

U.S. Chemical Safety and Hazard Investigations Board

Business Meeting

July 26, 2017

CSB Headquarters Office - Washington, DC

U.S. CHEMICAL SAFETY BOARD MEMBERS PRESENT:

VANESSA ALLEN SUTHERLAND, CHAIR

MANNY EHRLICH, MEMBER

RICK ENGLER, MEMBER

KRISTEN KULINOWSKI, MEMBER

STAFF PRESENT:

KARA WENZEL, ACTING GENERAL COUNSEL

OPERATOR: Welcome to the business meeting. My name is Christina and I will be the operator for today's call. At this time, all participants are in a listen only mode. Later, we will conduct a public comment section. During that section, if you have a question, please press \* then 1 on your touchtone phone. Please note that this conference is being recorded. I will now turn the call over to Vanessa Sutherland. You may begin.

VANESSA ALLEN SUTHERLAND: Thank you, Operator. And good afternoon. Welcome to the business meeting of the U.S. Chemical Safety Board, or CSB. Today, we meet in open session, as required by the Government in Sunshine Act, to discuss the operations and agency activities of the CSB.

I am Vanessa Allen Sutherland, the Chairperson and CEO of the Board. Joining me today are my other Board Members, Dr. Kulinowski, Member Ehrlich and Member Engler. Also joining us is our Acting General Counsel, Kara Wenzel, and members of our CSB staff based in D.C.

The CSB is an independent, non-regulatory federal agency that investigates major chemical incidents at fixed facilities.

These investigations examine all aspects of chemical incidents, including physical causes related to equipment design as well as inadequacies in regulations, or industry standards, and

safety management systems. Ultimately, we issue safety recommendations, which are designed to prevent similar accidents in the future.

I will now share today's agenda and first ask the Board to give an update on investigations, studies, recommendations and deployments. Next I will give an overview of ongoing Inspector General audits, and then will provide a financial update.

Finally, we will provide a summary of our soon to be released final investigation report into the November 22<sup>nd</sup>, 2016, chemical release and fire at the ExxonMobil refinery in Baton Rouge, Louisiana.

If you are in the room and wish to make a public comment at the end of our meeting, then please sign up using the yellow sheets that you probably saw on the table immediately outside of this room at our registration table. For those of you who are on the phone, as always, you may submit comments by using [meeting@csb.gov](mailto:meeting@csb.gov) to be included in the official record.

Before we begin, I'd like to point out some safety information. Please take a moment, those who are in the room, to locate where you came in and notice the exits as you immediately exit our office are to the left and right. They have large exit signs over the stairwells.

Also please mute or silence your cell phones, vibrate, so that the proceedings are not disturbed. Thank you for that in advance.

So thank you again for everyone attending today. This is our fifth public business meeting for Fiscal Year 2017. And I'm pleased to share updates on the CSB's progress and activities. My fellow Board Members may now be recognized for any opening statements. I'll start to my left, Member Engler.

MEMBER ENGLER: I'd just like to say welcome to everyone who's come out in mid-summer already to the...to this Board meeting. It's most appreciated. And overall I'm very pleased with the progress that the Board has been making in an ongoing way on investigations and on plans for the future. I'll leave it at that, other than to say welcome.

VANESSA ALLEN SUTHERLAND: Thank you. Member Ehrlich?

MEMBER EHRLICH: Madam Chairperson. Thank you all for coming today. It's...it's good to see some of the same faces from time to time in here. And I think we made some tremendous progress. We have a great staff, great bunch of people working in this agency, and we're glad to share that information with you today and welcome you here anytime. Thank you.

VANESSA ALLEN SUTHERLAND: And lastly, Member Kulinowski?

MEMBER KULINOWSKI: Welcome everybody and let's get to it.

VANESSA ALLEN SUTHERLAND: [inaudible] to the point.

MEMBER KULINOWSKI: I can say the same things they did.

Ditto.

VANESSA ALLEN SUTHERLAND: So at this time, the Board Members will provide an update on ongoing investigations. But I'll add a note that more information and more detailed updates are always available on our website at [www.csb.gov](http://www.csb.gov). So if you want to follow-up or get more extensive information about the deployments, please visit the website.

I will start with Member Kulinowski, who will be providing an update on the Sunoco Logistics Partner and the Packaging Corporation of America investigations.

MEMBER KULINOWSKI: Thank you, Chair Sutherland. I do have a little bit more to say on this issue so...

I'd like to give an update on two incidents that involved hot work, which is the unsafe welding, grinding, or cutting activities that can result in explosions and fires. This is an issue on the CSB's Critical Drivers List or Drivers of Critical Chemical Safety Change. And I'm the appointed Board Champion for this issue. So it's my pleasure to update you on two issues...two investigations that are underway that relate to this topic.

The first is the Sunoco Logistics Partners incident. On August 12, 2016, seven workers were injured, including four critically, at Sunoco Logistics Partners, a terminal facility in Nederland, Texas. The incident involved a flash fire during welding. The current status of this investigation is that all field work and interviews have now been completed and the investigative team is currently preparing a draft report for internal review.

On the second issue, Packaging Corporation of America, or PCA, occurred on February 8, 2017, when an atmospheric storage tank exploded at the PCA facility in DeRidder, Louisiana, killing three workers and injuring seven other workers. On the morning of the incident, PCA issued a hot work permit to the fatally injured workers to repair piping near a 100,000-gallon atmospheric storage tank which likely contained an explosive atmosphere.

Current status on this investigation is that the CSB team completed its draft report, which is undergoing internal review. We haven't seen that yet at the Board level but I look forward to learning more about it when I visit the Western Regional Office next week, where that investigation is located. Thank you.

VANESSA ALLEN SUTHERLAND: Thank you. Now Member Ehrlich will provide an update on the Loy-Lange Box Company and the DuPont LaPorte investigations.

MEMBER EHRLICH: Thank you, Madam Chairperson. The Loy-Lange Box Company investigation examines the April 3, 2017, multi-fatality incident which resulted from a catastrophic steam explosion inside a pressure vessel, caused when the entire bottom of the vessel separated instantaneously. The vessel was part of a utility steam system used by Loy-Lange Box Company in the production of corrugated board products. The investigation team has determined the vessel failed due to corrosion of a six-inch ring of the original bottom head, resulting in the circumferential split of the ring and subsequent separation of the entire tank circle from the vessel. Both the main portion of the vessel and the bottom remnant that separated have been recovered. Key areas of focus continue to be circumstances surrounding the 2012 repair, the cause of the corrosion, and the opportunities that may have existed to detect the progression of corrosion damage over time.

Metallurgical testing of these pieces to verify the cause, extent, and history of the corrosion is being scheduled and the report is being drafted.

DuPont LaPorte, Texas. On November 15, 2014, nearly 24,000 pounds of methyl mercaptan was released at the DuPont Chemical facility in LaPorte, Texas. The release resulted in the deaths of three operators and a shift supervisor inside of an enclosed manufacturing building. Additionally, three other workers were injured from their exposure to methyl mercaptan and at least three more workers experienced methyl mercaptan exposure symptoms.

The CSB investigation has team completed its draft report, which is going through internal review. Thank you.

VANESSA ALLEN SUTHERLAND: Thank you. And Member Engler will now discuss the Enterprise Products investigation as well as the MGPI investigation.

MEMBER ENGLER: Thank you.

At Enterprise Products Partners, a flammable gas release with subsequent fire and explosions occurred in Moss Point, Mississippi on the evening of June 27, 2016. This facility gathers and processes natural gas for other users. There were no fatality or injuries but members of the public in the nearby community evacuated.

A draft copy of the case study has been internally reviewed by the CSB staff and comments from that process are being addressed. As you may know, there's a variety of products that can be issued



by the CSB, including lengthier investigation products, case studies, bulletins. And this will be a case study product as planned at this moment.

At MGPI Processing, on October 21, 2016, a chemical release occurred at their facility in Atchison, Kansas. MGPI produces distilled spirits and specialty wheat proteins and starches. The release occurred when a chemical delivery truck, owned and operated by Harcros Chemicals, inadvertently offloaded sulfuric acid connected to a tank containing sodium hypochlorite, an incompatible material. And as many of you may know, CSB has had a longstanding interest in issues concerning reactive chemistry and the hazards that reactive chemical processes impose. The plume generated by the reaction led to a shelter-in-place order for thousands of residents. Four MGPI employees and 139 members of the community, including the truck driver, sought medical attention.

Field work and interviews have been completed and plume modeling is being arranged. A draft copy of the case study has been internally reviewed by CSB staff and comments are being addressed. The current version of the case study is being reviewed by external parties for factual accuracy. This includes review by the companies involved, OSHA, EPA, the Transportation Pipeline and Hazardous Materials Safety Administration, the Chlorine Institute,

other industry associations, and the United Food and Commercial Workers Union, which represents employees at the facility.

VANESSA ALLEN SUTHERLAND: Thank you. I will now provide updates on CSB's Midland Resource Recovery and ExxonMobil Baton Rouge investigations.

For ExxonMobil Baton Rouge, I will discuss that in more detail under the new business item toward the end of the meeting.

For those in the room, there is a video that we will play, a short animation of the incident. And for those who are on the phone, the ExxonMobil animation is available on the CSB website at CSB.gov. If you want, I'm giving you enough time to look at that and follow the link. But you have plenty of time. We will discuss that under new business.

For Midland Resource Recovery, they operate a facility in West Virginia that, among other things, decommissions equipment previously used to odorize fuel gas. Two explosions occurred at that facility in a four week period killing three workers and seriously injuring another worker. The first explosion took place on May 24, 2017, which killed two employees and seriously injured another. Then on June 20, 2017, a second explosion occurred at the facility, killing another worker. Both explosions happened during activities to decommission equipment previously used to odorize

fuel gas. And the company is cooperating with state and local officials to develop a plan to decommission the remaining odorization units at the facility without causing additional harm to people.

The status of that deployment is that the investigation into both explosions is ongoing. We will have a further update at a subsequent public meeting.

Next is Didion Milling, which occurred on May 31, 2017. That incident was an explosion at the Didion Milling facility located in Cambria, WI, which occurred at approximately 11:00 PM. There were 16 employees working the night shift when the incident occurred. Thirteen people were injured, 5 fatally. If this incident had occurred only 12 hours earlier during the day shift, that number could have been up to 50 people because of various buildings which were damaged housed offices and were adjacent to the explosion. Didion Milling processes corn to make a variety of products such as grits, corn meal, and corn flour. Six different buildings on the site comprise the processing, packaging, and office facilities.

The packing facility where some employees had been working completely collapsed because of the explosion. All the other buildings were also severely damaged. I had the opportunity to visit Cambria about two or three weeks ago and the damage from that

blast is truly devastating and it's hard to describe without the visual. There's still a lot of work to be done at that location but I hope that the CSB can be part of ensuring that the facility is rebuilt to the best available standards and that some of our [inaudible] will be available to them as they try to recommence operations.

The status of the investigation itself is that the CSB arrived on site June 3 with a team of three investigators. After an initial assessment, the CSB mobilized additional investigators, structural and blast engineers with expertise in dust explosions, and a drone team. The CSB and its contractors have completed ground and elevated surveys of the blast damage. Limited entry into two of the damaged buildings has also allowed for the investigation into the origins of the explosion. The CSB interviewed approximately 40 Didion workers and emergency responders. And Didion Milling has provided us with unobstructed access to the site and has made many individuals with in-depth knowledge of the mill available to consult with the blast engineers aiding the CSB's investigation. That is ongoing and again, we'll provide more information as that becomes available.

For ExxonMobil, which occurred on November 22, 2016, and you'll hear...you'll see the animation and hear more about that

towards the end, that event was the result of a flammable vapor cloud igniting in the sulfuric acid alkylation unit of the Baton Rouge refinery in Louisiana. The fire seriously injured four workers and I think for those who saw some of the video, it was a large fireball. Flammable isobutane vapor released from a valve following the removal of an inoperable hand-wheel and gearbox assembly is one of the areas of focus. That isobutane reached an ignition source about a minute after the release, while four workers were still in the vapor cloud.

The Board Members are currently reviewing the final draft of the investigation report and is expected to vote on the final product in the near future. Again, that's the backdrop for the animation that you will see a little bit later.

For our recommendations office, the CSB currently has 79%, or 636, recommendations closed and 21%, or roughly 168, in open status, bringing the total number of recommendations to 804. The status of all of our recommendations can be found on the website at [csb.gov/recommendations](https://www.csb.gov/recommendations).

Those recommendations that have been voted on can also be found on the recommendations page under "Recent Recommendations Status Update". Each recommendation has a "Status Change Summary" that describes the rationale for the Board vote.

To date in fiscal year 2017, we have closed 43 recommendations. Three were closed exceeded our recommended action. Six were closed unacceptably. 21 were closed acceptably, including an acceptable alternative. Five were closed reconsidered or superseded. And eight were closed no longer applicable.

In fiscal year 2017, the Board has voted on the status of 74 recommendations. Since the last quarterly public business meeting, these were seven have closed since then as Acceptable Action. Four closed Acceptable Alternative Action. Three remain open as Acceptable Response or Alternate Response. And two are closed Reconsidered or Superseded

Recommendations that were voted on this fiscal year were from the following investigations. Understand that those numbers are hard to follow. At least you'll be able to group them by the investigation to which they are linked. Ten recommendations have been advanced from the ExxonMobil Torrance investigation. Nine recommendations have been advanced in each the Excel Energy and Airgas investigations. Six recommendations have been advanced for each Tesoro Anacortes, Chevron Richmond, and Williams Olefins investigations. Five recommendations have been advanced from the West Fertilizer investigation. Four recommendations have been advanced from the NDK Crystal investigation. Two recommendations

have been advanced from each of the Third Coast, Universal Form Clamp, DEI, and Freedom investigations. Lastly, one recommendation has been advanced from each of the following investigations—Improving Reactive Hazard Management, MFG, Valero Delaware City, CAI/Arnel, Valero McKee, Partridge Raleigh, Dupont Belle, Bayer CropScience, Veolia, Hoeganaes, and US Ink.

That concludes the recommendations update. Now we will discuss IG updates.

As of July 20, 2017, the CSB is currently working with the Office of Inspector General on three audits.

First, Management Challenges and Internal Control Weaknesses is ongoing but close to completion. The OIG provided a draft to the CSB on July 10<sup>th</sup> for review. CSB reviewed that draft report with no additional comments or revisions. And the OIG is moving forward with the final report which is expected by the end of this month.

The second is the Financial Statement Audit. OIG expects to complete this audit by November of this year.

And last, FISMA. CSB is working with the OIG to provide all requested documentation for our Information Security Management.

The OIG recently completed its Purchase Card audit of the CSB. To date, we currently have only one open recommendation. That's in

total. This recommendation relates to future office leasing that will not occur until 2019 for the Denver Regional office and 2022 for the DC office.

I have to pause and say that's pretty remarkable for those...the faces I see each business meeting. I think we started a year-and-a-half ago with 32-ish, 3-ish—thank you—34. So in absentia to our staff who worked on the IG audit and relationship, thank you immensely. For us to have only one open recommendation, which is fairly close to closure, is a remarkable feat.

Next, financial update. The CSB received \$11 million in funding for FY 2017, which ends, as everyone knows, September 30, 2017. We are using these funds to conduct investigations, recommendations and outreach work, as well as any new deployments.

I'm pleased to say that last week the House Appropriations Committee approved the FY 2018 Interior and Environment Bill, which included \$11 million for CSB to continue operations for the next fiscal year. The accompanying report said, "The Board has the important responsibility of independently investigating industrial chemical accidents and collaborating with industry and professional organizations to share safety lessons that can prevent catastrophic incidents and the Committee expects this work to continue."



The CSB is continuing its work and is very pleased to receive the Committee's support for our mission. We hope to continue to carry out the Board's important work and mission in 2018 as the budget process continues.

So now we are to the New Business section. Actually, before we do that, I will pause to ask my fellow members if they have any comments on the operations addressed or any of the updates provided. Member Kulinowski?

MEMBER KULINOWSKI: I echo your sentiments about the staff and the hard work that they have continued to do in the face of the pressure that the agency is facing. So kudos to the staff and let's keep it up.

VANESSA ALLEN SUTHERLAND: Member Ehrlich?

MEMBER EHRLICH: I echo those sentiments. I'd also like to say that a number of organizations helped us with the Appropriations Committee and Congress and whomever, because I don't know all the letters, and we're...looks like we're going to be funded for 2018. So for those of you in this room that were involved, and a number of you were, thank you. We appreciate it. For those of you on the phone, we equally appreciate it and we hope we don't have to go through the same set of machinations next year.

VANESSA ALLEN SUTHERLAND: And Member Engler? Thank you.

So I would like to provide a very high-level overview of the CSB's soon to be released ExxonMobil Baton Rouge investigation. Our final report will include [inaudible] lessons and I will give you the following two. But among other things, it seems that our report and this investigation will yield that companies should continue to evaluate human factors associated with equipment design and apply the hierarchy of controls to mitigate identified hazards. And more detail, of course, will come when the final product is reviewed and approved or discussed and published by the agency.

But I think we also will highlight that making sure written procedures are detailed and accurate and providing training on those procedures is always a critical part of performing anticipated job tasks safely.

We're now going to show the short animation that I mentioned and I hope the way we've scheduled this agenda gave people on the phone time to find the link on our website. We are also working on a full safety video that will be released shortly after the report is done. And with that, I will ask Board Affairs to start the short animation. [Video plays]

So for those who are on the phone, for us in the room, the video stopped. If you are still watching, we certainly will make sure we open up the lines for public comment. We are moving to

that phase of the meeting and at this time, I'd like to open up the floor for public comment, those who are in the room, related to and of the CSB activities or operational updates that you've heard today.

Please present your comments within three minutes. We will begin with the list of people, if there are any, who signed up to speak at our headquarters. For those who are listening on the phone, you can e-mail your comments or questions to [meeting@csb.gov](mailto:meeting@csb.gov). And so I will open it up to anyone in the room.

And, Operator, if you let us know if anyone is in the queue, we will start with whomever is first in the queue.

OPERATOR: Thank you. And if you'd like to have a public comment, please press \* then 1 on your touchtone phone. Please proceed. And, pardon me, we have a public comment. Should we take that now?

VANESSA ALLEN SUTHERLAND: Yes, thank you.

OPERATOR: Thank you. Fred Millar, please go ahead.

FRED MILLER: Hi, this is Fred Millar. I said I would try to give you an updated about the chlorine risk situation. There's been a dramatic new development which is that finally the...the Department of Homeland Security has released the results of a field test out in Utah which showed that the chlorine tank car release

went fully downwind 11-plus kilometers. That's a new... That's a first piece of concentration and distance information we've ever gotten from these folks. In fact, most of the underlying documents in all of this have been squirreled away as secret and are being restricted by the...by the restrictive kinds of agencies like Department of Homeland Security and Department of Defense.

You will recall that this has to do with, as I mentioned in previous comments, an industry and government group that strategized and coordinated work over several years, lobbying all the relevant national agencies and...and Congressional funding...and got Congressional funding, which was tagged the biggest single pot of gas research money in the world. And then they conducted field tests at Dugway, Utah, and also have been doing some deposition experiments that were paid for out of this funding as well.

The basic dynamic here is that a few gas scientists have been hired to cast doubt on the proceeding gas science, based on very, very thin evidence. A consistent goal was to lower dramatically the disaster risk advice that is relied upon at accident sites by emergency responders in all the...in the national industry and federal guidance documents.

Some prominent emergency response community members have resisted this whole trend and basically have refused to go along

with lowering the risk estimates in the Federal ERG, the Emergency Response Guidebook. You realize that for...for the Chemical Safety Board, the chlorine tank car on many, many plant sites is the single most dangerous object and therefore has to be reported to the US EPA under the offsite consequence analysis.

The final test that was done at the Jack Rabbit testing in...in September of 2016 showed that the cloud went downwind over 11 kilometers. Finally, this...the CSAC group, the Chemical Security Analysis Center, within the Department of Homeland Security, which was basically coordinating a whole lot of this, they released five little slides, data slides, showing this result. First time any of this information has gotten to the public. And it really contradicts the previous industry information that came out in Pamphlet 74, Edition #6, which said that the cloud would only go downwind .2 miles or 1184 feet.

So now we have basically a kind of embarrassment for the Chemical Security Advisory Committee. They are...they are now... Chemical Security Analysis Committee. They are basically under also a threat from the Trump administration to zero out their agency. I don't know who is at the...at the root of this. I don't know what dictated all this. But they're one of several Homeland

Security Agencies which are...which are now considered to be unneeded in the new Trump proposed budget.

So I'm very glad to hear that the...that the Chemical Safety Board's budget has been moving through the Congress and I just wanted to kind of update you on the fact that seems like reality has actually bitten...bitten again and the...and the previous modeling and...and assurances that are coming from the industry about how chlorine gas is also dangerous has been shown to be quite sketchy.

VANESSA ALLEN SUTHERLAND: Thank you, Mr. Millar. Operator, are there other calls in the queue or comments as well?

OPERATOR: Thank you. If you have a public comment, please press \* then 1 on your touchtone phone. We have a question from Richard Rusarra. Please go ahead.

RICHARD RUSARRA: Hello. I wanted to find out what, if any, the pass forward is in the Senate with respect to appropriations for the budget in general, CSB in particular.

VANESSA ALLEN SUTHERLAND: I'm going to make sure I repeat the question because you were a little faint on the phone. I think you were asking what, if any, has the Senate passed forward with regards to the CSB's budget.

RICHARD RUSARRA: Correct.

VANESSA ALLEN SUTHERLAND: We don't know.

RICHARD RUSARRA: Okay, follow-up question. Do you expect that this is going to not take place until after the current situation is resolved with respect to healthcare and perhaps taxes as well?

VANESSA ALLEN SUTHERLAND: We don't know.

RICHARD RUSARRA: Okay...[multiple voices].

VANESSA ALLEN SUTHERLAND: So, Richard, I mean I hear you. And I use the word tough because we're not trying to be funny. I don't... I don't think anyone knows. We...we haven't gotten any insight on that. There's healthcare. There's taxes. There's debt ceiling. There's lots of competing issues and the debt ceiling, I think, is probably going to take up a lot of the news because the question is will there be a government shutdown, will there not be. So I...I don't think anyone has an idea of where things are headed.

RICHARD RUSARRA: Okay, thank you.

VANESSA ALLEN SUTHERLAND: You're welcome.

OPERATOR: Thank you. We have another question, a follow-up from Fred Millar. Please go ahead. Fred, if you muted your phone, please unmute it or if you're on speaker phone, pick up the handset. Fred? And we seem to have no further questions at this time. Once again, please press \* then 1 for a public comment. We have a question from Nichol[?] Belise[?]. Please go ahead.

NICHOL BELISE: Hello.

VANESSA ALLEN SUTHERLAND: Hello.

NICHOL BELISE: Hello, do you [inaudible]?

VANESSA ALLEN SUTHERLAND: Yes.

NICHOL BELISE: Hey, question for you. We were wondering if there was a chance to get a little more detail on the explosion that happened at the milling plant. We were wondering if the area was...get a little more detail on which area it happened and what the reason was.

VANESSA ALLEN SUTHERLAND: Well, we don't fully know what the reason was. As I think I maybe just did a summary, I can clarify. We don't have the exact ignition source. We do have a blast expert and consultants who are trying to help us deduce where the fire originated. One of the challenges is even after a couple of weeks when I went to visit the facility, the blast...the way the building was constructed, most of the people who were injured were...they were crushed. It was a crushing hazard. The explosion lifted the roof up and the walls literally fell out to...sort of outward, you know, to away from the building. And then the roof came down. And much of the debris was still burning and smoldering even two weeks after the explosion occurred. So it's difficult to get in. It's



difficult with the way the explosion occurred to fully understand where...where the ignition source came in.

So we will have more detail as our team continues to work with our consultant to try to do modeling and as the site begins to get cleared and we have access to more information, we will see what else we can find. But we don't have a clear answer for that at the moment.

NICHOL BELISE: Is that... Is there a timeline in which you'd like to get all this done? Is there... Is there a date where you say it has to be done by this time or is it, again, I guess, a moving deadline?

VANESSA ALLEN SUTHERLAND: Not really moving. It really depends on how quickly the experts with whom we work can complete modeling and then we need time to analyze that modeling. So our goal is always as soon as possible, particularly as companies want to restart operations or rebuild. So we want to have timely information so that we can hopefully be a contributing factor and voice in how they rebuild and some of the things that we are finding in a preliminary factual update. As we get that, we certainly hope to put it on the website and share that publicly so that others outside of just the Didion investigation, anyone who is

involved in facilities that might have dust or have similar construction, we'd be able to share that information broadly.

But I couldn't tell you a specific month. We are working very diligently to get our experts to do the modeling rapidly and we are simultaneously doing additional investigative work so that we can have many different phases ongoing simultaneously. So we're doing interviews. We're still collecting data. We're still looking at building modeling. So all of that's happening concurrently as a way for us to hopefully get the information out faster.

NICHOL BELISE: Last question is, again, I don't know so please forgive my ignorance if this is blatantly obvious, but is there... What happens once you find the source of ignition? Is there legal action taken against the providers of equipment in the area or the cause of ignition? What typically happens?

VANESSA ALLEN SUTHERLAND: We do not focus on fines, penalties, or any punitive measures. So when we find information, that is simply for us to understand all of the root causes and contributing factors to an explosion or an incident. So that information would be summarized, to reflect as much detail as we had available for our final report, so that other facilities could hopefully learn from that and implement any protective measures or emergency planning and response issues to the extent we found

those, in the hopes of preventing an incident or at least mitigating some of the consequences. But we aren't going to assess fines, penalties, violations, based on the data that we collect or share.

NICHOL BELISE: I think...thank you for your time. I appreciate it.

VANESSA ALLEN SUTHERLAND: Thank you for the questions.

OPERATOR: Thank you. We have no further public comments at this time.

VANESSA ALLEN SUTHERLAND: And it appears no hands up, none in the room. So thank you to everyone who provided a comment or question today.

I want to thank our staff, as you heard from the other Board Members, for their teamwork and dedication really to helping the agency make significant progress on the Fiscal Year 17 Action Plan and the important mission of the agency. I want to thank my fellow Board Members for their numerous contributions, not just here today, but in working through the very challenging time that we've had over the last few months and in recommendations, outreach, and strategic planning efforts that I think, quite frankly, they all bring very innovative and creative perspectives to, which helps us create the work that we do with the staff.

All of us share a strong interest in preventing chemical incidents in the future and in getting as much of our information out as possible.

Lastly, I really want to thank everyone who attended today. It's 75 degrees. You could have taken a sharp left and gone to the park. And for those on the phone, I am sorry about that. It's really nice here today. We appreciate your comments and your thoughts on sharing information about ongoing initiatives. The CSB is going to hold its next public business meeting in September. We have a tentative date but the actual date and time will be posted on the website. They're always at 1:00 p.m. Eastern. But please check [csb.gov](http://csb.gov) for additional details about the agenda for that next business meeting.

I will now ask my fellow Board Members if they have any final closing comments. Member Kulinowski?

MEMBER KULINOWSKI: Nothing.

VANESSA ALLEN SUTHERLAND: Member Ehrlich?

MEMBER EHRLICH: Nothing.

VANESSA ALLEN SUTHERLAND: And Member Engler?

MEMBER ENGLER: Two...two brief points. We didn't really discuss the video but the video and animation is one of the things the CSB does to capture what happens in real...in the real world when there's

an incident at a facility using hazardous chemicals. But it's really a teaser for the...for the product that follows because the description of the incident is not the cause of the incident. And I just feel it's really important to make that point because sometimes when we present information, it's accurate but it's partial. We don't get at what the underlying causative factors are. So if you look at the animation and think nothing else is being considered or looked at, you might think that the description is the cause, that the actual...you know, manual turning of bolts was the cause, when in fact there are underlying factors that we're taking a careful look at. And certainly Chair Sutherland talked about design, training procedures. The investigation is an all-cause analysis and we'll take a look at the broad causative factors. And no other agency does that. So I just want to make that point.

And the second is I wanted to compliment the staff and Tom Zoeller, our Senior Advisor, in particular because on our website, if you haven't seen it, is a relatively new publication called... I think it's called "The Business Case" [multiple voices] exact wording correct. And I don't think that we make the point often enough, even though perhaps it's incredibly obvious, that when plants explode, when facilities burn down, when those in parts of

our industrial infrastructure are simply no longer there, they contribute to job loss, community economic destabilization, and all kinds of impacts among not only the neighbors but the employees. And so often workers are displaced forever, in addition, of course, to the tragedies of loss of life and serious injury.

So I just wanted to mention it because I think it's an important contribution of the Board. It's something that we've just done this new publication on. It's something that I'll be looking at further in terms of going back to some of the earlier investigations and looking at which ones, in addition to identifying the causes of preventable tragedies, are ones that had significant economic impact as well.

So even though that's not in our formal statutory language, the CSB addresses that. I think we shouldn't ignore it. Because I think we share a goal not only for safer chemical facilities but also for sustainable ones. So I just wanted to add that.

VANESSA ALLEN SUTHERLAND: Thank you. No one else? No?

So before we adjourn, thank you for your attendance. Please take a look at our September agenda. We're going to wrap up the whole year and hopefully tell you where we're headed in FY 18. So if you are not able to attend in person, please dial in, those who are on the phone. Also, as usual, the Federal Register will

publish our agenda for the September meeting, which we hope—knock on wood—will be a nice summary of everything that we were able to wrap up in FY 2017.

So, with that, the meeting is adjourned and any future comments can be sent to [public@csb.gov](mailto:public@csb.gov).

OPERATOR: Thank you. And thank you, ladies and gentlemen. This concludes today's conference. Thank you for participating. You may now disconnect.