

U.S. Chemical Safety and Hazard Investigations Board

Business Meeting

September 18, 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 Chemical Safety Board's public business meeting. My name is Jenny I'll be your operator for today's call. At this time, all participants are in a listen only mode. Later, we will conduct a question and answer section. During the question and answer session, 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 Allen Sutherland. Ms. Sutherland, you may begin.

VANESSA ALLEN SUTHERLAND: Thank you, Jenny. First I will call our sixth business meeting of the year to order. Good afternoon and welcome to this business meeting of the U.S. Chemical Safety Board, CSB. Today we are going to meet in open session, as required by the Government in Sunshine Act law. And that allows us to discuss the operations and activities of the Chemical Safety Board.

As you heard, I'm Vanessa Allen Sutherland, the Chairperson and CEO of the Board. And joining me today are my fellow board members. From my left, are Member Engler, Member Ehrlich, and Dr. Kulinowski. Also joining us is our Acting General Counsel, Kara Wenzel, and members of our staff.

Thank you to all who have joined on the phone as well. If you are just joining in, we will have a video, so please stay tuned in a moment for directions about that.

The CSB is an independent, non-regulatory agency that investigates major incidents at chemical facilities. The investigations examine all aspects of chemical incidents, including the physical causes related to equipment design as well as any inadequacies in regulations, industry standards, or safety management systems. Ultimately, we issue safety recommendations, which are designed to prevent any similar incidents in the future.

Today we have two items on our business meeting's agenda. I will provide a summary of the Board's accomplishments for FY17 and, after our adoption of the final report about the fire at ExxonMobil Baton Rouge facility, we are releasing the report at this meeting. Our next public meeting is October 16th and its agenda will be available on our website, on Twitter, Facebook, the Federal Register, and by email distribution to those who have signed up on our website. For those email communications, please feel free to do so at csb.gov.

As has been our custom for these public meetings, we invite attendees who are both in the room and on the phone to make comments. If you are in the room and wish to make a public

comment, when you arrived there was a bright yellow sheet on the table outside. Please place your name on that registration form. For those who are on the phone, remember you submit a public comment by email to meeting@csb.gov to be included in the official record. So you can do that either during the meeting and they will provide those questions or comments to us at the end.

But before we begin, I'd like to point out some safety information and encourage everyone who is in the room to take notice of the exits. If you are in the room, where you came in, there were two glass doors. Both to the left and right are exits and stairwells. Do not use the elevator in the event of emergency.

And I also ask that you please mute your phones or put them on vibrate, so that they don't disturb anything. Thank you for that.

So on with our agenda. As I mentioned, this is the sixth public business meeting for Fiscal Year 2017. I'd like to recognize my fellow Board Members for any opening statements or comments. I will start to my left with Member Engler.

MEMBER ENGLER: Thank you, Chair Sutherland. In light of the continuing chemical incidents across the country, I'd like to make a brief statement concerning an issue that I have had continuing concern about.

Elected officials and local leaders can act to better prevent and plan for chemical incidents. We should all be familiar with the locations of facilities that use hazardous chemicals. Important information is publicly available under federal and state laws, including the 1986 Emergency Planning and Community Right to Know law and the 1990 Clean Air Act that also created the CSB. Both were enacted after the 1984 release in Bhopal, India killed thousands of people and there were major incidents across the nation, including West Virginia, Texas, and New Jersey.

Part of EPCRA is the local Emergency Planning Committee and its clear, legal obligation to develop a local emergency response plan that must be available for public review and identifies chemical facilities and realistic evacuation or shelter in place measures during a chemical emergency.

The Right to Know Network is one valuable online source of EPA data, including risk management plans for a specific plant. It is hosted by the Houston Chronicle.

Reports by the CSB have urged public transparency about chemical hazards, such as in our investigations at Bayer Crop Sciences in West Virginia in 2011 and West Fertilizer in West, Texas in 2016. Moreover, CSB comments to the U.S. Environmental Protection Agency in 2016 on their proposed Risk Management Program

rule revision support firms providing more information about chemical safety in communities.

In my view, it's a prerequisite to safety that facility workers, plant neighbors, managers of nearby industrial sites, emergency responders, and public health professionals all have access to critical information. This information is essential for action, including for supporting inherently safer solutions and the best possible emergency response planning.

In a democratic society, a prerequisite of an engaged citizenry is having access to the facts. I urge everyone who cares about chemical safety to seek this information and put it to good use. Thank you, Chair Sutherland.

VANESSA ALLEN SUTHERLAND: Thank you, Member Engler. Dr. Kulinowski?

MEMBER KULINOWSKI: Welcome, everyone. It's been just two years since I joined the Board and I'd just like to say that it's been a pleasure to work with each of my fellow Board Members and their staff on the investigations that we've concluded during my tenure.

The agency does important work and as my recent travels for outreach and advocacy have demonstrated, our work is consumed and

appreciated across the United States and, indeed, around the world. It's my privilege to serve with you all.

As many know, I lived in Houston for over a decade, during which time my family and I experienced numerous tropical storms and hurricanes. While each had its own impacts on the city, none was as devastating as Hurricane Harvey, as accounts from friends and former colleagues have revealed. I wish all of those affected by the recent storms, including Irma and the future storm brewing as we speak, a full and speedy recovery. Thank you.

VANESSA ALLEN SUTHERLAND: Thank you. And Member Ehrlich?

MEMBER EHRLICH: Thank you, Madam Chairperson. I have spent a considerable amount of time in the last two or three weeks doing outreach and advocacy. And I'm pleased to report that the feedback we're getting from the people I interface with really speak very highly to the effort that our staff puts into developing reports, preparing videotapes, and providing accurate and detailed information.

I have been on the Board for nearly..well, I guess almost three years now. And I am pleased to be a member of this Board and to work with the Board and the Chair and I thank you all for your interest and hope you will continue to participate in our meetings. Thank you. Thank you, Chair Sutherland.

VANESSA ALLEN SUTHERLAND: Thank you. And I'd like to thank all three of you for those sentiments. Very different but all very valuable and timely.

I...as you know, we have a required meeting coming up in October with a bit more details about our operations for the upcoming year. And I'm very excited that the Board Members and I will start thinking about our action planning and bringing our different perspectives and our reflections upon...about the last year, to bear on FY18. We all know that there's only a CR until September 8th, but we are starting to plan ahead to make sure we're executing on our strategic plan. And so both the sentiments about our...just our fellow human beings in Houston, which I thought was very eloquent, and to both Members Engler and Ehrlich about some of the more substantive topics that we continue to tackle. Very much appreciate that thoughtfulness.

We don't necessarily all approach challenges and topics and issues with the same perspective, but that's one of the beauties of being on this Board, even when we're wrangling with each other. So stay tuned because in October, when we have operational updates and more topics to discuss, you may see many of those different opinions come out. So I hope that you will come with questions and participatory in that process. That's why we have the Sunshine Act

meetings in the first place. It's not just to lecture to everybody. It's to really show how we are getting the work done and trying to drive safety in the country. So thanks for that.

And now I'd like to start by giving a brief overview of our most recent deployment. The CSB currently has a two-person team at Arkema in Crosby, Texas. As many of you already know, the Arkema facility experienced multiple fires and explosions following the impact of Hurricane Harvey. Our team is currently gathering information. They've been onsite for about two weeks, the past two weeks. And in addition to be busy photo-documenting the site and collecting evidence and samples, they're also scheduling interviews. And that will be evaluated in future analysis.

The interviews that they are conducting are with Arkema personnel to develop a timeline of the events prior to the fires and explosions, as well as to understand Arkema's general safety management system. We've issued document requests and have been reviewing those documents provided so far. The team still has many hours of work to do to cull through that information and review it.

We hope to be able to provide a...another status update in the next few weeks. Hopefully by our October meeting. But for those who wanted to know the status of our deployment, they are there and the facility is still shut down.

So in two weeks we are simultaneously going to be ending our fiscal year as we continue with those type on ongoing deployment activities, I'd like to highlight the Board's accomplishments during the fiscal year. The CSB has completed five investigations.

The first was a refinery fire in Delaware City, Delaware. On November 29th, 2015 an operator at the Delaware City Refining Company, or DCRC, [inaudible] alkylation suffered second degree burns to his face and neck while he was de-inventorying equipment on a vessel in preparation for the removal of a pipe spool from a connective process.

This incident follows two previous incidents at the facility that occurred in August 2015, literally a week after both Members Kulinowski and I joined. The CSB's investigation report focused on the adequacy of written procedures and safety processes. And that final report was approved by us on April 11th of this year and released in a news conference the following month, in May.

Second was a chemical release and disruption of drinking water supply in Charleston, West Virginia. That occurred when, on January 9th, 2014, an estimated 10,000 gallons of crude methyl cyclohexane methanol, which is still so much fun to say, or MCHM mixed with propylene glycol [inaudible] were released in the Elk River when a 46,000 gallon storage tank that was located at Freedom

Industries, but on the banks of the Elk River, failed. And that disrupted the water supply for approximately 300,000 residents in that community. It was nine counties, to be more specific.

The CSB's report called on above-ground storage tank facilities, government officials, drinking water utilities, and public health agencies across the country to follow our recommendations for best practices to prevent similar incidents in the future. And that final investigation report was also released in May, May 11, 2017.

There was third, the refinery explosion and catalyst release in Torrance, California, following the February 18th, 2015 incident. ExxonMobil was the refinery investigated for releasing said catalyst material into the surrounding communities. And the explosion resulted in four minor injuries and extensive property damage.

The CSB's investigation focused on the technical cause of the equipment failure, organizational factors, process hazard analyses, and mechanical integrity at the refinery, and the State of California's Process Safety Management revisions, which were going on simultaneously. The final report was approved on March 28th of this year, released on May 3rd in California.

And, as part of this investigation, the CSB issued subpoenas to ExxonMobil with respect to the near miss that occurred during that event. We are in the process of enforcing those subpoenas and the initial court date is scheduled for mid-October.

Next, was a nitrous oxide explosion in Cantonment, Florida, which occurred when, on August 28th, 2016, a nitrous oxide trailer truck exploded at the Airgas manufacturing facility near Pensacola, Florida. That explosion killed the only Airgas employee present at the time and heavily damaged the facility, halting nitrous oxide manufacturing at that facility and leading to many shortages for the medical, university, and food manufacturing industries.

I think at the time many of you who are in this area may have read news reports about its impact on whipped cream and other common uses of those nitrous oxide products. The plant has been inoperable since that time.

The report was approved on March 16th, 2017, and released in a news conference that next month, in April.

And, last, we completed the refinery chemical release and fire in Baton Rouge, which you will hear more about today. That occurred when, on November 22nd, 2016, an isobutane release and fire seriously injured four workers in the sulfuric acid alkylation unit at that facility in Baton Rouge. During the removal of an

inoperable gear box on a plug valve, the operator removed critical bolts, securing the pressure retaining component of that valve, releasing isobutane into the unit and forming a flammable vapor cloud. The isobutane reached an ignition source within about 30 seconds of the release, starting a fire and severely burning four workers who were unable to exit the vapor cloud before it ignited. And, as you heard, our final investigation report will be released at today's business meeting.

So next we're really going to give you two factual updates about two ongoing deployments, one in St. Louis and the other in Barbour County, West Virginia. In addition to releasing those final reports, the CSB also provided a factual update into its ongoing investigation at Loy-Lange Box Company.

The Board provided an update into a catastrophic pressure vessel rupture in St. Louis, Missouri on April 3rd, where an overpressure within a steam condensate storage tank at the Loy-Lange facility launched the vessel into a neighboring dry cleaning facility and fatally injured one worker at the box company and three members of the public at the adjacent facility. The update is available on our website and clearly more work is being conducted prior to issuance of a final report.

Later this week, the CSB will release a factual update into Midland Resources Recovery investigation, which occurred in Barbour County, West Virginia, where two separate explosions killed a total of three workers. The CSB's investigation is currently ongoing but we will be releasing a short summary to update the public on our ongoing efforts.

So back to deployments, in addition to the Midland Resources Recovery investigation, the CSB initiated four other major investigations in FY17. An explosion at a paper mill facility north of Lake Charles, Louisiana, two explosions that I mentioned at the West Virginia facility, the explosion of a corn milling facility in Cambria, Wisconsin, and the explosion of stored organic peroxide in Crosby, which I just summarized as Arkema.

With respect to the work that generally results from those reports, our recommendations team has been extremely diligent in following up on our open recommendations. With respect to those outstanding recommendations, we have been diligently engaged with recipients in an effort to close or change the status of as many recommendations as possible, with a goal to close in an acceptable status. That doesn't always happen, but that is our primary target.

The CSB currently has a ratio of 79% recommendations closed. That's a total number of 636. And 21% in an open status, which is a total number of 168. That's a total of 804 recommendations collectively. The status of all of our recommendations can be found on our website at csb.gov/recommendations. The recommendations that have been recently voted on can also be found on the website under Recent Recommendation Status Updates. Each recommendation has a status change summary that describes the rationale for the Board's vote and supporting documentation. But I'll summarize today very quickly, before we transition to ExxonMobil Baton Rouge, the recommendation closure information to date in fiscal year 2017.

We have closed 43 recommendations. Three were closed exceeding the recommended action. Six were closed unacceptably. 21 were closed acceptably, including an acceptable alternative to our original recommendation. Five were closed reconsidered or superseded. And eight were closed as no longer applicable.

Of these recommendations, I'd like to highlight one of the three responses that exceeded our recommendation request. And it was, I think, of note because the goal was to reduce future safety risks and hazards and this recipient did work very quickly and go above and beyond.

Following our investigation into the 2013 fertilizer explosion in West, Texas, which resulted in the death of 12 emergency responders and three members of the public, the CSB issued recommendations to the Federal Emergency Management Agency, FEMA, to create and implement a competitive funding mechanism to provide training to regional, state, or local career and volunteer fire departments that respond to fire and explosion incidents involving FGAN, which is fertilizer-grade ammonium nitrate. In less than 10 months, FEMA awarded two grants of \$1 million each to the George Tech Research Institute and the International Association of Firefighters to develop and deliver HAZMAT training focused on issues related to FGAN.

We really applaud the actions from our recommendation recipients, but certainly when a recommendation like that, that can help emergency planning and response, to have done it so quickly, we certainly applaud the efforts of all involved to really corral stakeholders and execute a recommendation like that in such an expeditious period.

Advancing CSB recommendations really does bring us closer to our vision which is a nation safe from chemical disasters. And so we are always excited when we see work being done that will help us realize that vision.

So prior to transitioning the meeting to the key findings of our ExxonMobil Baton Rouge report, which is the last [inaudible] item on our agenda today, I'd like to replay the animation that was released at the last public meeting in late July.

For those who are on the phone, if you participated in July, we directed you to the website to view this video. It's the same animation. But we will also, obviously, direct people to view it online if you want to follow along. So with that, Hillary, can you hit play?

[PLAYS VIDEO]

[UNIDENTIFIED]: Our investigation found that accepted practices at the facility were conducted without appropriate safety hazard analysis, needlessly injuring four workers. Our safety bulletin outlines that good maintenance practices are good business practices. A key safety lesson discussed in the bulletin is the hierarchy of controls. This is a method of evaluating safeguards to provide excessive risk reduction. Within the hierarchy of controls, an engineering control, such as improved valve design, is more effective than a lower level administrative control such as a sign warning workers that the gear box support bracket connects to pressure-containing components.

Specifically the CSB is issuing the following key lessons:

#1, evaluate human factors associated with operational difficulties that exist in your machinery and other equipment, especially when the equipment is part of a process covered by the Process Safety Management Standards. Apply the hierarchy of controls to mitigate the identified hazards. In this case, the Baton Rouge refinery should have evaluated the fact that approximately [inaudible]% of the plug valves in the alkylation unit used a gear box attachment design that could result in inadvertent disassembly of pressure retaining components.

Once identified, the refinery should have applied the hierarchy of controls to establish a mitigation strategy for susceptible plug valves.

#2, establish detailed and accurate procedures for workers performing potentially hazardous work, including [inaudible] such as removing an inoperable gear box. In this case, established procedures specific to removing malfunctioning gear boxes from plug valves is especially important when different types of equipment or configurations exist that could cause confusion.

#3, provide training to ensure workers can perform all anticipated job tasks safely. This training should include a focus on processes and equipment to improve hazard awareness and help prevent chemical accidents.

Back to you, Chair Sutherland.

VANESSA ALLEN SUTHERLAND: Thank you. And I'd like to also thank the...the team who worked on this because, as you know, these are always challenging. Investigator Wingard is here. If anyone has questions during the public comment period, he is on the line. If there are questions or comments that you may have for him. When we unmute the lines, we will allow him to be able to speak. But, operator, make sure that we...inform people that before they speak, we want to give Investigator Wingard the opportunity to jump in first if it's specifically about ExxonMobil Baton Rouge.

So, at this time, the CSB would like to just double check with the members, see if they have any other comments, whether it's about ExxonMobil or the content that we've just discussed on our accomplishments, before public comment. So, I'll start with Member Engler. Anything else?

MEMBER ENGLER: Only to say that I...that I think...and I hesitate at these meetings to do self-congratulatory things because I think it's not...you know, not helpful. But I do think that there is a solid record of accomplishment over the last period that speaks to the stabilization and forward progress of the agency and staff.

VANESSA ALLEN SUTHERLAND: Thank you for that. Dr. Kulinowski?

MEMBER KULINOWSKI: Nothing further.

VANESSA ALLEN SUTHERLAND: And Member Ehrlich?

MEMBER EHRLICH: Yes, I'd like to comment on the issue related to the program that Georgia Tech is preparing, coming out of the FEMA grant. They've kind of done this with record speed and I was in Virginia last week at a VDEM[?] conference, Department of Emergency Management, and talked to the fellow with Georgia Tech. And they have the syllabus for the first program done and ready to be circulated to interested parties and I'm sure we'll be one of them, within the next couple of weeks. So they've done a...[inaudible] person's job in that regard.

VANESSA ALLEN SUTHERLAND: I'm glad to hear that. It will be interesting to see.

MEMBER EHRLICH: Thank you.

VANESSA ALLEN SUTHERLAND: So for those who are in the room, you may either raise your hand if you didn't sign up on the form out front. And for those on the phone, the operator will facilitate your questions unless you had emailed them to meeting@csb.gov. Thank you to everyone for reviewing our ExxonMobil video and for participating.

So we'll start with those in the room. Does anyone have a question or comment? If not, Jenny, if you can let us know if there are any questions in the queue on the phone.

OPERATOR: We have one question. Your line is open. If they're on mute, can you please unmute your phone? If you have a question, please press * then 1 on your touchtone phone. And our question is from Fred Miller.

FRED MILLAR: Yes, Millar. Fred Millar. Are you going to give my question to the Board? Is that it?

OPERATOR: Your line is open.

FRED MILLAR: Okay. Hi, this is Fred Millar, calling from Arlington, Virginia. I would just like to update the board on the current situation and status of the issue about the attempt to minimize the perception of risks of toxic gas containers. There's been a distinct if limited victory in that the...the Chlorine Institute has now withdrawn Pamphlet 74, Edition 6 from its website, saying that it will be revised. And they're telling some media folks that there's been some miscalculation that needs to be corrected, as if it was a math mistake or something.

But the...the...the Chemical Safety Board may have a role in this that would be very useful, in that the role of the EPA in this is not exactly clear yet, whether they basically have...have changed

their guidance on how facilities may submit the offsite consequence analyses. This is all...not at all clear. And I think it...I think it would be in the interest of the Board, given that the EPA has the fixed facility regulations under the Risk Management Program, to find out what's going on on its side of things. And will...will the Chlorine Institute now communicate with fixed facilities that they may not use Pamphlet 74, Edition 6 in their ongoing five-year revisions of the RMP documents?

The second part of all this has to do with transparency. The Board's interest...longstanding interest in transparency has been very clear and, in this case, all the...all the...all the really important underlying documentation on this has been kept secret. The two agencies from the Federal Government who were involved with this most closely have been very secretive agencies, namely Department of Homeland Security and Department of Defense. But it's also the case that there's some DOT revisions of the ALOHA program and...and the Orange Book, which need to be looked at and...again, all the underlying documents get withheld from requests, including FOIA requests, with the excuse that they're Homeland Security sensitive, as if it would be just terrible if the public learned what's going on underneath the scenes in terms of the on...onsite dangers from toxic gas containers.

Also just the...just in general, I know that the Chlorine Institute has now done an FOIA to find out whether...whether RMPs were submitted during 2016 that cited their Pamphlet 74. It seems to me it would be interesting for the...for the Chemical Safety Board to try to find out whether, in fact, there are a lot of industry...a lot of facilities around the country that are currently revising their risk management programs using either Pamphlet 74 or some other version of...of the underlying documents which has been kept secret.

I appreciate the attention that...that the Board has paid on transparency issues in the past and I would...you know, I would...I would look forward to seeing some...some Chemical Safety Board attention to this program going forward.

Thanks very much.

VANESSA ALLEN SUTHERLAND: Thank you for the comments.

MEMBER EHRLICH: I'd like to respond to that in some sense. I spent four days a number of weeks ago in Provo, Utah, wherein the folks from the Jack Rabbit project got together and talked about all the data they had gathered, both from the 2010, 2015, 2016, and 2017 tests where they dumped aliquots of anhydrous ammonia and liquid chlorine and looked at some of the issues related to plume modeling.

There's been no effort to not deal with that information. DHS wants to make sure that it's perfectly accurate in its interpretation. And we should have a preliminary report for review and final vetting within the next couple of weeks. So that will be forthcoming.

VANESSA ALLEN SUTHERLAND: Thank you.

MEMBER ENGLER: Chair... May I ask Member Ehrlich a question just to clarify that we shall have, I believe you said, a preliminary report in this case?

VANESSA ALLEN SUTHERLAND: You mean the [multiple voices].

MEMBER ENGLER: Can you clarify?

MEMBER EHRLICH: The participants of the committee meeting will have the report. Once it's vetted and any changes or corrections made, it'll be modified and released appropriately.

MEMBER ENGLER: Just to follow-up, if I may. When you say released appropriately to the participants, that means it becomes an official CSB...the CSB will receive a copy and CSB Board Members and staff will have an opportunity to review it? I would just like some clarification.

MEMBER EHRLICH: No, I don't think so. I don't know the exact answer to that. The report will come to me as a member of the

group that sat on the committee. I will submit the comments back to DHS and DHS will handle the distribution of the report.

VANESSA ALLEN SUTHERLAND: Yeah, so I think... I understand what you're asking. We are not weighing in on it in that sense. We are participating because we see a lot of incidents with chlorine, ammonia, lots of different chemicals. And being a federal agency, we can sort of listen and participate. It's their effort. They're leading it. It's their documents. Whether we get a copy to review or not, they're going to publish it and edit it and do whatever they would like with it as they deem appropriate. But we are not...if what you're asking, we're not a signatory. We're not a...we're not championing the effort in the sense that we are co-owners of that project. We're just participating because it is a way for us to find that information for us [inaudible] trainings, discussions, or our Board discussions. So that's my understanding, that we're looking at the data because it's interesting for us from a chemical safety perspective. But we are not a signatory or...

MEMBER EHRLICH: Not at all.

VANESSA ALLEN SUTHERLAND: ...author of the...of the product.

MEMBER EHRLICH: Not at all.

VANESSA ALLEN SUTHERLAND: Okay. Does that answer your question?

MEMBER ENGLER: [inaudible]

VANESSA ALLEN SUTHERLAND: Okay. But, yeah, I think it will be interesting to get the final product to see what they're doing. The DOT ERG, otherwise known as the Orange Book, and some of those other things complement what we do but those are really for transportation or [inaudible] for other purposes that are outside of simply our investigative work. We always like to collaborate with other [inaudible] one voice.

So are there other questions, Jenny, on the line in the queue?

OPERATOR: Our next question comes from Matt Dempsey.

MATT DEMPSEY: Hi. I have two questions. One question is what is the...is the scope for the Arkema investigation solely the timeline...trying to establish a timeline of events prior to the explosion?

VANESSA ALLEN SUTHERLAND: No, the scope of the investigation will be to determine all of the root causes that led to fires and explosions. So it's difficult for us to pinpoint what items might be of focus because the investigation has just commenced.

MATT DEMPSEY: Yeah, that makes sense. And is there...and I might be missing something, but has the CSB made recommendations before in terms of natural disaster planning for chemical facilities? I know you've issued recommendations...like urgent

recommendations, like beforehand for cautions, like safety bulletins. But has the CSB ever made specific recommendations as part of an investigation in relation to that?

VANESSA ALLEN SUTHERLAND: We have not. And you're correct, Matt, that what we have issued is a safety bulletin as it relates to startup and shutdown, whether or not that was for operating...normal operating procedures or post-weather. But we have not, in the past, issued recommendations as you've described which is the relationship between the incident to which we deployed and extreme weather.

MATT DEMPSEY: Thank you much. Appreciate the time.

VANESSA ALLEN SUTHERLAND: All right, thank you. I appreciate that question. It is a novel area for us, new area for us.

OPERATOR: And we have no further questions at this time.

VANESSA ALLEN SUTHERLAND: Okay, then I will give the room one last opportunity. Yes?

ROBIN BROOKS: Robin Brooks from the Chlorine Institute. I have both a question and a comment. The question is on Atchison, Kansas. Is there a timeline for the completion of that investigation's safety bulletin?

And then my comment is that the Chlorine Institute [inaudible] from the beginning, we're following the science. The edition that

was suspended was based off of 2010 data. Now that the 2015 and 2016 data has really gone through their quality assurance process, considering there is terabytes of information that was collected, we've done some preliminary...I say we, DHS has done some preliminary comparisons and we find it best to issue a new edition with better data. As better data is available, we'll make that available.

VANESSA ALLEN SUTHERLAND: So I'll take the comment before the question. The comment...part of the CSB's role...I...everyone hears me say safety is a shared responsibility. Everyone has their role to play. And if they play that role, we make things safer. I also think, as an organization that is focused on scientific and technical rigor, and having come from a rule-making agency before, a regulatory agency, rules are updated, standards are updated, technology is updated, data is updated. And I think we appreciate when people work collaboratively to figure out when it needs to be changed without necessarily getting stuck on why it was where it was.

Going forward, we are focused on trying to drive chemical safety change to where it needs to be. And anything that we can do to facilitate others talking, it's a wonderful thing. And if that means improving the data, new modeling, new information arises, we support people taking a good look at that and then trying to move

forward to a new standard, a new resolution, and continuing to make progress.

On the MGPI, Atchison, Kansas chlorine release, that is currently with us. We are reviewing it. So you're looking at the current group to ask what is the status.

MEMBER EHRLICH: Culprits.

VANESSA ALLEN SUTHERLAND: The culprits, I should say, as Manny just joked. But we are very much immersed in doing that in a timely manner. We will collect our comments collectively for the staff and then ultimately, I think, be ready when we look at those comments to determine how quickly we would be able to get it to a vote or a notation item from the Board members. But as we're reviewing it, it's hard to project because we still have to reconcile our four individual perspectives. But at least it's with us and it is being reviewed as we speak.

So I definitely want to thank the callers and everyone in the room and on the Board for being participatory. The purpose of these meetings is not just for us, as I mentioned, to push information out. It's for us to engage and to listen. So I encourage everyone who is either going to replay this, talk to a colleague, in the room, on the phone, to attend our October 16th meeting. That is the longer agenda where we actually talk about

additional operational statuses, including finance and budgetary and IG and other statuses, status reports.

But in the meantime, please feel free to engage us at public@csb.gov and through our other online mechanisms—Twitter, Facebook, etc. And I'd like to close by saying that one of the things the Board members will certainly be mindful of is sharing at upcoming business meetings new topics. I think today we [inaudible] to hear snippets of topics but this was a much shorter meeting. It was primarily for a more narrow focus. But we do hope to be able to, at upcoming meetings, have more of a debate and that you all will engage with us as well on your perspectives.

So thank you for your attendance today and I've given everyone 15 minutes back. With that, this meeting is adjourned. Jenny, thank you. You may close the phone lines. And thank you, Mark, for joining, Mark Wingard.

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