "hierarchy of controls" and enhanced worker and union collaboration.³⁹

Requested Action

- 10) Designate meaningful reform of RMP and PSM as CSB's top advocacy priority and allocate staff resources towards this end.⁴⁰

³⁵ https://www.epa.gov/sites/production/files/2019-11/documents/final_risk_management_program_reconsideration_final_rule_fact_sheet.pdf

³⁶ Ibid, Regulatory Impact Analysis, EPA, page 80. EPA specifically stated that *Based on analysis of RMP data and other studies, EPA concludes that there is evidence that risks from RMP facilities fall on minority and low-income populations, to a significantly greater degree than those risks affect other populations. Therefore, EPA believes that this action may have disproportionately high and adverse human health or environmental effects on minority populations, low-income populations and/or indigenous peoples, as specified in Executive Order 12898 (59 FR 7629, February 16, 1994).*

³⁷ csb.gov, About CSB, Open Government, Public Comments. Scroll down to CSB Comments on the Environmental Protection Agency (EPA) Accidental Release Prevention Requirements: Risk Management Programs under the Clean Air Act, Section 112(r)(7). July 20, 2018.

³⁸ <https://www.whitehouse.gov/briefing-room/presidential-actions/2021/01/20/executive-order-protecting-public-health-and-environment-and-restoring-science-to-tackle-climate-crisis/> and <https://www.epa.gov/newsreleases/epa-announces-public-listening-sessions-risk-management-plan-rule-0>

³⁹ See <https://aiche.confex.com/aiche/s18/meetingapp.cgi/Paper/511230> and https://www.epw.senate.gov/public/index.cfm/hearings?id=9A92B90F-DE5F-5477-7177-CCD5A1AEF682&Statement_id=34575FD7-8E6F-4B2C-9424-3E707DBA8AAF

⁴⁰ EPA is currently holding public listening sessions and seeking "solicit comments and suggestions from stakeholders pertaining to the review of EPA Risk Management Program (RMP) regulation revisions completed since 2017 and to address new priorities, as directed under Executive Order 13990: Protecting Public Health and the Environment and Restoring Science to Tackle the Climate Crisis," including on the important issues of climate risks and environmental justice. EPA, Notice, 86 Fed. Reg. 28,828 (May 28, 2021); *see also* EPA Press Release, <https://www.epa.gov/newsreleases/epa-announces-public-listening-sessions-risk-management-plan-rule-0>. The Occupational Health and Safety Administration is participating in the listening sessions "to foster continued coordination with the EPA." *Id.* EPA has announced that it is "developing a regulatory proposal to revise the RMP regulations at 40 CFR part 68." *Id.* at 28,829. EPA has also announced in the Spring 2021 Regulatory Agenda that it plans to publish a proposed rule by September 2022, and publish a final rule by August 2023.

(<https://www.reginfo.gov/public/do/eAgendaViewRule?pubId=202104&RIN=2050-AH22>). The CSB should provide

- 11) Assess how the 2017 California refinery PSM and RMP rules offer valuable precedents for national reforms.

D) Agency Governance

Problem: Chair Lemos has Attempted to Eliminate “Majority Rule” to determine major Board policies.

CSB is a very small agency that has a budget to fund about 46 positions, including up to five Board Members. Oversight of CSB policies, budget, and major operations by the Board Members is a critical function that helps to ensure that the agency is fulfilling its mission and serving the public interest.

Before April 1, 2021, Board Order 28 defined the *Executive and Administrative Functions of the Board*.⁴¹ For example, it established the powers of the Chair over specific management and administrative issues and the powers of the other Board Members to vote on final investigative reports, recommendations, recommendations status changes, *and* important agency policies, such as budget.

As the sole CSB Board Member, on April 1, 2021 you voted to eliminate Board Order 28 on the *Executive and Administrative Functions of the Board*⁴² and to replace it with a new Board Order 28 on *Board Member Roles and Responsibilities*.⁴³

This unilateral action attempts to eliminate the authority of other Board Members, including three whose nominations are now pending before Congress, to have any power over agency regulations, rules, and Board Orders; the agency budget and transmission of the budget to Congress; and statements to Congress or the President.

By making such draconian changes to well-established Board policy, you ignored a bedrock legal principle for independent government Boards that “the majority rules” and defied established legal opinion.⁴⁴ Board Members must have explicit authority – as they did in the prior version of BO 28 – to vote on matters central to CSB’s direction and operation, including agency regulations, rules, and Board Orders; major budget matters and contracts; and statements to

all available new information on RMP facilities and incidents to EPA and OSHA, including on the important issue of climate risk assessment and mitigation measures, as part of this process, as well as detail on the CSB’s important recommendations to EPA on ways to prevent incidents and ways that the RMP should be expanded.

⁴¹ This older version of CSB Board Order 28 is not archived on CSB’s website. It can be accessed at the Wayback Machine, an independent Internet archive at [http://web.archive.org/web/20201017004438/http://www.csb.gov/assets/record/board_order_028_-_final_approved_3_22_18_\(1\).pdf](http://web.archive.org/web/20201017004438/http://www.csb.gov/assets/record/board_order_028_-_final_approved_3_22_18_(1).pdf)

⁴² https://www.csb.gov/assets/record/board_action_report_-_notation_item_2021-30.pdf

⁴³ https://www.csb.gov/assets/record/b0_028docx.pdf

⁴⁴ <https://www.justice.gov/file/19391/download>

Congress and the President. Moreover, new Board Members should be part of discussions to help determine their appropriate roles and specific duties.⁴⁵

Requested Action

- 12) After meaningful input from new Board Members and opportunities for public comment on a draft regulation, issue a new CSB **regulation** (or regulations) to address **both** the *Executive and Administrative Functions of the Board* and *Board Member Roles and Responsibilities*.

E) Public Transparency and Engagement

Problem: Elimination of Opportunities for Public Participation at Meetings

Public transparency and engagement are widely accepted as foundational to a democratic government.⁴⁶

During CSB business meetings before March 5, 2021, there were opportunities for public comments and questions.⁴⁷ At business meetings on March 5, 2021 and April 2, 2021, however, you did not provide such opportunities.⁴⁸

You also did not allow for public comments or questions during the May 4, 2021 public meeting to adopt the report on the two deaths at the Aghorn Waterflood Station in Texas in 2019, also conflicting with CSB past practice.⁴⁹

Requested Action

- 13) Restore opportunities for public comments and questions during all CSB public meetings, including quarterly business meetings and meetings discussing specific investigations.

Problem: Violating CSB's Policy for Notice of Public Meetings

In the past an occasional CSB practice was to post the tentative dates of quarterly business meetings on the agency website.⁵⁰ Current CSB policy states the public is supposed to be notified of its quarterly public business meetings no less than 60 days in advance, when

⁴⁵ Attempts to disenfranchise of other Board Members and consolidation of power by the Board Chair has been a recurrent issue in CSB history. For events in 2015, for example, see: <https://oversight.house.gov/sites/democrats.oversight.house.gov/files/documents/2015-03-18.Chaffetz%20EEC%20etc%20to%20Obama%20re%20CSB.pdf>, page 2.

⁴⁶ For example, see

https://obamawhitehouse.archives.gov/realitycheck/the_press_office/Transparency_and_Open_Government

⁴⁷ See transcripts of CSB business meetings for January 29, 2020, April 29, 2020, September 2, 2020, October 29, 2020, and earlier meetings at www.csb.gov, About the CSB, Open Government, CSB Business Meetings.

⁴⁸ See transcripts of CSB business meetings for March 5, 2021 and April 2, 2021 at www.csb.gov, About the CSB, Open Government, CSB Business Meetings.

⁴⁹ See video of meeting on May 4, 2021 at <https://www.csb.gov/videos/?SID=3606>

⁵⁰ For example, see <https://www.csb.gov/csb-announces-dates-for-public-business-meetings-for-2020/>

feasible.⁵¹ For 2021 meetings, however, CSB ignored its own policy and provided approximately just seven days and the most minimal public notice to comply with Federal Register notice rules. Such late notice discourages CSB stakeholders from planning to participate in these meetings and from learning about agency work.

Requested Actions

- 14) Follow CSB policy to provide 60 days advance public notice of quarterly business meetings.
- 15) Develop an annual calendar of tentative dates for CSB's quarterly public business meetings and post it on the agency website.

Problem: No Public Input in CSB Planning

The GPRMA Modernization Act of 2010 (GPRAMA) requires federal agencies to prepare strategic agency plans (ASP) which operate on a four (fiscal) year basis.⁵² CSB's current plan for 2017-2021 expires September 30, 2021.⁵³

Under GPRAMA, agencies must consult with nonfederal stakeholders at least once every four years when developing the plan. (Agencies also must confer with appropriate congressional committees every two years, irrespective of their work on an ASP).

CSB has not held a dialogue with multiple stakeholders since June 10, 2015 and there is no indication that it plans to hear stakeholder perspectives as part of developing a new strategic plan.⁵⁴

Requested Actions

- 16) Conduct a public forum to hear stakeholder perspectives and encourage dialogue on a draft FY 2022-2026 CSB strategic plan.
- 17) Conduct an annual CSB stakeholders meeting, beginning in FY2023, involving representatives of industry, labor, environmental, environmental justice, public health, scientific, professional safety, family, and other organizations.

Problem: Uncertain Disclosure of Chemical Incident Data

There are few data sources where the public can learn about major chemical incidents.

⁵¹ https://www.csb.gov/assets/record/board_order_001-quorum_voting_and_meeting_procedures12-17-19.pdf, pages 9-10.

⁵² <https://www.congress.gov/bill/111th-congress/house-bill/2142>

⁵³ https://www.csb.gov/assets/1/6/csb_strategic_plan11.pdf

⁵⁴ See the transcript of this meeting at <https://app.box.com/s/07tgkeihhfrod014ei3m1pi37945je53>

CSB's reporting rule, issued in February 2020, requires prompt reports to CSB from facility owners or operators that have a chemical release that results in a death, serious injury or substantial property damage.⁵⁵

In this rule, CSB pledged to publicly disclose incident information stating that "...the CSB recognizes the public interest in learning from initial accidental release information. The CSB occasionally receives FOIA requests for incident screening information. After appropriate review, the CSB has disclosed this information and will continue to do so."⁵⁶

CSB also stated in the rule that "With the adoption of this final rule, the CSB will also devote additional resources to the collection and processing of initial accidental release information. In light of this, the CSB will proactively disclose, subject to any Federal statutory prohibitions on such disclosure, initial incident information, as defined in this rule at § 1604.4, at least once per year."⁵⁷

To be of more timely public use, incident information should be posted quarterly.

Requested Action

18) Post incident reports quarterly on CSB's website.

Problem: Complying with President Biden's Policies on Racial Equity

On September 22, 2020, President Trump issued Executive Order 13950, *Combating Race and Sex Stereotyping*.⁵⁸ This Order sought to block CSB and other federal agencies from teaching "divisive" concepts about race and prohibited federal contractors and subcontractors from providing workplace diversity training.

In response to your request to the Office of Inspector General for EPA,⁵⁹ on November 18, 2020 the OIG evaluated CSB's compliance with this Order. The OIG found that CSB had suspended all planned diversity and inclusion trainings as of November 9, 2020 and had not provided any employee diversity and inclusion trainings since November 2019.⁶⁰

On January 20, 2021, as part of a new Executive Order, *Advancing Racial Equity and Support for Underserved Communities Through the Federal Government*, President Biden revoked Executive Order 13950.⁶¹ His new Executive Order (EO) stated that "equal opportunity is the bedrock of

⁵⁵ <https://www.csb.gov/assets/1/6/2020-02418.pdf>

⁵⁶ Ibid, page 10094.

⁵⁷ Ibid, page 10094.

⁵⁸ <https://www.federalregister.gov/documents/2020/09/28/2020-21534/combating-race-and-sex-stereotyping>

⁵⁹ https://www.epa.gov/sites/production/files/2020-11/documents/epa_oig_notificationmemo_11-18-20_stereotyping.pdf

⁶⁰ https://www.epa.gov/sites/production/files/2020-12/documents/epa_oig_20201229-21-e-0043.pdf

⁶¹ <https://www.whitehouse.gov/briefing-room/presidential-actions/2021/01/20/executive-order-advancing-racial-equity-and-support-for-underserved-communities-through-the-federal-government/>

American democracy, and our diversity is one of our country's greatest strengths" and that "Affirmatively advancing equity, civil rights, racial justice, and equal opportunity is the responsibility of the whole of our Government. Because advancing equity requires a systematic approach to embedding fairness in decision-making processes, executive departments and agencies must recognize and work to redress inequities in their policies and programs that serve as barriers to equal opportunity."

The new EO also states that "It is therefore the policy of my Administration that the Federal Government should pursue a comprehensive approach to advancing equity for all, including people of color and others who have been historically underserved, marginalized, and adversely affected by persistent poverty and inequality."

Further, the EO states that "In carrying out this order, agencies shall consult with members of communities that have been historically underrepresented in the Federal Government and underserved by, or subject to discrimination in, Federal policies and programs. The head of each agency shall evaluate opportunities, consistent with applicable law, to increase coordination, communication, and engagement with community-based organizations and civil rights organizations."

Requested Actions

- 19) Comply with President Biden's Executive Order 13985, including consulting with members of communities that have been historically underrepresented in the Federal Government and underserved by, or subject to discrimination in, Federal policies and programs.
- 20) Develop a policy and video for communities that are disproportionately harmed by chemical incidents on how the CSB works and opportunities for engagement with the agency, focusing on the investigation process.

Problem: CSB Lacks Clear Policies on Scientific Integrity

The US Chemical Safety Board relies heavily on the use of science to inform its investigations and decisions regarding severe industrial chemical accidents. The CSB also is comprised of several scientific experts including mechanical and chemical engineers, industrial safety experts and investigators. Given the CSB's important science-based charge and mission, it is critically important that the science relied upon by the CSB remain independent and free from undue interference.

Currently, the CSB is without a scientific integrity policy that would help to ensure that the work it conducts remains free from political interference. Political interference in science-based decision making has occurred under every presidential administration at least dating back to President Eisenhower. However, the past four years saw an uptick in scientific integrity violations even at federal agencies with strong scientific integrity policies. Such violations

resulted in decisions made that were not informed by the best available science putting the public's health and safety at-risk. For these reasons, the Biden-Harris administration is working on strengthening scientific integrity⁶² and evidence-based decision making across the federal government.

The US Chemical Safety Board should develop a scientific integrity policy that is enforceable to protect its scientific experts and their work from undue political interference. While the board currently follows guidelines⁶³ for "ensuring and maximizing the quality, objectivity, utility, and integrity of disseminated information," these guidelines lack enforcement even within the board itself. Because the CSB is charged with investigating severe industrial accidents that often involve injuries, fatalities, and destruction costing millions of dollars, it should work to maintain integrity in its science-based investigations and decisions for the public good.

Requested Actions

21) The CSB should establish and enforce a scientific integrity policy that safeguards against improper political interference in the conduct of scientific research and in the collection of scientific or technological data, and that prevents the suppression or distortion of scientific or technological findings, data, information, conclusions, or technical results.

Please respond to our organizations with your ability to implement these reasonable recommendations within 30 days. You may send your response to the representatives listed below.

John Paul Smith
United Steelworkers
jpsmith@usw.org

Allison Cain
Union of Concerned Scientists
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Terry McGuire
Earthjustice
tmcguire@earthjustice.org

Respectfully,

United Steelworkers (USW)
Union of Concerned Scientists
Earthjustice
AFL-CIO
BlueGreen Alliance
United Food and Commercial Workers International Union (UFCW)
International Chemical Workers Union Council (ICWUC)

⁶²<https://www.whitehouse.gov/briefing-room/presidential-actions/2021/01/27/memorandum-on-restoring-trust-in-government-through-scientific-integrity-and-evidence-based-policymaking/>

⁶³ <https://www.csb.gov/assets/1/6/finaldataqualityguidelines1.pdf>

Environmental Justice Health Alliance for Chemical Policy Reform (EJHA)
 Sierra Club
 Greenpeace US
 Coming Clean
 National COSH
 Coalition for a Safe Environment
 New Jersey Work Environment Council
 NAACP Branch #1069
 Community Dreams
 California Kids IAQ
 EMeRGE
 Center for Progressive Reform
 Ohio Valley Environmental Coalition
 Air Alliance Houston
 California Communities Against Toxics

September 28, 2021

The Honorable Diana DeGette
Chairwoman
Subcommittee on Oversight and Investigations
Committee on Energy and Commerce
United States House of Representatives
Washington, DC 20515

The Honorable H. Morgan Griffith
Ranking Member
Subcommittee on Oversight and Investigations
Committee on Energy and Commerce
United States House of Representatives
Washington, DC 20515

Dear Chairwoman DeGette and Ranking Member Griffith

The American Chemistry Council (ACC) and the American Fuel & Petrochemical Manufacturers (AFPM) would like to thank the Subcommittee on Oversight and Investigations of the Committee on Energy and Commerce for holding its September 29 hearing on revitalizing the Chemical Safety Board (CSB). ACC and AFPM strongly support the CSB's mission and are committed to working with this Subcommittee, the CSB, and regulatory agencies to further protect workers, the public, and the environment. We believe that a fully constituted CSB, properly funded and managed, is essential to achieving our shared safety objectives.

ACC represents the major chemical producers across the United States, including a diverse set of small and medium-sized companies. ACC members make and enhance products that are critical to the everyday health and welfare of our nation. In fact, more than 96% of all manufactured goods are directly touched by our industry. Our commitment to safety is embodied in ACC's Responsible Care® program, the chemical industry's leading environmental, health, safety, and security performance initiative. Our Process Safety Code® obligates companies to develop and implement a comprehensive process safety management system to manage risk and seek opportunities to improve performance.

AFPM is the leading trade association representing the makers of the fuels that keep us moving, the petrochemicals that are the essential building blocks for modern life, and the midstream companies that get our feedstocks and products where they need to go. AFPM members are committed to the safety of their employees, contractors and community and utilize various AFPM safety programs like Advancing Process Safety and Process Safety Regional Networks to continuously improve and learn from each other.

Congress has tasked CSB with the critical role of investigating industrial chemical accidents, conducting root cause analyses, and making recommendations based on the factual determinations. The CSB's findings are highly influential and a catalyst for safety improvements. Our members find considerable value in the CSB's work – especially the reports, videos and other materials generated by the Board as part of its investigations.

The Board deserves credit for the improvements made over the years to engage stakeholders and share useful information at all stages of its investigations. At the same time, it is critical that the Board communicate not just the hazards of processes it investigates (as its remit is to address incidents arising from inherently hazardous operations) but identify specific risks related to the incident and recommend steps that can be taken to mitigate those risks.

The CSB must be managed by objective and qualified board members. Getting the CSB back up to full strength must be a priority, and it must be done with the individuals who are best equipped for the job. Board members should have a broad range of applicable experience and expertise, including experience in the operations, processes and procedures employed in commercial chemical facilities.

The CSB must also have adequate funding to attract, train and retain qualified staff investigators. We urge Congress and the Administration to support appropriate funding levels needed for the CSB to be successful.

ACC and AFPM appreciate the Subcommittee's important oversight role and stands ready to work with you to help support the CSB's mission.

Sincerely,



Chris Jahn
President and CEO
American Chemistry Council



Chet M. Thompson
President and CEO
American Fuel & Petrochemical Manufacturers

**U.S. Chemical Safety and
Hazard Investigation Board**

Honorable Katherine A. Lemos
Chairperson and CEO

1750 Pennsylvania Avenue NW, Suite 910 | Washington, DC 20006
Phone: (202) 261-7600 | Fax: (202) 261-7650
www.csb.gov



November 22, 2021

The Honorable Frank Pallone, Jr.
Chairman
Committee on Energy and Commerce
United States House of Representatives
Washington, D.C. 20515

The Honorable Cathy McMorris Rodgers
Ranking Member
Committee on Energy and Commerce
United States House of Representatives
Washington, D.C. 20515

The Honorable Diana DeGette
Chair
Subcommittee on Oversight
and Investigations
United States House of Representatives
Washington, D.C. 20515

The Honorable H. Morgan Griffith
Ranking Member
Subcommittee on Oversight
and Investigations
United States House of Representatives
Washington, D.C. 20515

The Honorable David B. McKinley
Ranking Member
Subcommittee on Environment and
Climate Change
United States House of Representatives
Washington, D.C. 20515

RE: Questions for the record following CSB hearing on September 29, 2021

To Committee Leadership,

Thank you for the opportunity to engage with you in the hearing titled, "Protecting Communities from Industrial Accidents: Revitalizing the Chemical Safety Board." We appreciate your support for the critical mission of this agency. At the request of the Chairman of the Committee on Energy and Commerce and Subcommittee Chair for Oversight and Investigations, we are providing our responses to the written questions for the record we received on November 2, 2021.

The CSB's plan to address the 18 open investigations in an accelerated manner, while maintaining integrity, will require our adopting a novel approach.

- Concurrently, the CSB will continue to refine the process model moving forward that accommodates a range of investigative products and timelines to effectively serve our community and meet our full mandate. This is discussed more fully in the attached written response.

This accelerated plan produces the completion of incident reports through transparent virtual and/or hybrid board meetings for as many as four investigations each quarter for FY22 and FY23.

- This would put us on track to close all current investigations within this two-year timeframe and would exceed the performance of the CSB at any point since our inception.
- The current plan is aggressive and would involve the agency adding to our goal of completing as many as 11 investigations in FY22.
- This assumes flexibility in the order of completion based on factors outside of our control (e.g., unsafe structure, site contamination), or if we identify a high-priority incident that is ready for release and needs to be moved up in the queue.

This plan prioritizes the completion of older investigations. Moving into FY23, all open incidents occurring prior to CY20 would be completed.

- The new process model would permit members of the Board to review and vote on currently issued recommendations simultaneously.
- To ensure transparency and CSB's accountability to the timeline, we will be setting firm dates for virtual board meetings at the start of each fiscal year.

We greatly appreciate the House Energy and Commerce Committee's support for our agency and our mission. Should you need any additional information or detail, my team and I are ready to engage.

Sincerely,



Dr. Katherine A. Lemos
Chairperson and CEO
U.S. Chemical Safety and Hazard Investigation Board
1750 Pennsylvania Ave. NW, Suite 910
Washington, DC 20006

Encl. – Attachment A – Additional Questions for the Record November 27, 2021

FRANK PALLONE, JR., NEW JERSEY
CHAIRMAN

CATHY McMORRIS RODGERS, WASHINGTON
RANKING MEMBER

ONE HUNDRED SEVENTEENTH CONGRESS
Congress of the United States
House of Representatives
COMMITTEE ON ENERGY AND COMMERCE
2125 RAYBURN HOUSE OFFICE BUILDING
WASHINGTON, DC 20515-6115

Majority (202) 225-2927
Minority (202) 225-3641

November 2, 2021

The Honorable Katherine A. Lemos
Chairperson and CEO
U.S. Chemical and Hazard Investigation Board
1750 Pennsylvania Avenue NW
Suite 900
Washington, DC 20006

Dear Chairperson Lemos:

Thank you for appearing before the Subcommittee on Oversight and Investigations on Wednesday, September 29, 2021, at the hearing entitled "Protecting Communities from Industrial Accidents: Revitalizing the Chemical Safety Board." I appreciate the time and effort you gave as a witness before the Committee on Energy and Commerce.

Pursuant to Rule 3 of the Committee on Energy and Commerce, members are permitted to submit additional questions to the witnesses for their responses, which will be included in the hearing record. Attached are questions directed to you from certain members of the Committee. In preparing your answers to these questions, please address your response to the member who has submitted the questions in the space provided.

To facilitate the printing of the hearing record, please submit your responses to these questions no later than the close of business on Wednesday, November 17, 2021. As previously noted, this transmittal letter and your responses will all be included in the hearing record. Your written responses should be transmitted by e-mail in the Word document provided to Austin Flack, Policy Analyst, at austin.flack@mail.house.gov. To help in maintaining the proper format for hearing records, please use the document provided to complete your responses.

Thank you for your prompt attention to this request. If you need additional information or have other questions, please contact Austin Flack with the Committee staff at (202) 225-2927.

Sincerely,

A handwritten signature in blue ink that reads "Frank Pallone, Jr." in a cursive style.

Frank Pallone, Jr.
Chairman

Attachments

cc: The Honorable Cathy McMorris Rodgers
Ranking Member

Committee on Energy and Commerce

The Honorable Diana DeGette

Chair

Subcommittee on Oversight and Investigations

The Honorable H. Morgan Griffith

Ranking Member

Subcommittee on Oversight and Investigations

Subcommittee on Oversight and Investigations
Hearing on
“Protecting Communities from Industrial Accidents: Revitalizing the Chemical Safety Board”
September 29, 2021

The Honorable Katherine A. Lemos, Chairperson and CEO, U.S. Chemical Hazard Investigation Board

The Honorable Frank Pallone, Jr. (D-NJ)

1. In the most recent CSB Performance and Accountability Report, released in November 2020, CSB indicated that the report on the June 2019 incident at Philadelphia Energy Solutions (PES) was “complete and awaiting Board action.” Subsequent to the hearing, CSB provided the Committee with its current plan for completion of open investigations and reduction of CSB’s backlog (Investigation Closure Plan). The Investigation Closure Plan indicates that the PES Refinery report is now scheduled to be released in Q3-Q4 FY22. This investigation relates to a release of hydrofluoric acid (HF) – a dangerous chemical used in dozens of refineries across the country. There have been a number of HF “near misses” in recent years, including the April 2018 incident at Husky Energy Refinery in Superior, Wisconsin which also remains under investigation by CSB (currently scheduled for release in FY22 Q2-Q3). Given the risks presented to surrounding communities by this dangerous chemical, some have suggested that HF-related investigations are particularly important to finalize and make public in a timely fashion.
- a. Nearly a year has passed since CSB stated the PES Refinery report was complete. Why has the release of this report been delayed? What specifically has impeded the board action and approval?

Safe use of Hydrofluoric Acid (HF) in the refining process is an important topic for the CSB. For this reason, the CSB has heightened its attention to and closely monitored for incidents involving HF. For example, earlier this year we were made aware of an event that highlighted the success of HF mitigation technologies and processes in preventing injury and damage. Due to this success, the event did not meet our reporting requirements.

The Chairperson is aware of previous correspondence with the EPA in 2019 with regards to the EPA’s 1993 study addressing HF across a range of industries.

Product integrity is a priority, especially for an investigative report addressing such a significant and complex topic as HF,

Through the course of rebuilding the agency and filling critical staff roles, the CSB has identified the need to develop and reinforce a uniform investigative and report review process that applies to the factual element of the report as well as the final product. Without uniformity of product process and expectations, as well as staffing and training challenges, many investigative reports have been delayed.

The CSB is returning to what once was the norm in ensuring input from key personnel. For example, prior to Chairperson Lemos' term, completed investigations were not subject to legal review, nor did they undergo review from additional management due to a lack of personnel.

"Ready for board review" refers to a product that has passed identified external and internal reviews and, following which, changes are routinely requested by board members. This is an important role for the Board in ensuring integrity of the facts, conclusions, and recommendations.

Over the past year, the CSB has worked diligently to draft this updated process, which is being pilot-tested and refined as we continue to advance and complete investigations.

This process provides confidence in the CSB's ability to close more investigations in FY22 than any year since the inception of the CSB.

Ensuring report integrity and efficiency is essential to the success of our agency in meeting its mission.

2. As discussed during the hearing, thousands of chemical and petrochemical facilities are in low-lying areas, where they are vulnerable to sea-level rise, storm surges, and inland flooding due to increasing storm and hurricane intensity. Thousands more are in areas threatened by the wildfires that have become a regular summer occurrence in the West. However, in addition to these threats, climate change poses a number of less-obvious hazards to chemical facilities. For example, because the risks associated with the storage, transportation and use of many chemicals increase with heat, the fact that climate change is bringing more extreme temperatures will increase the risk of chemical disaster at some facilities. In addition, prolonged droughts make it more challenging to guarantee water will be available for process-cooling. Finally, because there's a human factor in many chemical disasters, disruption to human operations at facilities caused by the extreme temperatures and major storms may increase the risks of incidents, as well. Because of this, I think it is important for CSB to be examining and assisting chemical facilities in preparing for all of these potential effects of climate change. For this reason, I'd like to understand the following:
 - a. When CSB investigates a given incident, does it identify the factors, including those mentioned above, that may have been related to climate change, or that could be exacerbated by increasing climate change?

Yes, for every current investigation, the CSB is identifying and evaluating the role of extreme weather in its review of all potentially relevant factors. We take extreme weather seriously, as facility resilience in the face of extreme weather is one of the biggest challenges facing the chemical industry today.

The ability to ensure the availability of critical utilities, such as electric power and cooling water, to maintain safe operating conditions, adequate preparation for extreme weather events, and adequate and reliable mitigation processes in the event of an accidental release, are examined by the investigation team for the event under investigation.

The CSB engages with specific incidents after an event occurs. For example, in Arkema, extreme weather caused by a hurricane created conditions directly linked to weather as a causal factor. We report on these issues and have published safety bulletins to industry to increase awareness of extreme weather. We have also published similar alerts for the effects of cold temperatures on restarts of petroleum refineries.

We have also increased our consideration of weather-related factors in our monitoring of collecting data for all incidents.

- b. When CSB makes recommendations, whether to industry, unions, or other federal or state agencies, does it identify factors that are expected to present an increasing risk as a result of climate change?

Yes, for every current investigation, the CSB is including extreme weather in its review of all potentially relevant factors, to include related recommendations.

In addition, our reports now include weather analysis at the time of the event, and we specifically determine if the weather, extreme or typical, was a causal factor directly or indirectly in the incident.

Since our involvement occurs post-incident, we view climate change issues through the lens of extreme weather and its impact on a particular event. Our enabling language includes provisions for safety studies, but our staffing currently is sized to respond to incidents as our priority. Safety studies are conducted on an ad hoc basis with the existing investigator staff. Per our enabling legislation, these safety studies must be coordinated with other federal agencies, to prevent duplication of resources.

Environmental conditions such as extreme temperature, rain and wind events should be included in a company's hazard analysis process, and it is reasonable to expect the company to develop an appropriate prevention and mitigation plan. For this reason, we applaud the CCPS's response to our recommendation from the Arkema incident to update guidance, which now calls for extreme weather to be included in the risk assessment and mitigation process and provides specific checklists for facility owners and operators. We also produced recommendations to Arkema Inc. in ensuring that all their facilities were reviewed for potential operational risk due to extreme weather, which has been closed successfully.

- c. Has CSB identified a set of scientific resources that it draws upon to help assess the impacts of increased sea-level rise, storm surge, storm intensity, flooding, wildfire, drought, and heat waves on its mission?

Yes. As the CSB continues to develop stronger partnerships with federal agencies and academic institutions, we are first enhancing current relationships with those having weather-related scientific expertise, to include NOAA's Severe Weather Forecasting Center, FEMA, DOE, and others listed below. We will continue to expand and refine this list based on the incident at hand.

Our enabling language includes provisions for safety studies, but our staffing currently is sized to respond to incidents as our priority and safety studies are done on an ad hoc basis with the

existing investigator staff. Per our enabling legislation, these safety studies must be coordinated with other federal agencies.

- d. Does CSB have staff who have the expertise to identify climate change-related factors in its investigation reports and recommendations?

Yes, in the event additional technical expertise is needed specific to extreme weather for a specific incident, we have a contract in place to secure this expertise.

- e. Does CSB consult with others in the federal government, whether at EPA, the Department of Energy, or the Office of Science and Technology Policy, on any of these questions?

Yes, CSB has continual interchange with a range of federal agencies, to include EPA, OSHA, DOE (e.g., Argonne, EIA, Oakridge, Lawrence Livermore), FEMA, U.S. Coast Guard, PHMSA, BSEE, and DHS/CIMA, on technical and policy issues, to include extreme weather. As an example, climate change and extreme weather was a focal discussion topic during an interchange with GAO Engagement on climate change in which we participated.

The Honorable Diana DeGette (D-CO)

- 1. In response to my request during the hearing, you provided the Chemical Safety Board's (CSB) current plan for completion of open investigations and reduction of CSB's backlog (Investigation Closure Plan), which we have included at Attachment B. Thank you for promptly providing the requested information. As you know, CSB is required pursuant to 40 C.F.R. 1600.5(c)(1)(ii) to provide a "schedule for completion of all open investigations, studies, and other important work of the Board" at each quarterly public meeting.

- a. To fulfill this requirement, will CSB commit to providing an updated version of the Investigation Closure Plan at each quarterly public meeting?

Yes, the CSB will provide an updated version of the Investigation Closure Plan at each quarterly business meeting and post the update on our public website.

Transparency regarding our performance and progress is important to us and to our stakeholders. The CSB has taken significant steps to increase transparency in the past 18 months and will continue to do so.

- b. Following each quarterly public meeting, will CSB commit to posting the updated Investigation Closure Plan on its website so that it remains accessible to the public?

Yes, the Investigation Closure Plan, with quarterly updates, will remain on our public website so that it is consistently accessible to the public.

- 2. Within the letter accompanying the Investigation Closure Plan, you noted that, "The plan allows for deployments to continue at the FY 2021 rate and assumes that funds for new Mission Product team members will be appropriated, with staff onboarded and trained."

Within your testimony, you also noted efforts to onboard additional investigators and members of the technical team.

- a. Can you please provide details of your hiring plan, including the specific positions that need to be filled in order to successfully execute the Investigation Closure Plan? As part of this, please explain what specifically CSB is doing to ensure its current and future staff possess the diversity of expertise needed in order to address the range of topics outlined within CSB's statute, i.e., accident reconstruction, safety engineering, human factors, toxicology and air pollution regulation.

Consistent with our previous formal communications with the Energy and Commerce Committee, critical positions must be filled across the Mission Product Team, Support Staff, and Leadership.

For the Mission Product Team, the agency has proposed a plan which features additional staff in investigations, recommendations, and safety studies. The role of investigators is paramount, but we also need to hire recommendations staff that work alongside investigators. Some new hires should have investigative backgrounds and skills, as well as subject matter expertise in human factors, environmental policy, etc. Further staff with technical, software, and experiment design experience are needed in safety studies to support incident report data tracking and analysis, and the initiation and updating of focused studies (e.g., CSB 2001 Reactives Report). These proactive safety studies and efforts are clearly outlined in our mandate as "realized or potential hazards" and include our identification of potential hazards that could pose greater risk in the future, such as climate change. Per our enabling legislation, we should partner with our federal counterparts in these proactive efforts for the greatest use of taxpayer funds and to identify significant risks most accurately and efficiently for the entire chemical industry and the impacted public communities.

For Support Staff, we are pleased to have recently filled two critical roles in Human Resources and Procurement. These hires are required to enable and support the Mission Product Team in both hiring and in providing contract subject matter expertise to bear.

We are mindful of and continually revisiting the benefit analysis of direct hires versus continuing to rely on the vast number of contractors that support our Mission Product and Support Staff teams. For critical roles that require full-time support, hiring direct will allow for more stability, integration, communication, and promotion of a common culture and process.

There is no substitute for a strong leadership team, to include career staff and appointed board members, which is essential to attracting and maintaining qualified and engaged staff. We are attending to the balance required as we scale up to a level of functioning that meets our core mission in a timely manner and with integrity.

Remaining gaps across these three areas, in comparing current staff to our proposed FY23 Staffing Plan, include:

Mission Product Team:

- Chemical Incident Investigators
- Safety Recommendations Specialists

- Safety Studies and Data Analysis Manager
- Technical Writers and Editors

Support Staff:

- Chief Information Officer
- Communications Director
- FOIA Officer
- Board Member Confidential Assistants

Leadership:

- Managing Director
- General Counsel

Each position is critical to the success of our agency, and to meeting our Investigation Closure Plan.

The hiring plan is dynamic and challenging, with retirements and an uncertain budget environment, to include the potential for a full year CR for FY21. Other challenges include heavy competition with the private sector, especially starting FY21 to the present day.

Despite these challenges, we take pride in our accomplishments. From an all-time low in 2019 of eight total Mission Product Team staff, we are now at a four-year high of 14. If fully appropriated, the Mission Product Team will equate to an all-time high by the end of FY23. The agency is seeking a modest increase in budget after many years of standstill, and we are hopeful to receive Congressional support in this area.

We are ready to take on the hiring and training challenges to meet our mission.

- b. Given the urgency of the work at CSB and the dire need for staff, have you considered petitioning the Office of Personnel Management for direct hiring authority? If not, why not?

As a micro agency, the CSB does not have the human resources necessary to execute direct hiring authority. The CSB utilizes the inter-agency services provided by the Department of Interior's Interior Business Center through an interagency agreement. It is our expectation that the process will be improved following the recent hiring of an HR Director.

3. We understand that CSB's Incident Reporting Rule has resulted in the submission of thousands of incidents to CSB over the last year. While it is understandable that CSB cannot deploy on-site to each and every one of these incidents, I believe the public, and particularly surrounding communities, would be interested in learning more about these accidental releases so that they can assess their own risks.

Providing timely information to the public and local communities is a priority, and the reason we instituted this past year a more proactive approach to media releases with factual details in the initial stages of an investigation, press interviews in the community, as well as reaching out to Congressional staff with responsibility for affected constituents.

To ensure completeness of data, the CSB uses a broad set of criteria when requesting incident reports from the USCG National Response Center (NRC). From an average of over 735 reports received monthly from the NRC, approximately 3 of these reports per month meet CSB's incident reporting criteria. A much smaller percentage of these meet deployment criteria but are still monitored.

Events that meet direct reporting criteria are nearly always included in NRC data which is widely utilized as a public record.

4. One concern we have heard is that the Incident Reporting Rule and resource limitations have caused CSB to undertake non-deployment investigations. My understanding is that these non-deployment investigations are essentially written requests for information sent to company management, without deploying CSB investigators on-site to conduct interviews and otherwise gather evidence. The concern is that non-deployment investigations rely primarily on information provided by company management, rather than workers, first responders, labor unions, or other key witnesses and stakeholders.
- a. Can you please explain CSB's process around non-deployment investigations? When are they conducted, and how are you accounting for their inherent limitations?

Incidents that do not meet criteria for full deployment may sometimes be of value in the interests of furtherance of the CSB's mission.

In the past the CSB has produced a range of products (Safety Bulletins, Hazard Study, Case Study, etc.) and applied differential and a dynamic level of resources to each investigation, based on what is learned in the initial stages. The decision to investigate was not polarized and static, but agile in adapting to provide the most productive outcomes and lessons for the community. A return to this model for the CSB would allow the CSB to enhance productivity from learnings.

Whether a team is initially deployed in person does not prevent the escalation or de-escalation of resources and the product outcome. Especially in the chemical domain, deploying in person immediately may not be the most efficient approach as the actual site can be inaccessible due to a lack of structural integrity. A remote interview or trip to a separate location, such as headquarters, can be far more productive.

If a reported event meets the criteria of an accidental release as defined by the Accidental Release Reporting Rule, the CSB routinely initiates a document request to the owner/operator for additional information regarding the incident and will also request investigative reports when conducted by Federal, state, local agencies, to include labor organizations and incident commanders.

This "range of products" approach requires additional resources to finalize and fully implement but provides a clear added benefits and safety information to the community.

Once again, we are still exploring the right model for the CSB moving forward, but the general approach described above is similar to the model employed successfully at the NTSB.

- b. Has CSB ever reached conclusions about the root cause of an incident without deploying investigators to the incident site? If so, can you please elaborate on how many times this has occurred and for which incidents?

Historical records from previous Administrations are incomplete. Many CSB products, for example, safety studies or safety bulletins, have advanced the mission of the agency without a root cause determination of an incident. Given capabilities with remote access to sites, interviews with subjects via webcams, and virtual meetings and access, the CSB is adopting more innovative practices in investigative capabilities. More investigative work is conducted remotely than ever before.

- c. To the extent CSB conducts non-deployment investigations or other reviews that do not involve on-site deployment, it is important that CSB is transparent about the information sources it is relying on as part of those reviews. How does CSB plan to communicate the information sources it has and has not relied on when sharing the results of non-deployment investigations or other products that do not involve full deployment of CSB staff to incident sites?

Transparency is vitally important to the CSB. Details on citation of appropriate review materials will be finalized prior to any advancement of CSB products.

- 5. As discussed during the hearing, the U.S. Environmental Protection Agency (EPA) is revising its Risk Management Program (RMP) regulations. My understanding is that, after years of identifying the root causes of exactly the kinds of chemical disasters the RMP is intended to prevent, the Board's investigation findings and recommendations are a great repository of information on how to avoid chemical disasters. We understand that CSB has already provided some information to EPA regarding certain recommendations relevant to this rulemaking, including information at a listening session and a July 30, 2021, letter outlining three open recommendations to EPA (July 2021 Letter). While this is a good start, I think more is needed to ensure EPA has the full benefit of the valuable knowledge gained by CSB over the years.
 - a. Does CSB keep a catalog of prevention measures, based on its more than 100 investigation reports, that could help facility managers and others to adopt the best approaches to preventing chemical incidents? If so, will CSB make this list public and provide it to EPA as part of the RMP rulemaking process?

The CSB has not historically kept a catalog of prevention measures, but with additional resources in personnel and software investments, the CSB would be willing to compile this list and provide it to relevant stakeholders, to include the EPA.

With resources provided to both the EPA and CSB, we would look forward to taking on this challenge together. As a joint effort, we could ensure that elements of our findings are not taken out of context, and our teams could simultaneously learn more about each

other's activities, to include the investigative process and the EPA's regulatory process and growth.

All CSB closed investigations and recommendations issued are available on our website, to include a range of information that could be catalogued for the benefit of the community, to include the EPA.

- b. Beyond the July 2021 Letter, what additional steps is CSB doing to provide EPA detailed recommendations and information to inform the RMP rulemaking process? As part of this process, can CSB provide EPA a list of inherently-safer technologies and recommendations for how facilities may evaluate which inherently-safer technologies may address its particular hazards?

The CSB will continue to work closely with the EPA to inform RMP improvements through the course of past and future investigation recommendations.

In dealings with any stakeholder, to include the EPA, upon request, the CSB is willing to compile a list of previously issued recommendations as it is beneficial to our mutual mission.

- 6. EPA's RMP program is closely related to the Occupational and Safety Health Administration's (OSHA) Process Safety Management (PSM) standards, which address the management and handling of highly hazardous chemicals.
 - a. Similar to the questions above regarding RMP, what steps is CSB taking to ensure that OSHA is informed of relevant findings and recommendations that can and should inform its PSM standards?

The CSB will continue to work closely with OSHA to inform PSM improvements through the course of past and future investigation recommendations.

Over the past 18 months, the CSB has invested in strengthening relationships on all fronts with both the EPA and OSHA, to ensure effective communication and progress towards higher safety standards.

- 7. What specific steps is CSB taking to comply with President Biden's Executive Order 13985, *Advancing Racial Equity and Support for Underserved Communities Through the Federal Government*?

The CSB is committed to improving the safety of both workers and the public, to include the fence line communities, who are most often underserved and vulnerable to chemical accidents and incidents.

Impact or potential impact to the fence line communities is a vital component of our deployment criteria. In addition, as many workers are residents of the local community, we protect both by

performing our mission: timely completion of investigations, issuing safety recommendations, and advocating their successful closure.

Our communications with the impacted communities must be improved. We have already made progress in FY21 through issuing factual media releases during deployment and in the early investigative phases to update these communities. Enhanced communications with stakeholders, especially the EPA, is critically important.

The Honorable H. Morgan Griffith (R-VA)

1. As a follow-up to the hearing, you sent the Committee the Chemical Safety Board's (CSB) current plan to complete those investigations comprising the present backlog, including mentions of the "anticipated board meeting time frame" for each backlogged investigation. According to this document, CSB intends the oldest investigation from 2016 to close first in the FY22 Q1-Q2 timeframe. However, after that, investigations are not prioritized based upon date, such as the Bio-Lab Conyers incident subject to close in FY22 Q2 with an incident date of September 14, 2020.

- a. Can you explain what criteria the CSB used to determine the order of backlogged investigations anticipated completion dates?

The decision criteria for the completion of investigations is based on the ability and urgency to effect safety, technical complexity of the incident, the amount of time required to recover, inspect and conduct testing of critical evidence, as well as the availability of the investigative staff.

- b. What is the status of the work on each of these backlogged investigations, including the percentage of each investigation toward completion?

The investigative staff often work on multiple investigations with priority to work involving the collection of perishable evidence, documenting the incident scene, and conducting interviews with personnel with direct knowledge of the incident.

Once the investigators begin preparation of their final report, we have more fidelity in the timeline for closure. Projects that involve detailed investigations are difficult to hold to a specific schedule since they are influenced by many external dependencies (site safety and availability, demolition status and access, evidence collection and reconstruction, etc.).

Regardless, the agency's plan is to complete up to 11 current investigations before the end of FY22 and the remaining in FY23.

- c. This planning document also notes, "estimated schedule for completion is subject to change based on external factors and investigation complexity." Please state what is meant by the "estimated schedule for completion is subject to change based on external factors and investigation complexity." Has the CSB reviewed the backlogged investigations beyond the incident dates stated in the planning document to determine which investigations may be more complex to close?

The CSB evaluated each of the 18 open investigations to determine the resources required to complete each of the investigations. All open investigations are assigned a lead investigator (Investigator-In-Charge), a staff attorney and a recommendations specialist. To the extent possible, a more complex investigation is assigned additional mission resources.

Per the planning document we provided, the Investigation Closure Plan assumes flexibility in the timeframe for completing investigations, as dynamic re-assessments are required based on numerous external and internal factors. For example: The order of completion may change based on factors outside our control (e.g., unsafe structure, site contamination), or if we identify a high-priority incident that is ready for release and warrants an accelerated placement in the queue.

- d. What is CSB's guidance on determining whether backlogged investigations are outdated and could be closed without resolution so that resources can be allocated to more recent investigations that have a broader impact on the chemical industry?

Internal guidance supplementing Board Order 40: Investigation Program was developed in earlier years and remains in place, with rationale and analysis for how and when to determine whether closing a backlogged investigation should occur, for the greater benefit of safety to the community.

With the "range of product" approach mentioned above, agency resources should align with the potential safety impact, as has been executed successfully in previous years at the CSB.

- e. Please state how CSB intends to handle investigations necessitated by accidental releases that occur after today's date to ensure they do not further exacerbate the current backlog or become casualties of a new a backlog. Please state how CSB intends to enforce any internally created deadlines for this kind of work.

The CSB is reducing the backlog of investigations while still deploying to new incidents on a consistent basis. All backlogged reports will be complete by the end of FY23 and new investigations will be targeted for closure in alignment with internal guidelines.

The mission plan through the FY23 budget request will result in the most mission staff in the history of the agency. Improved process with this increase in staff will allow the agency to continue to move toward accomplishing our goals.

2. The CSB's current planning document also states that "the CSB will continue to refine the process model moving forward that accommodates a range of investigative products and timelines to effectively serve our community and meet our full mandate."

- a. Please explain what is meant by "refine the process model," "range of investigative products," and "meet our full mandate"?

The agency is revising its investigative and report development and review process to improve the integrity and efficiency of the chemical incident investigation process.

With the "range of product" approach, provided in greater detail above, agency resources would align with the potential safety impact, as has been executed successfully in previous years at the CSB.

Meeting our full mandate refers to our mission as outlined by Congress and our mission statement.

- b. How long will it take CSB to “refine” its process model and what will be the impact of this on CSB’s investigations?

Consistent with the principles of continuous improvement, the CSB considers the refinement of its process model to be a dynamic activity. As mentioned earlier, the draft prototype has already been pilot-tested on the first three completed investigations. The range of investigation element still needs refinement.

Changes will result in reports with a higher degree of integrity and a reduction in the time required to complete investigations.

- c. Has the CSB considered submitting alternative investigative products besides investigative reports for the backlogged investigations to accelerate the process of completion?

Yes. The CSB has considered a range of options from administrative closures to subsidiary products. The consideration of these options is subject to change given the recommendation of career staff and leadership.

The Honorable David B. McKinley (R-WV)

1. Given the number of investigation requests, and the Chemical Safety Board’s current backlog, do you think its counter-productive to add to the Board’s workload and expand its scope by asking the Board to take on issues already being addressed by other agencies?

The CSB works to minimize inter-agency overlap and efforts are made to make sure resources are deployed efficiently given constraints on resources and agency backlog.

The CSB’s role is important and unique, as is the NTSB’s, in that the investigations conducted by the agency result in the determination of the cause or probable cause of the incident and when appropriate, recommendations to the operator of the facility, Federal agencies, and/or standard setting organizations. Our enabling legislation supports this independent model to follow that of the NTSB.

2. Is it appropriate for the Board to lobby other agencies for regulatory changes beyond issuing the recommendations in its reports?

Per the CSB’s enabling legislation, the advocacy and outreach activity of the Board is limited to actions specified in the Board’s recommendations and the successful closure of those recommendations.

3. Do you think the Board should adopt formal guidelines and/or standards to ensure the Board conducts objective, transparent investigations, and issues consistent reports?

The CSB agrees that formal guidelines should be developed in many instances and the agency is acting to develop and refine standards in many areas.

4. What is the single most important thing the Board needs or can do to streamline the process for completing timely investigations?

Completing the revision of the CSB's investigative and report development and review process will have the most impact in streamlining, improving the integrity and efficiency of the chemical incident investigation process.

Attachment B
CSB Investigation Closure Plan

Attachment 1

CSB Chemical Incident Investigation - Summary and Schedule of Open Investigations				
Date: 07 OCT 2021*				
	Incident Date	Investigation	Incident Location	Anticipated Board Meeting Timeframe
1	8/12/2016	Sunoco	Nederland, TX	FY22 Q1-Q2
2	4/3/2017	Loy-Lange Box Company	St. Louis, MO	FY22 Q2
3	5/31/2017	Didion Milling	Cambria, WI	FY22 Q2
4	9/14/2020	Bio-Lab Conyers	Conyers, GA	FY22 Q2
5	4/26/2018	Husky Energy Refinery	Superior, WI	FY22 Q2-Q3
6	5/19/2018	Kuraray EVAL	Pasadena, TX	FY22 Q3
7	1/24/2020	Watson Manufacturing and Grinding	Houston, TX	FY22 Q3
8	6/21/2019	Philadelphia Energy Solutions (PES)	Philadelphia, PA	FY22 Q3-Q4
9	3/17/2019	Intercontinental Terminals Company (ITC)	Deer Park, TX	FY22 Q4
10	11/27/2019	TPC Group	Port Neches, TX	FY22 Q4
11	4/2/2019	KMCO	Crosby, TX	FY22 Q4 - FY23 Q1
12	8/27/2020	Bio-Lab Lake Charles	Lake Charles, LA	FY23 Q1
13	1/29/2020	Wendland 1H Well	Burleson County, TX	FY23 Q1
14	11/13/2020	Wacker Polysilicon North America	Charleston, TN	FY23 Q1
15	12/9/2020	Optima-Belle LLC	Belle, WV	FY23 Q2
16	1/28/2021	Foundation Food Group	Gainesville, GA	FY23 Q2
17	4/8/2021	Yenkin-Majestic	Columbus, OH	FY23 Q2
18	7/27/2021	LyondellBasell	LaPorte, TX	FY23 Q3
* Estimated schedule for completion is subject to change based on external factors and investigation complexity.				