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## UNITED STATES OF AMERICA CHEMICAL SAFETY AND HAZARD INVESTIGATION BOARD

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OSHA RECOMMENDATIONS

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PUBLIC MEETING

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THURSDAY,

JULY 25, 2013

+ + + + +

9:30 A.M.

+ + + + +

**CSHIB MEMBERS:** 

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This transcript was produced from audio provided by the Chemical Safety and Hazard Investigation Board.

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## 1 P-R-O-C-E-E-D-I-N-G-S

## 2 OPENING REMARKS

CHAIR MOURE-ERASO: So I am

calling this meeting to order. Good morning,

everyone. My name is Rafael Moure-Eraso. I

am the chairperson of the Chemical Safety

Board.

Before getting to start, I would like to recognize Katherine Rodriguez. She is the daughter of Ray Gonzalez. That was one of the fatalities in the BP in Texas City. So Katherine is here with us, and she is going to present some public testimony. I thank Katherine very much for being here with us. We appreciate it.

I would like to welcome you all to this U.S. Chemical Safety Board meeting, also described as the Sunshine Act meeting, here in Washington, D.C.

I have some opening remarks, but before beginning, I would like to call an attention to some business issues and

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attention to the specifics of the agenda. For people here in the meeting, we are required to inform you that there are two exits. If there would be any kind of problems in here that we need to evacuate, there is that door and there is the door that you entered.

So I would like to call your attention to the agenda. I think you saw copies of them at the entrance. We are covering a lot of complex issues. And so I think it would be good to look at this in detail.

We are going to start with opening remarks from the Chair and from the Board members. Then the next thing that we are going to do is we are going to have a CSB staff presentation on the PSM and fuel gas issues.

This is going to be followed by comments from Mr. Thomas Galassi, who is the Director of Enforcement from OSHA. This is going to be followed by public comments that

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are going to be facilitated by our Managing Director, Dr. Horowitz.

Then following that, we are going to have deliberations of the Board on the presentations of the staff. We will ask questions to the staff. And following that, we will take a vote of the accepting or not accepting the recommendations of the staff.

Then we have lunch from 11:50 to 1:30. And in the afternoon session, we will be discussing combustible dust. And also we are going to take a vote on the recommendations on combustible dust to OSHA and also recommendations to the Board to designate combustible dust as the CBS most wanted chemical safety improvement, the first one for this year.

There will be opportunities for members of the audience to participate: first, from 11:25 in the morning, to comment on PSM or fuel oil or whatever you want to comment; and then again in the afternoon at

2:15, in which you can discuss combustible dust or anything relevant to our deliberations here.

Now I would like to proceed with my opening statement. We are here today to vote, updating the status of seven important safety recommendations. Over the years, the CSB has made a number of recommendations to the Occupational Safety and Health Administration in the aftermath of 10 tragic accidents that killed 60 workers. They are the ones that corresponded to these specific recommendations. There were 100 more workers injured. And this cost millions and millions of dollars in property damage, these ten accidents.

The CSB staff made recommendations to OSHA for first revision of the PSM standard and the issuance of one full gas release regulation for a total of three recommendations that we will be discussing in the morning session.

In the afternoon, we are going to discuss the issue or recommendation to the issue of an OSHA combustible dust standard.

There are also three recommendations related to that. And the issue is the designation of the issuance of the general industry standard of combustible dust by OSHA to be CSB "Most Wanted Safety Improvement" issue and one of more orders. This all is going to be discussed in the afternoon.

I would like to make it clear that OSHA has made progress on some of these recommendations. Most notably, OSHA updated the Hazard Communication Standard to require inclusion of combustible dust warnings. This is a very important step since CSB showed the lack of worker understanding of those hazards was a key factor in the number of catastrophic dose explosions, including Imperial Sugar, West Pharmaceutical, and CDA Acoustics.

OSHA also updated its acetylene standard based on a CSB recommendation and has

adopted a number of enforcement programs related to combustible dust, refinery safety, and now chemical plant safety. At the same time, all recommendations to revise the PSM standard, adopt a fuel gas standard, and develop a combustible dust standard have not advanced as quickly as we hoped.

I am further encouraged by OSHA's recent action to add the Process Safety

Management standard onto its regulatory agency agenda of this year. OSHA's notice states that it is considering adding reactive hazards, atmospheric storage tanks, and organizational management of change to that standard.

Today's meeting is an opportunity
to review with the OSHA's Director of the
Enforcement practice, Mr. Thomas Galassi,
these issues that are recommendations to us.

I would like very much to recognize Mr. Galassi. I don't know if he has arrived here at this time. Yes? He's here.

And I would like to thank him for accepting our invitation to appear today to discuss the OSHA efforts. We appreciate it.

Today's meeting is an opportunity for the Board members to hear the staff propose its evaluation of the OSHA actions to date, also to hear from members of the public, and then consider voting on the status of these recommendations dating back to 2002. Additionally, this meeting serves as a step forward for the CSB advocacy initiative.

I cannot overstate the importance of the safety recommendations we are discussing today. Time and again, the CSB has gone to communities where chemical disasters have struck and heard the pleas of victims. Family members who were left behind do not look to the government for comfort, but they do look to the government for action.

In 2006, Tammy Miser, whose brother Shawn Boone died in a combustible dust explosive at Hayes Lemmerz in Indiana, told

the Board, I quote, she said, "I think the only way is for you guys to help us by making recommendations to OSHA so that we can have some really good regulations for this. This affects more than just one family. It affects generations of families. We are just asking you to help us, to help restore our faith in governmental humanity."

Years have elapsed. In 2008, 14 more workers died in a dust explosion at Imperial Sugar. In 2011, 5 more died in dust-related fires at the Hoeganaes Powder Metal Plant in Gallatin, Tennessee. Among those killed was Wiley Sherburne, whose wife, Chris, met with CSB Board members and investigators and spoke movingly at a public meeting we held at Gallatin later that year. Ms. Sherburne told the National Tennessean that delays in getting combustible dust standards was "like rubbing salt in a really fresh wound."

Families all around the country

suffered death and injury from hazards that we know how to prevent but where we lack the modern regulatory standards and programs to do so.

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Eva Rowe is a young woman who lost both her parents to a preventible accident. Both her father and her mother were among the 15 workers who died at the BP Texas City refinery in March 23rd, 2005. In 2007, she testified to the House Education and Labor Committee along with the CSB then Chairman Carolyn Merritt. Mrs. Rowe said, and I quote, she said, "It is of little comfort to us, but we hope that through legislation to assure more stringent working health and safety standard, that their deaths won't be in vain. Today I ask Congress to carefully review the report issued this week by the CSB and act with great speed on these recommendations."

CSB found at our 2005 Texas City investigation that BP's Process Safety

Management had declined at the Texas City

refinery over a number of years, the victim of corporate budget cuts, under-investment, training shortfalls, and management turnover, and downsizing. These organizational changes were not properly analyzed to determine the safety impacts.

These management of change reviews are considered an important part of maintaining safety. The American Chemistry Council has been recommending them since 1998. So does the American Institute of Chemical Engineers. So do regulators in other countries, like the United Kingdom and in other states, like California, Contra Costa County.

Yet, more than eight years after
the Texas City tragedy, no changes have been
made to refinery safety standards at the
federal level. Tragically, Mrs. Rowe's pleas
for federal action have, in fact, been in
vain. And insurance company statistics from
Swith Ray (Phonetic.) show the heavy price of

inaction as their actuaries tell us that U.S.
refineries suffer property losses at four
times the rate of other countries, a gap that
continues to widen. Clearly, more must be
done. And I look forward to working with our
colleagues at OSHA to see these

7 recommendations through to success.

Thank you. At this time, I would like to ask if any of the Board members would like to comment. Dr. Rosenberg?

MEMBER ROSENBERG: Yes. Thank you.

Welcome. It is so nice to be in a public meeting with all of you. I extend a special welcome to the families and friends of those who died while trying to make a living. You have my condolences.

We are here today to discuss recommendations to OSHA that have not been acted on. Make no mistake. I want OSHA to act on these recommendations. But to blame OSHA for this inaction is myopic. There are

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factors beyond OSHA's control that thwart the agency's capacity to promulgate standards.

For decades, OSHA has been shackled by an anti-regulatory climate, where any regulation is seen as job-killing.

many. We have all heard about the extensive and resource-intensive reviews that are necessary during each step of the process: the technical analysis; the review; and, finally, OMB review. Countries where it is safest to be a worker have strong labor and public health movements that force the government and the business community to be serious about worker health and safety. We lack that now in the U.S. And OSHA's inaction is a symptom of this bigger problem.

We need strong regulations and enforcement. A root cause analysis, which the CSB is famous for, will lead us beyond demanding that an agency prevented from rulemaking make rules. It will lead us to

identifying the obstacles and strategizing
together about ways to overcome them.

Thank you.

CHAIR MOURE-ERASO: Thank you,
Member Rosenberg.

Member Griffon, do you have some comments?

MEMBER GRIFFON: Yes. Thank you,
Mr. Chairman.

Good morning to everyone as well, happy to see everyone here. Today we are going to discuss and vote on the status of recommendations the CSB has made to OSHA, many of which were made several years ago. The items to be discussed include recommended changes to an outdated Process Safety

Management standard and the recommendation for OSHA to develop and issue a combustible dust standard. These issues are clearly of great interest and importance to workers, industry, communities near high-hazard facilities, as well as the families directly affected by

1 industrial accidents.

I look forward to discussing and voting on these important issues in a public meeting, where we can hear from the recipient of the recommendations, OSHA, as well as the interested public. We very much look forward to hearing from all of you.

I am looking forward to hearing our staff present on the history of these recommendations. And I am also interested in hearing from OSHA at what has been done since the recommendations were issued.

As we discuss these issues today, it is also important to remember the varying difficulty in implementing CSB recommendations. Currently approximately 25 percent of our recommendations are to federal agencies. Many are greater than three years old.

I certainly support recommendations to federal agencies since, by definition, these changes would have a

national impact on safety. After all, the mission of the CSB is not to make recommendations to accompany on how to fix a broken pipe. We, therefore, should continue to push for national change, but the CSB should also think strategically of ways to make this change happen.

Additionally, we have to realize that while federal regulatory change may be the ultimate goal, there are other means that in the short term may improve safety.

Improving safety for workers and the community is, of course, a main goal.

Finally, I agree with my colleague Dr. Rosenberg. To blame OSHA for not completing regulatory changes or being able to enact a new standard does not address the root cause of the delays. A recent GAO report, "Workplace Safety and Health: Multiple Challenges Lengthen OSHA's Standard Setting," found that it took OSHA on average more than eight years to develop and issue safety

standards. I think we, the CSB, need to look into this. Why does it take so long to issue a safety standard? And what action can the CSB take to address this problem?

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Thank you, Mr. Chairman.

CHAIR MOURE-ERASO: Thank you very much, Member Griffon.

At this time, I would like to introduce Dr. Manuel Gomez, which is the CSB Director of the Office of Recommendations. I would like to add also that before I give the floor to Dr. Gomez, that with us is Don Holstrom, which is the Director of our Western Office, sitting at the podium here. And also with us, helping us on the meeting, is our Managing Director: Dr. Daniel Horowitz.

So I would like to turn to Dr.

Manuel Gomez for the presentation of the recommendation.

DR. GOMEZ: Thank you, Mr. Chair.

STAFF PRESENTATION: DRAFT EVALUATION OF

RECOMMENDATION 2001-05-I-DE-R1

Neal R. Gross & Co., Inc. 202-234-4433

## (FROM MOTIVA REPORT)

DR. GOMEZ: Before I introduce those who are with me here on the stage, we thought it would be useful if I take a minute to explain some of the words we use to refer to our classification of recommendations because we will be using those words today and we don't want our somewhat bureaucratic terminology to confuse the really important issues that we will be discussing.

After the CSB issues
recommendations, the staff of our
Recommendations Office follows up with
recipients to see how well those
recommendations have been implemented. This
involves correspondence and meetings with the
recipients, review of documents, and other
evidence of implementation.

Based on the information through these follow-up activities and in accordance with some timelines or deadlines that I really need not detail here today, the staff

evaluates the effectiveness of implementation and recommends that the Board assign one of several possible status categories to each recommendation.

For the purposes of today's discussion and, actually, in most instances, only a few such categories are really important because they are by far the most frequently used and the ones of most significance.

We refer to open recommendations, as you might imagine, as those that have not yet been fully implemented. These, in turn, can be evaluated or assigned the status of open acceptable response when the Board considers that timely progress is being made or open, unacceptable response when the recipient either rejects the recommendation and the Board does not agree with the rationale for that rejection or when the Board considers that progress towards implementation is insufficient or too slow and also considers

that the recipient can and should be persuaded to implement it. That's us that should persuade them and hopefully other parties as well.

As I am sure you can deduce, the Board can also assign the status of closed acceptable action when the recommendation is judged to have been successfully implemented or closed unacceptable action when the Board judges that the recipient has not implemented it and also that additional persuasion or other efforts are unlikely to bring about implementation. Again, I know this sounds a bit bureaucratic but I think will help make clear what the discussions later in the day will be.

I must emphasize again that it is always the Board that makes the decisions about the status classification. The staff only provide the Board with our analysis and recommendations for those decisions.

Let me stop here now. You can

find the details of our status classifications on our web page. The key point I wanted to highlight before we started this morning is that an open, unacceptable classification, which you will hear a lot about today, simply means that a recommendation has either not been accepted at all and the Board disagrees with the reasons for that lack of acceptance or it has not been implemented in a timely manner or at all and, hence, the unacceptable part of the status and the Board also considers that it should remain open because it is both important to accomplish it and it is possible to persuade the recipient to implement it.

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I hope this was a useful classification. Let me now go ahead and introduce my colleagues. Second to my right is Mark Kaszniak, Senior Recommendations

Specialist in our Recommendations Department. He will be our first speaker today, addressing two of the recommendations related to the OSHA

1 Process Safety Management standard.

Next to me is Ms. Christina

Morgan, also a Recommendations Specialist on
our team, who will be describing the issues
related to the fuel gas standard
recommendation this morning and issues
regarding the dust recommendations in the
afternoon.

And last, who has already been introduced, but certainly not least, our colleague Don Holstrom, who is, as the Chair indicated, the Manager of our Western Office, who was very instrumental in the investigations leading to all the recommendations we will be discussing this morning and whom we very much hope will add both his perspective following the presentations and also participate during the question and answer session later in the morning.

With that, Mark, I would ask you to go ahead and make your presentation.

MR. KASZNIAK: Thank you, Dr.

2 Gomez.

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STAFF PRESENTATION: DRAFT EVALUATION OF

4 RECOMMENDATION 2005-04-I-TX-R9

5 (FROM BP TEXAS CITY REPORT)

6 MR. KASZNIAK: The first

evaluation, recommendation evaluation, that I am going to discuss this morning concerns a 2002 recommendation that the CSB Board issued to OSHA regarding changing the OSHA's PSM standard to include coverage of atmospheric tanks involving flammable materials that occur

when a flammable process is present.

On July 17th, 2001, an explosion of fire occurred at the Motiva Delaware City refinery in Delaware City, Delaware. As a result, a tank separated from its contents, releasing its entire amount. And a fire burned for nearly half an hour. Other tanks also lost their contents. And one contract employee was killed, and either others were seriously injured. Sulfuric acid spilled into

the Delaware River, causing damage to aquatic life in the river.

The incident occurred at the Motiva sulfuric acid tank farm. This tank farm holds six above-ground tanks, 2 of which, numbered here on the slide 394 and 395, contained fresh sulfuric acid. And the four remaining tanks contained a spent sulfuric acid solution, which is primarily sulfuric acid with a combination of about five percent water and the rest flammable hydrocarbons.

It should be noted that the flammable hydrocarbons are only present in the spent sulfuric acid tanks. And at the time of the incident, there was welding repair being made to a catwalk. Sparks from that welding torch ignited flammable vapors in the headspace of the tank, resulting in the explosion.

What I am going to show you right now is a brief video animation that describes the events that led up to the incident and

1 explains its consequences a little further.

(Whereupon, a video was played.)

MR. KASZNIAK: The OSHA Process
Safety Management standard, codified at 29 CFR
1910.119, is a systematic approach to safety
and prevention of catastrophic accidents. It
requires adherence to 14 elements for
processes that contain either a process that
involves a chemical at or above a specified
threshold quantity that is listed in appendix
A of the standard, a process which involves
flammable liquid or gas on site in one
location in quantities of 10,000 pounds or
more or a process which manufactures
explosives in pyrotechnics in any quantity.

At Motiva, it should be noted that sulfuric acid is not listed in appendix A. So it's not subject to the PSM standard. The amount of flammables in the alkylation process exceeded the PSM 10,000-pound threshold for flammables. And the amount of flammables in the spent sulfuric acid solution tanks could

not be determined at the time of the investigations but were interconnected with the alkylation process.

The PSM standard contains a definition for a process, which is any activity involving a highly hazardous chemical, including any storage, manufacturing, handling, on site movement of such chemicals, or their combination of those activities. And for the purpose of this definition, the definition goes on to explain that any group of vessels which are interconnected and separate vessels which are located such that a highly hazardous chemical could be involved in a potential release shall be considered a single process.

However, the standard also contains an exemption for atmospheric tanks that store flammable liquids. It states that the flammable liquids stored in atmospheric tanks or transferred which are not below their normal boiling point without benefit of

chilling or refrigeration are not covered by
the PSM standard.

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In addition, in 1995, an administrative law judge ruled that PSM coverage does not extend to stored flammables in atmospheric tanks, even if they are connected to a process. OSHA at the time did not challenge this particular decision. Motiva when it developed its PSM program did not include the spent sulfuric acid tanks in their program based on both the standards exemption and the administrative court decision. OSHA when it investigated the Motiva accident did not cite Motiva for violations of the PSM standard involving these atmospheric tanks at the time of this incident.

If PSM had been properly applied for the sulfuric acid tank farm, then the following PSM elements would have been required by the OSHA standard. First, they would have ensured that the mechanical

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integrity of the equipment is maintained. As you have noted in the video animation, there were several holes in the tank. And the tank had not been taken out of service to have those holes repaired. Tanks were also subject to corrosion that had not been addressed.

Also, the PSM standard would have required a consistent management of change procedure for any equipment changes. What is not explained in the animation is that this particular tank was converted from a fresh sulfuric acid tank into a spent solution sulfuric acid tank, but there was no management of change conducted when that conversion was made.

If such a procedure had been conducted, then it would have been subject to a review by safety professionals and other people familiar with the process. They would have done a process hazard analysis where they would have identified potential hazards, such as the corrosion issues and the fact that

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there were flammable headspaces in the tank.

And the PHA would have required, then,

administrative and engineering control and

administrative controls to deal with those

particular hazards in the process.

In addition, before the process was allowed to be started up again, a pre-startup safety review would have been required. And at that point, the hose that was being used to put inert nitrogen into the tank would have probably been spotted as an ineffective means of providing nitrogen inerting to the top of that tank. And that would have been changed out.

As a result of CSB's investigation in September of 2002, CSB issued its recommendation to OSHA to ensure coverage under the Process Safety Management standard of atmospheric storage tanks that could be involved in a potential atmospheric release as a result of being interconnected to a process with more than 10,000 pounds of flammable

1 substance.

OSHA responded to the CSB recommendation in April of 2003. At that time, OSHA advised the CSB that the spent sulfuric acid solution tanks in the Motiva incident were not exempt from the PSM standard because they were considered to be process tanks, not storage tanks, and that OSHA proposed to address the CSB recommendation by clarifying this distinction in a compliance directive. Unfortunately, OSHA did not provide any timetable to the CSB for when this directive would be issued.

In April 2004, the CSB wrote back to OSHA asking the agency also to clarify its position in regards to storage tanks that would be attached to PSM-covered processes, as was mentioned in the recommendation. In June of 2004, OSHA again responded to the CSB that it intended to address the issues in a compliance directive that would be issued in the next 6 to 9 months. And both issues would

be addressed in that compliance directive.

meetings were held in the interim with no action on the part of the agency. Again, in December of 2011, the CSB wrote to OSHA again asking for an update of the status of this particular recommendation. And in August 2012, OSHA replied that it was still committed to issuing a compliance directive and estimated that the agency action on that directive would be completed in the next 9 months. However, to date, the CSB has not received a revised compliance directive from the agency.

so, therefore, based on these events, the staff's recommendation to the Board notes that over ten years have passed and there has been no revised compliance directive or no rulemaking to clarify coverage under the PSM standards. And then, as a result, both the CSB recommendations and investigation staff urged the Board to change

the classification of this recommendation to open, unacceptable response.

The next recommendation I am going to discuss is a 2006-7 recommendation that was issued again to OSHA regarding the PSM standard and this time requesting the standard be amended to manage organizational changes under the management of change provisions of that standard. This recommendation was a result of CSB's investigation of the BP Texas City refinery in Texas City, Texas.

That event occurred on March 23rd, 2005. A series of explosions and fires occurred, which resulted in 15 deaths and 180 injuries. In this situation, a raffinate splitter column in the isomerization unit overfilled with flammable liquid. That overfill caused the safety relief valves on that vessel to open, resulting in that flammable liquid flowing into an open top stack blowdown drum, which is shown in the slide with the surrounding yellow box.

That blowdown drum subsequently overfilled and flammable liquid gushed out the top of that blowdown drum, started falling to the ground and vaporizing, creating a vapor cloud, which contacted the ignition source, resulting in the explosions and fires.

of the root and contributing causes of this investigation and found that one of the causes was poorly managed corporate mergers, leadership, and organizational changes and budget cuts that greatly increased the risk of catastrophic incidents at the site. Some examples that CSB noted in the report were the merger of BP and Amoco, which led to a lack of focus of the process safety function in the corporation.

In this particular case, since
there was centralized process safety
management staff at both Amoco and Arco, which
merged into BP, these staffs were eliminated
in a centralized manner and delegated back

down to the business unit level. And, in addition, some PSM functions were relegated to special committees of practice involving all of BP's refineries, which were basically reduced to sharing lessons learned between themselves.

The Texas City site underwent a number of organizational changes that affected its stability and reduced the prominence of the PSM function. Again, there were many changes in site management and leadership over a short period of time, something like seven different managers of the site over a five-year period and the PSM function being transferred to different departments, eventually ending up as a subunit of the Environmental Health and Safety Department at the refinery.

And, finally, there were policy changes that were made by BP, such as budget cuts and changes to the bonus structure that eliminated the PSM metrics from calculations

for remuneration and further impacted process safety performance.

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Budget cuts involved cuts to training and staff, board operators, mechanical integrity, and, in fact, even preventing them from eliminating the blowdown drum in the isomerization unit due to budget cutbacks. Staffing changes occurred, where people were removed from various safety functions and various PSM-related issues. And the metrics that were being used to hold managers accountable were based primarily on profits and their typical lost time injuries. Even though the refinery had undergone three or four major process-related fatalities in the last year, the people at the refinery still got their bonuses.

When CSB was investigating the organizational changes at the BP Texas City refinery, it noted that there were a number of good guideline practices out there that had already addressed organizational changes.

These had been issued by the Center for
Chemical Process Safety; the American
Chemistry Council; the Health and Safety
Executive in the U.K.; the Canadian Society of
Chemical Engineers; and the Contra Costa
County, California unit out in the State of
California. In addition, a 2002 published
survey result showed that organizational
change was only being addressed in the
management of change programs in 44 percent of
chemical processing companies.

Now, OSHA covers management of change in subset section L of its standard.

And that section of the standard states that the employer shall establish and implement written procedures to manage changes except for replacements in kind to process chemicals, technology, equipment, procedures, and changes to facilities that affect a covered process.

While it can be demonstrably arguable that some organizational changes may affect changes to facilities or procedures,

the CSB final report, issued in March of 2007, contained a recommendation of the Board to amend the OSHA PSM standard to require that management of change review, be conducted for organizational changes that may impact process safety, including major organizational changes, such as mergers, acquisitions, or reorganizations, personnel changes, including changes in staffing levels or staff experience, and policy changes, such as budget cutting.

OSHA responded, initially responded, to the CSB recommendation in December 2007. The agency agreed that organizational changes can affect safety at the plant level but disagreed that regulatory change was needed. Instead, the agency proposed modifying its PSM compliance directive to provide guidance and again provided no timetable for when they would change the compliance directive. It should be noted the compliance directive to this date

has not been changed in any way, shape, or form.

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CSB received a second response after the change of administration in 2008 and November of 2009, where OSHA reiterated its previous position that mandatory changes are not needed but, instead, that the agency had decided to issue a memorandum into its regional administrators to provide guidance. This memorandum listed organizational changes that need to be considered when under the management of change section of the standard contained an example of both an organizational and a budget change had a decision-making flowchart incorporated into it and even provided suggestions to compliance officers as to what types of citations to cite. OSHA also asked the CSB at that time to close this recommendation with an acceptable response.

While the CSB considered this to be a partial solution to the problem, in our evaluation, we noted that a simple guidance

memo could be changed or rescinded by any subsequent OSHA administration, that we asked OSHA to provide us with examples of management of change where organizational change had been cited under the standards, but today OSHA has not provided the CSB with any examples.

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We also reviewed administrative law judge and review commission decisions to see if this particular issue had been litigated in the courts. And we could find no cases where this issue had been decided. also reviewed the regulatory preamble of the PSM standard as well as the actual text of the standard itself and all of the guidance documents associated with it and noted that the issue of organizational change and even the words "organizational change," "merger," "acquisition," "budget cuts," things like that, have not been addressed in either the standard, the compliance documents, or even in the preamble. The issue was never raised during the rulemaking discussions.

So while the courts have to give deference to the agencies and their interpretation of the standards, there are various due process requirements that the courts have to provide that basically tell them that the agency just can't make its own interpretations out without any factual basis in the actual standard itself. And so the CSB was concerned that the due process requirements have not been met in this particular case with the simple issue it's of a compliance memo and that the courts would have problems interpreting the fair use of the PSM standard under this particular policy change.

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Consequently, based on this
evaluation and this analysis and the text of
the actual recommendation, which asked for an
amendment to the PSM standard, which, by the
way, was the only significant regulatory
change that was made in the BP Texas City
case, both recommendations and investigation

staff urged the Board to change this
classification to open, unacceptable response.

I will now turn the presentations over to Christina Morgan, who will discuss our recommendation regarding fuel gas safety.

STAFF PRESENTATION: DRAFT EVALUATION OF
RECOMMENDATION 2010-07-I-CT-UR1
(FROM KLEEN ENERGY AND CONAGRA

## INVESTIGATIONS)

MS. MORGAN: All right. The next recommendation on the agenda is a recommendation calling upon OSHA to issue a comprehensive fuel gas safety standard for both construction and general industry. The recommendation was issued following the CSB's investigation of the February 2010 natural gas explosion at Kleen Energy in Middletown,

Connecticut, but it is also related to the CSB's investigation of a June 2009 natural gas explosion at the ConAgra Slim Jim facility in Garner, North Carolina.

On June 8th, 2009, workers at the

ConAgra Slim Jim facility in Garner, North
Carolina were installing a new gas-fired
industrial water heater. Because they were
having difficulties lighting the water heater,
the workers suspected that the gas line was
not effectively purged with air. Therefore,
they purged the line indoors, inside the
building's utility room, intermittently over
a two and a half-hour period. No combustible
gas detectors were used to warn of the levels
of natural gas, which were accumulating inside
the building.

The gas eventually contacted one of many potential ignition sources, triggering a massive explosion. The blasts caused 4 deaths and at least 67 injuries, including an amputation and severe burns. The facility itself was severely damaged, with large portions of the roof area experiencing collapse.

In addition, damage to the facility's ammonia-based refrigeration system

caused release of approximately 18,000 pounds of toxic anhydrous ammonia to the atmosphere.

Subsequent to the event, the Slim
Jim facility closed. And hundreds of jobs
were lost in the region.

Just three days after the CSB released its findings on the ConAgra incident, on February 7th, 2010, a second devastating natural gas explosion occurred at Kleen Energy, a combined cycle natural gas fuel power plant then under construction in Middletown, Connecticut. At Kleen, workers were not purging gas piping but, rather, conducting an operation known as a gas blow whereby natural gas is forced through piping at high pressure and velocity in order to remove debris that could damage the newly installed gas turbine upon startup.

Large quantities of natural gas and debris were released to the atmosphere outside the power generation building. The released gas accumulated and contacted an

1 ignition source, causing a massive explosion.

Six workers were killed. At least 50 were injured. And the completion of the Kleen Energy power plant was significantly delayed.

Both the Kleen and ConAgra

7 incidents had several important

8 characteristics in common. Both involved

9 planned work activities that led to large

10 releases of highly flammable natural gas in

11 the presence of workers and ignition sources.

12 Both caused serious loss of life, serious

injuries, and significant economic impacts.

Both had the potential to cause even more

damage and loss of life, and both were

16 entirely preventible.

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In the aftermath of both incidents, the CSB issued a number of recommendations to a variety of stakeholders, including voluntary consensus developers, such as the National Fire Protection association and the International Code Council.

At its June 2010 meeting in

Connecticut, the Board issued the

recommendation that is the subject of today's

presentation: a recommendation to the federal

Occupational Safety and Health Administration,

or OSHA, calling for the promulgation of a

regulation addressing fuel gas safety to both

construction and general industry.

The Board asked, at a minimum, that the regulation prohibit the use of flammable gas to clean piping, which was the cause of the accident at Kleen Energy, and that it prohibit purging flammable gases inside, which was the cause of the accident at ConAgra.

To prevent both types of accidents, the CSB recommended that the new regulation prohibit venting or purging outside, where a flammable atmosphere could be formed in the vicinity of workers or ignition sources.

The Board also recommended that

the new regulations prohibit any work activity in areas where the concentration of flammable gas exceeds a fixed low percentage of the lower explosive limit, or LEL, as determined by appropriate combustible gas monitoring.

Lastly, the Board asked that the new regulation require companies to develop flammable gas safety procedures and training.

In issuing the recommendation to OSHA, the Board noted that OSHA already has industry and construction regulations for flammable gases, including hydrogen, acetylene, and liquified petroleum gases.

Yet, the use of natural gas in the U.S. far exceeds the usage of all of these gases combined.

In addition, 80 percent of natural gas used in the United States is used in sectors covered by OSHA. Still, OSHA does not have a standard that addresses the safe handling of natural gas or the hazards of methane, which is the primary component of

1 natural gas.

More than three years have passed since the Kleen Energy incident. And OSHA has no plans to initiate rulemaking on this important issue. In the agency's initial response, dated December 2010, OSHA described a number of commendable actions that the agency took in the aftermath of the Kleen Energy disaster. These included issuing significant proposed penalties to the companies involved in the commissioning of the Kleen Energy facility and sending a strongly worded letter to the 125 power plants that the CSB identified as planning to commission new turbines between 2010 and 2015.

That letter notified power plants of the hazards of using gas lifts to clean piping and called for the use of non-flammable, non-explosive alternative media. The letter also warned of severe penalties under existing OSHA regulations, including the general duty clause, for failure

to protect workers engaged in pipe-cleaning operations.

Unfortunately, OSHA's response was silent on the issue of unsafe purging operations such as that which occurred at ConAgra. Moreover, the response stated only that OSHA would "consider initiating rulemaking for a fuel gas safety standard during the agency's regulatory review."

A second response from OSHA, dated March 2012, indicated that OSHA does not believe it is appropriate to commence rulemaking on fuel gas safety at this time.

Instead, OSHA has indicated that they will monitor states' and localities' adoption of NFPA standards addressing these hazards into their fire codes and evaluate the effectiveness of these standards at controlling the targeted hazards. At that point, the agency will determine whether rulemaking is necessary to protect workers.

OSHA offered no fixed timeline for

conducting this evaluation. To date, OSHA has yet to announce via press release or Federal Register notice that it plans to commence rulemaking on this issue at any time in the near future.

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Ensuring comprehensive and timely safety improvements underscored the Board's rationale for issuing recommendations to a variety of recipients, including the National Fire Protection Association. NFPA's revisions to NFPA 54, the National Fuel Gas Code, and their issuance of a brand new standard, NFPA 56, entitled "Standard for Fire and Explosion Prevention During Cleaning and Purging of Flammable Gas Piping Systems," will continue to improve the safety of gas-processing activities in the United States. But the Board did not intend for voluntary consensus standards to substitute for needed federal regulation on fuel gas safety.

While valuable in establishing best industry practice, voluntary consensus

standards carry the force of law only when adopted into state and local codes or explicitly referenced as mandatory in federal regulations. Adoption of the most recent editions of these standards at the state or local level is often very slow and politically difficult, even for the most safety-minded of jurisdictions. Moreover, even in instances where codes are enforceable by state and local jurisdictions, enforcement capabilities are often insufficient to prevent accidents.

In summary, OSHA's decision to defer regulation indefinitely while monitoring the implementation of voluntary consensus standards is in direct conflict with the intents of the CFC's recommendations, which is now more than three years old. Therefore, CSB recommendations and investigation staff recommend that the Board vote today to designate this recommendation with the status open, unacceptable response.

Thank you. I will now turn it

afternoon. So he is going to cover all of his comments this morning.

Mr. Galassi?

MR. GALASSI: Thank you, Mr.

Chairman.

## OSHA COMMENTS

MR. GALASSI: I have got some good news. I have a PowerPoint-free presentation, not that PowerPoint isn't important, but I know that gets a little tedious.

Before I offer my prepared comments, I would like to introduce my colleagues here with me today. Number one is my colleague, although I think he is probably not here, but -- he is here -- is the Acting Director of the Directorate of Standards and Guidance, Mr. Bill Perry -- I guess they are my shield here -- in addition, our Director of our Office of Chemical Process Safety and Enforcement Initiatives, Mary Lynn; our lead process safety management engineer, long term with OSHA, Mr. Mike Marshall; and a senior

process safety engineer from our Office of Chemical Process Safety, Mr. Jeff Wanko.

So it is a pleasure to be here.

On behalf of Assistant Secretary David

Michaels and our newly confirmed Secretary of

Labor, Thomas Perez, I want to thank you for

inviting OSHA to this important meeting.

As you are aware, OSHA and its state plan delegates regulate safety and health in over eight million workplaces over a wide range of industries. Despite our efforts, each year more than 4,500 workers die on the job in the United States. And more than a million are injured, suffer injuries serious enough for them to miss at least one day of work.

OSHA cares deeply for the safety and health of all workers in America and believes these injures are preventable. We act aggressively to enforce all of the standards, including those impacting the process industries. OSHA's 29 CFR 1910.119,

"Process Safety Management of Highly Hazardous
Chemicals," is the most comprehensive standard
applicable to process industries.

Before I discuss OSHA's activities, I want to make one very important point. Although OSHA's mission is to assure safety and healthful working conditions for workers in America, it is ultimately the employer's responsibility under the act to provide a safe and healthy workplace.

OSHA has a number of tools at its disposal to make sure employers fulfill that duty and protect workers from workplace hazards. The tools include enforcement with special emphasis to help focus our inspection activities on particular hazards; issuance of standards and regulations, on which enforcement is based; and compliance assistance, providing guidance, materials, and training.

OSHA's citations are based on standards and regulations issued by the

agency. Where no standard exists, OSHA can use its general duty clause, which states that an employer must furnish a place of employment, free from recognized hazards likely to cause serious physical harm.

Standard setting is one of the most important and permanent actions that OSHA can take, but it is rarely the quickest means of addressing workplace hazards. Not only do OSHA standards require substantial outlay of resources, but the process is extremely long.

A recent Government Accountability
Act's report, for example, estimated it takes
an average of seven years for OSHA to issue a
standard. And the process is only getting
longer. The rulemaking, therefore, is a tool
best reserved for the most widespread and
serious hazards.

Because of the enormous job OSHA has and the limited resources available to perform these tasks, we must carefully choose which of these tools we use at any given

situation and what the most effective and efficient action would be to address the most important hazards.

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Before deciding to address a hazard by promulgating a new standard, OSHA considers a number of factors. And they include the estimated time it takes to issue a final OSHA standard; the existing applicable OSHA standards in place; the usefulness of our general duty clause for addressing the particular hazards, including the existence of industry standards and codes which show the industry knowledge of the hazards, which is a particular requirement of general duty; the effectiveness of training, education, consultation, and outreach efforts; as well as vigorous use of the bully pulpit. And, last but certainly not least, is OSHA's available resources to apply on a given problem.

OSHA appreciates and takes CSB recommendations very seriously. We have carefully considered and responded to every

recommendation the Board has submitted to the agency, taken into account our resources and broad responsibility to protect all workers in America, not only those exposed to explosion and catastrophic hazards.

Each of our responses, including the four considered here today, was delivered to the Board in a timely manner. When in an OSHA analysis a Board recommendation, including a recommendation to promulgate a new standard may not be the most effective option, OSHA may use other methods to address the hazard, essentially taking a different route to the same destination in order to effectively protect workers as expeditiously as possible.

I will now describe the actions
OSHA has taken or is in the process of taking
to respond to the recommendations under review
today, so first the coverage of atmospheric
storage tanks under the Process Safety
Management standard or the existence of the

1 exemption.

July 17th, 2001 sulfuric acid tank explosion at Motiva Enterprise, Delaware City, Delaware facility, the CSB recommended that OSHA ensure coverage under the Process Safety Management standard of atmospheric storage tanks that could be involved in a potential catastrophic release as a result of being interconnected by a covered process.

And, as we have heard this morning in the report out, the incident occurred when welding on a walkway closed close to a spent sulfuric acid tank, ignited flammable atmosphere in the headspace of the tank.

Motiva used the tank to separate spent sulfuric acid used in petroleum refining from and trained hydrocarbon. Because of the hydrocarbon content, the tank's headspace contained a flammable atmosphere. The explosion caused a failure of the tank and resulted in the death of the welder.

As we have heard this morning,
OSHA's Process Safety Management standard
exempts from coverage the contents of
atmosphere storage tanks, the sole function of
which is storing flammable liquids.

OSHA responded to the Chemical Safety Board on April 22nd, 2003 explaining that the spent sulfuric acid tank at Motiva was actually a process tank meant for the separation of sulfuric acid and hydrocarbons and not a storage tank subject to the atmospheric storage tank exemption.

OSHA also informed the CSB it intended to repair a directive for its field offices, outlining the application of the atmospheric tank exemption.

OSHA continues to address

potential hazards associated with atmospheric

tanks on a case-by-case basis and is moving

forward with the guidance to the field I

mentioned previously. In addition, OSHA is

considering including questions regarding the

atmospheric storage tank exemption in its recently announced request for information related to revising the Process Safety

Management standard. The R-5 will address a number of issues that have become evident in the 21 years since OSHA promulgated the PSM standard.

The next issue is management of change. Following its investigation of the 2005 British Petroleum Texas City, Texas explosion, the Chemical Safety Board recommended that OSHA change its PSM standard to explicitly state that management of change, such as mergers, reorganizations, personnel changes, staffing levels, or budget cuts are covered under 1910.119(1) section, "Management of Change."

In the December 12th, 2007
response to this recommendation, OSHA
explained to the CSB that organizational
change affecting process safety is already
part of the PSM requirements.

organizational change under paragraph 119(1), both before and after the CSB recommendation.

At both Formosa Plastics and Kraft Foods, OSHA successfully cited organizational change that materially affected, changes which materially affected the safety of the process. OSHA, therefore, requested that CSB close the recommendation.

In addition, OSHA issued a field memorandum to its regional administrators on March 31st, 2009, explaining that OSHA's position on enforcement of paragraph 119(1) and organizational change. The memorandum clearly states that a facility must initiate its management of change process if an organizational change has potential to impact any of the process elements listed in 119(1), subsection 1.

Finally, OSHA is considering including questions relating to management of change, organizational change, to the recently

announced request for information for advising the Process Safety Management standard.

Next is fuel gas safety following the 2010 explosion at Kleen Energy construction site in Middletown, Connecticut. The CSB recommended that OSHA promulgate regulations to address fuel gas safety for both construction and journal industry.

osha responded that the agency would consider promulgating new flammable gas safety regulations. However, upon further review, Osha determined that rulemaking is not the best option at this time for a number of reasons that I would briefly like to touch on.

In general, OSHA believes the country is well-served by the current framework of building and mechanical codes that face fuel gas safety under national Fire Protection Association standard 54, National Fuel Gas Code, under International Code Council's international fuel gas code, and the American Society of Mechanical Engineers code

for pressure piping. These codes incorporate by reference in many municipalities, counties, states throughout the country, provide broad engineering standards for fuel gas systems in business and residence.

Given that this effective regulatory structure already exists, OSHA must consider the utility of a fuel gas standard given its regulatory priorities and finite resources.

SHA's other compressed gas standards exists because the gases present unique hazards; for example, the detonation of hazards of acetylene and hydrogen into high density and release of potential of liquefied petroleum gas, such as propane, because the facilities that use gases such as hydrogen, acetylene, propane, and butane typically store large inventories on site or at the point of use, which presents a much greater hazard to workers.

In response to the CSB

recommendation on the Kleen Energy explosion on purging and cleaning of fuel gas piping,

OSHA participated as a technical resource in the preparation of NFPA's new fuel gas process safety, NFPA 56, standard and has maintained a full awareness of the standard's content.

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Relatedly, by letter dated August 27th, 2010, OSHA directly placed energy companies and turbine manufacturers on notice regarding the hazard of releasing flammable gases into congested workplaces. OSHA will continue to monitor developments and implementation of NFPA's 56 as it becomes a permanent NFPA standard. If in the future OSHA discovers an employer exposing employees to fire and explosion hazards associated with gas blows, the agency can cite the employer for violation of the general duty clause, with NFPA 56 representing one source of industry recognition of a gas blow hazard.

Even though OSHA has several tools to address hazards associated with the gas

blows, it has determined that gas blows and their associated hazards are not widespread.

In fact, our search revealed that there have been no other fatalities due to gas blows since the Kleen Energy incident. As a result, OSHA believes that no further regulatory action is needed because of the effective comprehensive enforcement and recognition already in place.

And, lastly, combustible dust. In 2006, the CSB recommended that OSHA issue a standard designed to prevent combustible dust fires and explosions in general industry.

OSHA strongly agrees that the best course of action is a federal regulation to control combustible dust hazards.

As you may know, on April 29th,
2009, the Department of Labor announced its
intent to initiate a comprehensive rulemaking
on combustible dust for the first new
regulatory action of the administration. On
October 21st, 2009, OSHA published an Advance

Notice of Proposed Rulemaking in the Federal
Register as an initial step in the development
of a standard to address the hazards of
combustible dust.

The ANPR included 69 questions.

The questions covered a variety of categories, including the definition of combustible dust, controls needed to mitigate the hazards, hazards and analyses in other such categories.

During the comment period, which ended January of 2010, OSHA received comments from over 150 individuals representing different industries and organizations. And those comments can be found at website www.regulations.gov, as all comments can be found. At present, the comments have been compiled, and responses to each question have been addressed.

After the ANPR publication, OSHA convened six stakeholder meetings, two in Washington, D.C., December 2009; two in Atlanta in February 2010; two in Chicago in

1 April of 2010; and a web chat in June of 2010.

As a part of the rulemaking efforts, OSHA conducted 11 site visits of facilities handling combustible dust. Visits covered pharmaceutical plants, paper, power plants, furniture, food, sulfur, wet corn milling industries, representing a cross-section of industries potentially affected by a new combustible dust standard.

Additionally, the staff from OSHA standards group accompanied regional and area personnel and contractors on three site visits. OSHA has developed several regulatory alternatives ranging from basic to comprehensive. The agency is also preparing the necessary materials and analyses for the Small Business Regulatory Enforcement Fairness Act review, which is scheduled to begin in November of 2013. After the SBREFA meeting, OSHA will continue to work on publishing the proposed rule.

Because the rulemaking process is

time-consuming, OSHA has taken more rapid steps to ensure that workers are protected in the interim. So in October of 2007, OSHA initiated a combustible dust National Emphasis Program. In light of the Imperial Sugar dust explosion in February of 2008, OSHA expanded the National Emphasis Program to address industries, to focus on industries, a more frequent, high-consequence dust incidence. The revised NEP includes 64 types of industries for inspection.

In addition, OSHA inspected all sugar refineries, beaten sugar cane, under federal jurisdiction as part of the National Emphasis Program.

OSHA is taking and will continue to take strong enforcement action to address combustible dust hazards. Since the start of the National Emphasis Program, OSHA and its day plan partners conducted over 3,700 inspections, identifying over 14,000 violations at facilities handling combustible

1 dust.

In the absence of a combustible dust standard, OSHA has a number of tools, such as the general duty clause and our housekeeping standard, which addresses the accumulation of combustible dust in the workplace.

OSHA also uses educational tools.

In 2005, OSHA published a safety and health information bulletin titled "Combustible Dust in Industry: Preventing and Mitigating the Effects of Fire and Explosions."

This comprehensive guidance
highlights the hazards associated with
combustible dust, the work practices,
engineering controls that reduce the potential
for dust explosion that reduce the danger to
employees; if such explosions were to occur,
the training needing to protect employees from
these hazards.

In light of the tragedy at

Imperial Sugar, OSHA mailed 30,000 copies of

this bulletin to employers identified as being at-risk industry. This proactive step reminded employers of their duty to furnish employees with employment free of hazards resulting in serious physical harm and offering them instruction and information on how it can be accomplished.

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OSHA has also clarified its hazard communication requirements for combustible dust hazards. On March 26th, 2012, OSHA amended its hazard communication standards to incorporate the globally harmonized standard for classification labeling of chemicals, termed GHS. As part of those revisions, OSHA adopted the regulatory language that explicitly requires combustible dust hazards to be disclosed on labels and safety data sheets. OSHA is also working with the U.N. subcommittee on the GHS to include text in the GHS on the classification of combustible dust hazards.

In the interim, until a final

combustible dust standard is issued, the agency's strong and effective enforcement of existing regulatory and statutory requirements combined with education and outreach to employers, employees is helping to protect the safety and health of working men and women who may be exposed to combustible dust hazards.

OSHA is certain that rulemaking efforts that are currently underway will further reduce the potential combustible dust flash fires, deflagrations, and explosions.

OSHA is in full agreement with the CSB that there are serious chemical plant-related safety and health issues facing workers in America and that strong action must be taken. In every instance, OSHA has taken strong action to address hazards identified by the CSB. We would like to work constructively with the CSB in the future and find ways to best reach our common goal to protect the workers and communities in this country.

Thank you.

CHAIR MOURE-ERASO: Thank you very
much, Mr. Galassi. We appreciate your

comments. I thank you for them being so

comprehensive. I assure you that what you

have said and what we have presented, we will

take it into account in our deliberations.

Thank you very much.

## PUBLIC COMMENTS

CHAIR MOURE-ERASO: So now we move to the next issue in the agenda. We would like to ask for public comments. I would like to request that whoever is presenting public comments to us, I will appreciate if they identify who they are representing so we can have that for the record.

I am going to call to facilitate this part of the public comments to the CSB Managing Director, Dr. Daniel Horowitz. That is going to facilitate the process. So Dr. Horowitz?

DR. HOROWITZ: We hope that OSHA will stay because we during our question and

answer may have some questions directed to OSHA. Is that acceptable?

CHAIR MOURE-ERASO: Yes. Well, I wonder how OSHA feels about this. There might be some comments that refer to your presentations, Mr. Galassi. We will very much appreciate if you could stay here for a few minutes during this. Thank you very much, appreciate it.

DR. HOROWITZ: Thank you, Mr. Chairman.

We have a number of folks who have signed up to give their comments in person, received a number of comments in writing.

And, consistent with other public meeting practice, if I could ask each commenter to limit their comments to about three minutes and to please spell your name clearly for the final report?

And for those people who have submitted their comments in writing, Mr.

Chairman, they are quite voluminous. And I

propose to summary them unless there is
someone here from that organization who wishes
to summarize them instead.

The first commenter is Ms.

Katherine Rodriguez, who, as the Chairman mentioned, lost her father in the 2004 Texas

City incident and is representing the United Support and Memorial for Workplace Fatalities and has traveled here from Houston. So thank you, Ms. Rodriguez.

MS. RODRIGUEZ: Good morning.

Again, my name is Katherine Rodriguez,

K-a-t-h-e-r-i-n-e R-o-d-r-i-g-u-e-z. And I am

with United Support and Memorial for Workplace

Fatalities.

I would like to address the recommendation to OSHA on the revision of the Process Safety Management standard to require management of change reviews for certain organizational changes. As you know, this is as a result of the CSB's investigation of the March 23rd, 2005 explosion at the BP Texas

1 City refinery.

I have a highly personal perspective on this recommendation. My father was killed at that very same refinery six months before that explosion, on September 2nd, 2004. His incident was cited in the CSB's final report as the Ultraformer number 3 incident.

My father and two of his coworkers received second and third degree burns on the majority of their bodies during the opening of a pipe flange. The valve they were working on had stored energy. It was determined that the absence of a bleed valve didn't allow them to know for certain if the pipe was safe to open.

It was also determined that the incident was process safety-related and revealed a serious decline in process safety and management system performance at the BP Texas City refinery.

My father received burns to 80 percent of his body. He endured multiple skin

graft surgeries and painful daily cleaning of his skin. For two and a half months, he would remain in the hospital, until November 12th, 2004, when he died from his injuries.

OSHA did investigate his incident and cited BP Products North America \$102,500 for 7 serious and 1 willful violations. The willful violation was for failure to control hazardous energy.

I fully support the recommendation to amend the OSHA PSM standards 29 CFR 1910.119, section (1) to require management of change for organizational changes that may impact process safety.

An independent review panel, the
Baker panel, said that BP made many
significant changes, establishing several new
reporting lines. And relationships remain
undefined. If management of change was a
requirement, these new lines would have been
required to be reviewed, possibly preventing
incidents, like my father's in the March 23rd

1 explosion.

OSHA's response to this recommendation is the policy memo to clarify organizational change under management of change. I acknowledge and appreciate the memo and believe that it is a step in the right direction. My fear is that the memo is not enough to prevent another fatal incident that takes the life of another worker.

Earlier this year, the BP Texas

City site was acquired by Marathon Petroleum.

This is yet another major organizational

change. The BP Texas City site, now Marathon,

had 22 worker fatalities in 5 years, from 2004

to 2009.

I am encouraged by OSHA's spring regulatory agenda to address management of change in PSM. I understand that changing the standard is a long, cumbersome rulemaking process, but I cannot help but wonder if changing the standard prevents another event like what happened in Texas City, is that not

1 | worth all of our efforts?

Our family members who die on the job are not just statistics. They are our sons, daughters, sisters, brothers, husbands, and fathers.

My father spent his 35th wedding anniversary in the hospital. My kids will only get to hear stories about him. I miss him very much, and that pain will never go away.

I am asking the Board to vote to designate the recommendation related to management of change and PSM with the status of open, unacceptable response so that no other family member has to go through the pain and suffering it might have.

Thank you.

DR. HOROWITZ: Thank you, Ms.

Rodriguez.

The next speaker is Kim Nibarger.

21 He will be speaking twice. He will be

speaking first representing United

Steelworkers. Three minutes, please.

And before you start, Kim, I just want to remind anyone who has dialed in on the telephone -- there are some folks -- that you can submit comments at csb.gov. And I will be happy to read or summarize them here from the podium.

Kim, go ahead.

MR. NIBARGER: Good morning. My name is Kim Nibarger, K-i-m N-i-b-a-r-g-e-r.

I work for the United Steelworkers Health,

Safety, and Environment Department.

First, we want to thank the Board for conducting this public meeting to give more people an opportunity to see what you do as well as the opportunity to participate in the process.

We support the recommendation of including atmospheric storage tanks in the Process Safety Management standard, but it appears that the problem with OSHA enacting these recommendations is not so much the

agency but the regulatory system. GAO issued a report last year citing that it took OSHA nearly eight years to issue a new standard on health or safety.

Consequently, the OSHA Process
Safety Management standard, which covers the
safe operation of facilities that handle
highly hazardous chemicals, has not been
updated. When OSHA has tried to initiate rule
changes, the regulatory process, including the
legal challenges in OSHA's higher burden of
proof of the need for a rule under the
substantial evidence standard, creates a huge
burden on the department. Many of these
requirements have been implemented in the last
20 years.

The GAO has issued several statements, in addition to the report, that outline the burdensome, time-consuming process, and why this pushed OSHA to rethink issuing new statutes because of the time and expense, neither of which it has.

Reactives are another example of a process safety issue that needs serious attention, particularly in the light of the recent West Texas explosion.

In 2002, the CSB made a recommendation that reactive hazards receive more comprehensive attention by requiring OSHA in the Process Safety Management standard and EPA through the risk management program, to include all existing information on chemical reactivity.

Yet, in 2010, when OSHA stated that reactives were of great concern to them, they in the same breath said, "But we just don't have the time and money to address it at this time." Instead, another compliance directive was going to be issued.

Maybe more attention should be placed on how to protect workers on the job, rather than how to stop regulators from making new rules. We hear that more rules will kill jobs. While we haven't seen evidence of that

forecasted job loss, we have seen that repealing or stalling safety rules does kill workers.

We support the recommendation to OSHA that PSM cover management of change.

Over the last several years, we have seen unprecedented reduction in operating and maintenance staff in the nation's oil refineries. We have also seen an accelerated push of job combinations. This has for the most part been motivated as cost-saving initiatives by the most profitable industry in the history of the world.

apprehension about the ability to adequately respond to upset or emergency conditions. In some instances, the companies have done a management of change for the personnel changes, but they are done from a perspective of supporting the decisions to make the change. They are what we refer to as a matter of convenience, MOC. They fulfill the

paperwork requirements of the standard but are done with less rigor than was intended. The scope of the potential effects from the changes are often very narrow, focusing only on the specific job duties and not looking at all reactions required by this position in all operating conditions.

Let us remember that there is nothing stopping an employer or industry trade group from adopting the CSB's recommendations. There are no restrictions on a company going above and beyond the minimum requirements.

An equal responsibility falls on the employer to provide a workplace free from recognized hazards that are causing or are likely to cause death or serious physical harm to their employees. Not having enough employees to respond to an emergency certainly falls under this requirement. It would seem to make good business sense to have an adequate workforce to protect your investment. It would also seem to make sense that a

company or industry would want to implement
this recommendation without having to be told
to do so by the regulator.

Thank you.

And I'll come back to you shortly.

DR. HOROWITZ: Thank you, Kim.

MR. NIBARGER: Okay.

CHAIR MOURE-ERASO: Next, Guy
Colonna from the National Fire Protection
Association. Three minutes, please.

MR. COLONNA: Thank you. Mr.

Chairman, Board members, staff, my name is Guy

Colonna. I'm the Division Manager for the

Industrial and Chemical Engineering Department

with the National Fire Protection Association.

And I am here to respond regarding the gas

process safety activities with respect to the

ConAgra and Kleen Energy incidents.

NFPA responded to recommendations from the CSB for both of these referenced incidents using the broadest features of our consensus standard development system to

satisfy the CSB recommendations in a timely manner.

In response to the ConAgra

facility incident in June 2009, NFPA's

National Fuel Gas Code Technical Committee

developed and approved a tentative interim

amendment, TIA, to revise the provisions in

NFPA 54, national fuel gas code, applicable to

the safe purging into service of fuel gas

appliances.

The TIA was issued by the NFPA
Standards Council in August 2010, completing
the revision of the code to add expanded
requirements related to the safe purging of
gas systems.

These interim changes to NFPA 54
became permanent with the completion of the
current 2012 edition of the code. CSB
acknowledges action by NFPA to amend the code
as recommended and has closed the
recommendation action acceptable.

Less than a week after the CSB

issued its recommendations from ConAgra, an explosion at the Kleen Energy power plant in Connecticut focused increased attention on the practices to be followed any time flammable gas can be released from a process or a piece of equipment without adequate controls to prevent the gas from coming into contact with ignition sources.

After the Kleen Energy explosion,
NFPA was once again able to support CSB by
providing guidance on safe practices for such
activities. During this time, we discovered
that no single code standard or regulation
fully addressed the gas blow activity involved
with the clean energy incident or other
related activities where flammable gases might
be released.

In the aftermath of the incident,
NFPA contacted the leaders and members from
several of the NFPA technical committees to
discuss possible strategies that NFPA could
implement in reaction to the recommendation

that was anticipated from this incident. In

June 2010, NFPA received the CSB

recommendation to modify NFPA 54, the national

fuel gas code.

Based on the input from the respective committee members and a review by NFPA staff, NFPA proposed an alternative strategy in response to the CSB recommendation. NFPA proposed to create a completely new standard to address all applications involving flammable gases where during operation, startup, or maintenance, those gases could be released to the environment without adequate ignition controls.

With approval from the NFPA
Standards Council to begin this process in
October 2010, NFPA solicited interested
parties to join this new committee and work on
developing this new standard while in the
preliminary stages of this new standard
development NFPA took the opportunity to share

the strategy for the new standard with both CSB and OSHA.

Our intent for meeting with CSB was to outline for the Board why NFPA was pursuing an alternative path in response to the Board urgent recommendation from the Kleen incident.

Essentially NFPA adopted this strategy for two reasons. First, if successful, it would yield a more comprehensive standard of practice that was much broader than that called for by CSB recommendation; and NFPA also believed it could be achieved much more quickly than the actions specifically recommended.

We asked to meet with OSHA staff to review our plan and determine their interest in participating. OSHA staff currently serves on over 40 of the NFPA technical committees. And with the CSB recommendation directly to OSHA, NFPA wanted the agency's involvement so they could be

familiar with the new standard and its background and the agency can consider using the new standard as part of any regulatory or compliance action it might take.

As a result of our meeting with OSHA, a member of the OSHA staff was appointed, as Mr. Galassi has noted in his remarks, to the Gas Process Safety Technical Committee and has participated in all of the meetings during development of NFPA 56 PS, for preliminary standard, and continued to fully participate during the recent meetings, where we have developed the 2014 edition.

In an unprecedented action for standards development, NFPA completed and issued NFPA 56 PS, standard for fire and explosion prevention during cleaning and purging of flammable gas piping systems using an accelerated schedule and process. And barely 18 months after the Kleen Energy incident occurred, our standard was completed and issued.

Because the standard was developed using an expedited process in response to the urgency of the Board's recommendation, NFPA has just issued the 2014 edition of NFPA 56 following the full procedures of the NFPA standards development process.

Upon completion and issuance of NFPA 56 PS in August 2011, CSB acknowledges the accomplishment by NFPA and a designated recommendation as open acceptable response pending the adoption of the 2014 edition.

These incidents related to purging and other gas process safety activities, highlighted gas from the consensus code, and standards as well as federal regulations are the hallmark of the NFPA process.

We work with the CSB staff and
Board on each of these recommendations to use
the NFPA standards-making system and our
network of technical committee volunteers to
address each of the issues raised in a timely
manner. Consistent with the safety goals of

both the CSB and NFPA, we also ensure that information regarding these outcomes is widely disseminated.

Thank you.

DR. HOROWITZ: Thank you.

And for those of you who do have longer statements prepared, I invite you to submit your full text for the record. And, if you would, please do try to talk in just a couple of minutes. We have eight minutes and six commenters signed up and a number of written comments as well.

Next is Liz Borkowski, George Washington University.

MS. BORKOWSKI: Good morning. My name is Liz Borkowski. That's L-i-z
B-o-r-k-o-w-s-k-i. And I am a researcher at the George Washington University School of Public Health and Health Services.

I would like to thank the Chemical Safety Board for holding this meeting today.

The hazards described in today's staff

presentations have already killed and injured workers and harmed communities. They continue to place workers' lives and public health at risk. And they warrant a strong response from OSHA.

As Board members Beth Rosenberg and Mark Griffon have noted, OSHA faces many barriers to implementing CSB recommendations. Insufficient action on the hazards described today are symptomatic of problems that extend far beyond the agency, including an anti-regulatory climate and insufficient resources. OSHA rulemaking should not take eight years to complete, as the recent GAO report found that it does.

I support the CSB staff
recommendations to classify the open
recommendations discussed this morning as
open, unacceptable response. I believe doing
so is a step toward addressing barriers to
OSHA rulemaking and is consistent with
recognizing the important work OSHA is already

1 doing to address these hazards.

I also support any CSB activities to identify root causes of slow or inadequate OSHA responses to serious workplace hazards and to recommend ways to ensure OSHA can respond swiftly and effectively to hazards that place workers' lives and health at risk and endanger communities.

Thank you.

DR. HOROWITZ: Thank you very much.

And next is Charlotte Brody, representing the BlueGreen Alliance.

MS. BRODY: Thank you. And thank you for doing this hearing.

I am Charlotte Brody,

C-h-a-r-l-o-t-t-e B-r-o-d-y. I am a

registered nurse and the Vice President for

Health Initiatives for the BlueGreen Alliance,

a coalition of ten labor unions and four

environmental organizations.

The president for whom this

building is named was a mater of the big

screen. Ronald Reagan knew how to talk to the

American people in the broadest, most

cinematic ways, and to leave the details for

others.

I want to talk to you in the master of optics', Ronald Reagan, way for a minute. First, if there is a hearing about OSHA's unacceptable responses to CSB recommendations, what are the plans for the rest of the series? When will you call out industry groups? When will you call out Congress and OMB? When will you publicly review your own incomplete responses?

Second, in your opening remarks,

Mr. Chairman, you eloquently quoted Tammy

Miser and other members of the families of

chemical safety tragedies for asking for

government agencies to care, for expecting and

demanding action.

It is a very simple and compelling plot line: action versus inaction, caring or

non-caring. If there are missed deadlines, then OSHA must not care. If there are recommendations that have not been implemented, the problem must be inaction: neat, simple, and dangerously wrong.

There has been plenty of action.

There has been plenty of caring. But most of this has been the action and caring of the industry and political groups who don't want strong regulations and enforcement who make good livings taking action and taking care to make sure that OSHA and other regulatory authorities stay weak and ineffective.

It is shameful that workers in the United States are less safe than the women and men who do the same jobs in other countries, shameful. I share your frustration, but how much safer are we making workers when we point fingers, rather than strategically determining how to be the model agency in finding the ways out of no way: the strategies that allow us to overcome the pressure and the power of the

1 opponents of more protections?

and the bully pulpit, the stage presence to invoke Ronald Reagan, to tell the real story to the American people, not a story of lack of caring, inaction, but the more nuanced story of the power and pressure of the U.S. chemical and petroleum industry. And the only good government is no government-elected officials and the ways to effectively find our way under, over, and through that power to better protections for American workers and communities.

Thank you.

DR. HOROWITZ: Thank you, Ms.

Brody.

Next is Kim Nibarger presenting statement on behalf of Eric Frumin for the Change to Win Coalition. And he seems to have stepped out. So we will see about that.

Next is Darius Sivin for the
United -- oh, hold on, Darius. Kim, would you

1 like to give your statement on behalf of the
2 Change to Win Coalition?

MR. NIBARGER: Okay. Thank you.

4 Sorry.

DR. HOROWITZ: Sorry, Darius.

MR. NIBARGER: I have been asked to read a statement on behalf of Eric Frumin, E-r-i-c F-r-u-m-i-n, who is the Director of Health and Safety for Change to Win.

"Change to Win appreciates the opportunity to present our views on the recommendations concerning the Process Safety Management standard. We support the Board's work to maintain attention to these critically important improvements in OSHA's most important standard on safety in the chemical industry.

"The Board is not formally considering its other recommendations regarding reactive chemical hazards. The Board has issued its landmark study and recommendation, 2002. And OSHA initially

refused to provide an adequate response.

"OSHA's response in 2003 was especially unfortunate because OSHA had recognized the severity of the gap in the Process Safety Management standard in 1995, following the horrific incident at Napp Technologies in New Jersey.

"OSHA also had made considerable efforts in the '90s to prepare for formal rulemaking. And the administration's decision to drop it from the regulatory agenda in 2001 was indeed shameful. Those recommendations are as important and relevant now as they were then.

"The recent catastrophe in West

Texas demonstrates the urgency of closing the
loopholes on reactive chemicals in the basic

OSHA and EPA regulations on chemical
facilities and storage facilities, as Chairman

Moure-Eraso clearly stated in his recent
testimony to the Senate Committee on

Environment and Public Works.

"The fault for that continuing gap is not solely one of failure by OSHA. 2010, during a web chat on the regulatory agenda, Assistant Labor Secretary David Michaels stated the following in response to a question from a reporter about the failure to respond to a 2009 congressional request for action on the reactive hazards and the PSM standard, 'Reactive hazards are of great concern to OSHA. Unfortunately, there are a large number of other major priorities on the regulatory agenda at the current time. And our resource constraints make it impossible to add reactive hazards at this time. Meanwhile, we are planning to address reactive hazards through a compliance directive.'

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"OSHA never issued the compliance directive dealing with reactive chemical hazards either. It is simply unacceptable that the Office of Management and Budget would have allowed OSHA to be forestalled from dealing with such a critically important

protection merely because of shortage of funds.

"Standard setting is among the smaller part of OSHA's entire budget. And a few million dollars to support such a rulemaking would make no difference to the administration's budget priorities.

"We are pleased that OSHA has reinstated the PSM standard in the latest regulatory agenda, but we are deeply saddened and enraged that it only happened after the ammonium nitrate explosion in West Texas.

"The people of West Texas have paid a huge price for the continuing failure of the Labor Department, EPA, the Office of Information and Regulatory Affairs, and the Office of Management and Budget to fix this problem.

"We hope that they will be the last, but we fear that the reactive chemical hazards lurking through our nation will inflict their toll on many more communities in

1 the future unless the gaps are closed.

"Where is the Board to take note of this additional issue as it conveys its concerns about the gaps in OSHA's PSM standard and EPA's RMP standards to the appropriate parties, including the Congress, these two agencies and the oversight agencies at OMB, who bear major responsibility for failures in the administration's regulatory program?

"Thank you."

DR. HOROWITZ: Thank you.

Darius? Sorry about that.

MR. SIVIN: My name is Darius
Sivin with the United Auto Workers. And I
would like to say a couple of things first.
A hearing like this is possible precisely
because the CSB is an independent forum, much
like the Federal Trade Commission and the

A recent bill in Congress would deprive all such independent agencies of their independence, bringing them all under control

Equal Employment Opportunity Commission.

of the White House, making such hearings like this much less possible. And I would like to say that I am glad of the independence of independent agencies and would like to see that preserved.

Secondly, I, like the Board, am concerned that OSHA has not taken more action on many of these things. But, like the other commenters here, I am also concerned about the way in which the Board is going about pointing this out because I am very concerned that the primary reasons for which OSHA has not taken more action on many of these things is a concerted anti-regulatory campaign by trade associations.

I don't know if it is within the authority of the Board to call trade associations themselves out for their political activities, but the Board needs to be extremely careful in calling OSHA out for its inaction in not inadvertently serving the political goals of those trade associations

who have launched an anti-regulatory campaign to make OSHA appear bad. So if what is ultimately heard is trade associations say, "OSHA, bad," CSB says, "OSHA bad," that is not a message that will help actually get better response to these recommendations.

So I think that the CSB has to be very careful to do what it can within its ability to act to recognize that there is a larger context to OSHA's inaction and to call out the players in that larger context within the CSB's ability to react and not pretend, as the Republicans do, that OSHA is all powerful and can issue any sort of standard it wants.

Thank you very much. I appreciate the opportunity to offer my comments.

DR. HOROWITZ: Thank you, Mr. Sivin.

Next is Laura Swetz with the AFPM, which is the -- oh. Okay. All right. That was easy. And next is Randy Rabinowitz.

MS. RABINOWITZ: Hi. My name is

Randy Rabinowitz. That's R-a-n-d-y
R-a-b-i-n-o-w-i-t-z. I am an attorney in
private practice representing unions on OSHA
issues. And I am here this morning on behalf
of the steelworkers.

I want to compliment the Board on holding this public meeting. Your work to recognize hazards and publicize conditions that put workers at risk is important, but I would urge you not to label OSHA's responses to your recommendations, at least in two instances that I will describe, unacceptable.

It is true that OSHA has not set standards to address each of the hazards the CSB has identified, but some of the fault for that failure lies with the CSB itself. I have four points I would like to make.

The CSB's recommendations

consistently call on OSHA to set standards to

address a hazard it has identified in one of

its investigations. OSHA has a wide range of

regulatory tools in its arsenal. Standard

1 setting is only one of them.

While setting a standard is often
the best way to address a hazard, it is also
the most resource-intensive and involves a
host of legal, political, and procedural
hurdles that OSHA must meet before it can move
forward. Because of this, GAO has found that
OSHA takes on average eight years to complete
a standard once the rulemaking process begins.

None of the CSB recommendations at issue this morning address these practical problems with OSHA standard setting. None of the CSB recommendations at issue this morning suggest alternative or interim ways to protect workers. So I think it is unreasonable for you to condemn OSHA for not doing what it could not reasonably be expected to have done in the time that has been allotted.

If you want your recommendations to change workplace practices, it seems to me that the CSB should consider a far broader range of tools that are available to OSHA in

formulating your recommendations. It should give some consideration to the legal framework OSHA must meet before it can move forward on standards. And the CSB should tailor its recommendations so that they fit within the framework OSHA must act within.

There is no doubt that OSHA standards would protect workers, but OSHA must set priorities. Even in the best of regulatory climates -- and this is by far not the best of regulatory climates -- OSHA can set only a handful of standards each year. It must choose. If OSHA initiates rulemaking in response to a CSB recommendation, some other hazard facing workers will not be regulated.

OSHA itself does not even control its regulatory agenda. Under executive order 12866, OMB decides what OSHA can and cannot regulate.

So I ask you, are the recommendations you are considering this morning more important than regulating silica,

beryllium? Because your analysis does not consider the level of risk. And the reality is moving one of your recommendations high up on the list will move those others down.

So with respect to two of the specific things that are discussed, your recommendation on the management of change and your conclusion that you doubt it will have legal significance, I don't know of any legal basis for reaching such a conclusion. And I think it is totally unwarranted.

osha has interpreted the PSM standard to cover management of change. Right now that is the law of the land, and it has instructed its inspectors to cite accordingly. There is no legal case challenging that interpretation. No court has called it into question. And when it does go before a court, if it goes before a court, that court and the review commission are required to give great deference to Osha's interpretation.

I cannot say as an attorney,

having practiced law for 30 years in this field, that that interpretation will fall.

Until it does, rulemaking is just unnecessary.

It would be great if OSHA set out to revise the PSM standard comprehensively after 20 years if that were included among the revisions that it did in a comprehensive review, but initiating rulemaking in the SBREFA process for that little change when right now it has a recommendation in interpretation in effect and over 90 percent of OSHA citations are resolved voluntarily with employers doing what OSHA tells it to do seems like it would not be a useful way for OSHA to organize its resources or set priorities.

The other recommendation I wanted to talk about is the one for Kleen Energy on gas purging. I don't know on what basis you have concluded that an NFPA recommendation standard is not acceptable. It is a new standard if it induces change in behavior.

And OSHA can help induce change in behavior by using the NFPA standard as the basis for 5(a)(1) citations, then it can have a very big effect on industry practices. And, again, it may be that when you look at the scope of the problem, that the other things on OSHA's agenda are far more important and affect a lot more workers than the hazard you are talking about.

And so I would urge you before you condemn OSHA to think about a much broader range of tools that can meet the goal of protecting workers from the hazards that they face, rather than just focusing on standard setting and saying, "Well, OSHA hasn't done it. So they failed."

Thank you.

DR. HOROWITZ: Thank you, Ms. Rabinowitz.

Mr. Chairman, we have a number of written comments. And since we are over time, how would you like to proceed? Would you like

|    | Page 113                                       |
|----|--|
| 1  | those summarized or merely submitted? What is  |
| 2  | your preference?                               |
| 3  | CHAIR MOURE-ERASO: You could                   |
| 4  | summarize a few until we reach the time to     |
| 5  | I mean, we have until                          |
| 6  | DR. HOROWITZ: We have until noon               |
| 7  | for the Board discussion. So I will use as     |
| 8  | much of your time as you would like, sir.      |
| 9  | CHAIR MOURE-ERASO: Yes. Okay.                  |
| 10 | DR. HOROWITZ: All right.                       |
| 11 | CHAIR MOURE-ERASO: I mean, let's               |
| 12 |  |
| 13 | DR. HOROWITZ: I'll be extremely                |
| 14 | brief.   |
| 15 | CHAIR MOURE-ERASO: start and                   |
| 16 | see how many we can                            |
| 17 | DR. HOROWITZ: First of all, is                 |
| 18 | there anybody else in the room who didn't sign |
| 19 | up who wanted to offer a comment or a          |
| 20 | question? And at the request of someone in     |
| 21 | the telephone audience, if I can ask you if    |
| 22 | you are on the phone, please mute your         |

receiver. I guess people hear a certain amount of background noise on the line.

So if there is nobody else in the room, we received a comment from the Center for Progressive Reform, President Rena Steinzor and Senior Policy Analyst Matthew Shudtz. And if I can summarize, they appreciate the thorough investigations that the CSB staff undertake. The analysis from CSB reports inform their work in many ways.

They support the creation of the most wanted list because it sends a clear signal to OSHA about CSB's properties and creates a tool that allied stakeholders can use in their own work. And they state that, as I think others have stated, OSHA's regulatory priorities are somewhat beyond their control. And they cite what they call political calculations from increased centralization of the regulatory agenda in the White House.

In conclusion, they say, "The

1 facility of the CSB's most wanted program, 2 like the efficacy of OSHA's regulatory 3 program, turns on the White House's 4 priorities. If the current Zeitgeist 5 persists, CSB recommendations will go far, but if CSB and OSHA can work with a broader 6 7 coalition of stakeholders to prioritize 8 occupational health, the most wanted program 9 could be a success." And I submit the 10 entirety for the record.

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We have a comment from the

American Chemistry Council, which I will also
summarize. It relates to the four
recommendations, three of which are on today's
agenda. And with respect to the
recommendation on atmospheric tanks,
organizational management of change, the
council says that "Reopening the PSM standard
as recommended by the CSB is not warranted."

And with respect to the recommendation on fuel gas safety, the council says that the Compressed Gas Association is

addressing the issue and they will defer comment.

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We received a comment from Celeste Monforton, who is in the Public Health Department of George Washington. And she writes that "The CSB staff have provided sufficient rationale for classifying seven recommendations previously made to OSHA as open, unacceptable." And she further writes that "The CSB's credibility and value on the public side would be diminished if it did not press recipients to adopt its recommendations, especially those who had set the bar high." And then she writes, "I shudder to think about a CSB which would simply resort to issuing recommendations that it thinks will be easy for recipients to fulfill." And that is a lengthy statement. I will include that in the record.

I believe we heard Mr. Frumin's statement. We heard Ms. Rodriguez's statement. We received a statement from a Mr.

Norman Rogers, who identifies himself as a refinery worker at Tesoro in California, I believe. And he writes, "Dear CSB. I send this letter as a former employee of BP who now after the recent purchase of our refinery works for Tesoro."

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And he attaches a letter that he sent to the Federal Trade Commission expressing his concern about the safety of the refinery. And he says, "Though the intent is no longer the vetting of the sale, it is to see the proper discipline is used in the race for higher profits. Profitability is a good thing for all concerned, but how management of change is handled in the search for those profits is of the utmost importance. The stage is set for well-intentioned people doing as much as they can as fast as they can to not only recoup the money spent in the sale but to grab those profits that attracted them to make the purchase in the first place. There is a place for the CSB at the table prior to there

being an incident. And I hope the Board acts in that manner." And he also included his letter to the FTC.

We received a comment from a Mr.

Jeff Daly. And his comments relates to the safety of rocket fuel. It's a little afield from today's topic. So I just ask that it be submitted to the record and passed on to other agencies that do have that jurisdiction.

And there are other comments, but they relate to the dust issue. So why don't we defer those to the afternoon.

CHAIR MOURE-ERASO: For the afternoon. Thank you very much, Dr. Horowitz.

BOARD QUESTIONS, DELIBERATION AND

## **VOTE ON STATUS**

CHAIR MOURE-ERASO: So I think we move to the next issue on the agenda; that is, to have Board deliberations on the presentation of the staff and on the public comments that we have heard. So I will ask if any member of the Board would like to ask any

question to staff who have any comments on the process that we have gone through.

questions for the staff and also a couple for OSHA, so maybe the first one to the staff.

Can you speak briefly to the breadth of the issue regarding our recommendations for an OSHA fuel gas standard? Our recommendation speaks to both gas blows and purging, and I think it is important to understand how common both of those practices are.

I think often there is focus on the gas blows, but I just wondered if you could speak to the breadth of the problem nationally.

MS. MORGAN: I am not sure if this works. Oh, it does. Okay. I think that my understanding is that the process of gas blows is mainly restricted to the power plant industry, where they are cleaning the fuel gas piping in order to prevent debris in the piping from damaging the gas turbines upon

1 startup.

However, purging is a much more commonly done operation. I think, actually, there may -- I'm gathering there is probably someone better equipped in the audience to answer this question, but my understanding is that it is done quite commonly in a number of industrial applications. You know, you purge. When you are installing an industrial water heater, that can be an industrial facility. That can be in a large multi-family residential building. So there are a number of times when purging is done. It is a much more common thing.

And my understanding is that that is what is making rulemaking on this difficult, is the wide application of a fuel gas standard would have to apply to so many industries where purging is an issue.

MEMBER GRIFFON: Do you want me to continue? Yes. A question for OSHA. And I am not sure I can cite to OSHA because there

are several of you here. So whoever might be able to address this? I know this is where OSHA has added the PSM to the regulatory calendar. I am very happy to see this.

I think that, as people have said already, the standard is more than 20 years old. Can you tell us a little more about OSHA's plans for updating the PSM standard? I am just curious. And Randy Rabinowitz mentioned this. Are you planning on tweaking the PSM standard on specific recommendations or other items that may not have come from the CSB or are you considering boarder changes?

And while it's not a recommendation of the CSB, I certainly would support the need for a broader change.

MR. PERRY: For the record, I am
Bill Perry, Acting Director of OSHA's
Standards and Guidance Directorate. And thank
you for that question.

We have a lot of issues that we are considering, to include in the request for

CHAIR MOURE-ERASO:

Go ahead.

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MEMBER ROSENBERG: Thanks. I
wanted to ask Mr. Colonna a question. I just
wanted to know if you have noticed any impact
of your revised guidelines on gas blows.

MR. COLONNA: Thank you for that question, Dr. Rosenberg.

Nothing quantitative, more anecdotal.

MEMBER ROSENBERG: That's okay.

MR. COLONNA: However, I am also aware in speaking with my colleague with ICC, Mr. Johnson, that they have revised the international fuel gas code to include a reference to NFPA 56 going forward. So that will then put NFPA 56 in both the NFPA 1 fire prevention code and also the ICC's international fire code. So in terms of the fire code applications, that will cover everything from that standpoint.

I am aware, to Ms. Morgan's question about the frequency, to Mr. Griffon's question about the frequency of these types of

incidents, I would certainly say that she is correct with respect to the gas blows. That was more linked to the power plant development.

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And at the time you were doing the investigation, there was an acknowledgement that there were a number of power plants in the planning stages. So this prospect of this process was certainly there in terms of a potential frequency, but certainly more relevant would be the day-to-day activities associated with either putting new gas appliances into service but also taking existing appliances or pieces of equipment, even industrial boilers and things like that, that are gas-fired and, therefore, have gas in their system, taking them out of service for maintenance and things like that, and monitoring and dealing with how you deal with the gas and not just indiscriminately release it.

And I am aware of a couple of

incidents that have occurred in things like
heat exchangers that are associated with
gas-fired systems, where there have been fires
and explosions. There was one very recently
that resulted in a fatality as a result of
possibly not properly addressing the gas
hazard in the heat exchanger. Before opening
up that heat exchanger and following the
guidelines that are in NFPA 56, you probably
would have gone through a much safer process
before doing that.

MEMBER ROSENBERG: Thank you.

MR. COLONNA: So I hope that addresses your question.

15 MEMBER ROSENBERG: Thanks.

MEMBER GRIFFON: Just one more question to OSHA. And this is the question of things that have been done shy of rulemaking or regulatory change. The possibility of developing or updating compliance directives was mentioned for both the PSM recommendations, both CSB recommendations

discussed by Mark Kaszniak earlier.

And I just wondered if -- it seems that these -- I'm not sure of the dates, but it seems that these were mentioned in letters in response from OSHA to the CSB a couple of times. And, yet, they don't seem to be acted on yet. And I wondered if there is any update on issuing a new compliance directive or updating an old compliance directive with regard to those two PSM issues.

MR. PERRY: Thank you for that question. Let me first start with just a little broad answer. And then I'll get specific.

I am sure many in the room realize this. OSHA -- or let me just say regulatory requirements are established, obviously, through the standard-making process. So those requirements are set. And what OSHA does, as many agencies who have civil law enforcement responsibility, kind of deal with the opinions or letters, interpretation, things of that

nature, but we certainly have to live within the framework established by the standard.

So if we are doing that, we look at the preamble and the record and everything like that. So it is a very deliberative process. And we do these things. And it is not something where you can change the landscape, so to speak. But what a compliance directive does do is instruct the field staff or stakeholders if they were to write a letter of kind of these interpretive issues.

Process Safety Management standard is a very performance-oriented standard. And I think by "performance-oriented," it is expected that we would be doing opinions and interpretations.

The recommendations here before the Board, the two of them, really talk about, you know, putting out clarification to our field so that they understand. And oftentimes those letters serve a secondary purpose to the regulatory community.

So the management of change issue was dealt with through a memorandum to the That is a viable policy document that has actually almost equivalent weight of a directive. And in terms of that issue, we believe that we have issued before for management change, we have issued after. And the interpretive issue raised there is really very close to the standard that you can -- you know, we are going to look at management of change, but it has to have some nexus to a hazardous process. So there are administrative changes in an organization that we may not be able to make that linkage.

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So this memo, which I think is a fairly good treatment of that issue, really does try to lay out for the compliance officer what are those changes that impact the processes so that it is covered under the standard.

In terms of the atmospheric storage tanks and the exemption that is

described in the standard, in my comments and
I think in our letter, we talk about
compliance directive and process and in
clearance. And with respect to this issue, we
did say that we are handling it on a
case-by-case basis. So let me describe that.

OSHA has I think a very vigorous training program for its compliance officers for PSM. So it goes up to six weeks of training. This issue of atmospheric storage tank exemptions is dealt with very clearly in that training.

We do have a 1997 memo, which provides guidance to the field following that administrative law judge decision. And so what we have been doing -- well, and third is we have had a refinery National Emphasis Program, which played out for a number of years. We inspected every refinery in the country except for those in state plans and VPP. And we currently have a National Emphasis Program dealing with chemical plants.

So Mr. Marshall, Mike Marshall; and Jeff Wanko have a network of regional contacts that they exercise frequently that deal with PSM issues. Those folks are plugged into the area office activity. So I guess that I am describing that we have training.

We have some guidance out there.

And we have a network where as these issues are raised with respect to application of the exemption, we deal with them on a case-by-case basis. And I can say that thus far we have not identified any cases where we have not issued a citation because of the exemption.

Have I got that right, Mike? Nor have we found one of our citations going forward we have lost or we had problems in litigation.

So in the interim, I think we have a viable process. The compliance directive I will say presents policy and legal issues that in clearance, it pointed out. So we're not getting it out as quickly as we thought, but I think we do have a viable process in place

to deal with the application of that exemption.

And, again, I think you all know we can't eliminate the exemption. It is created by the standard. But we can see how it is being applied. And, for example, the example of Motiva today it is my belief would not happen because we have a system in place that would address that. And we would have gotten the feedback to our region that that is a process tank, which we did do.

So that is kind of a long-winded explanation of our policy business here in those two areas.

MEMBER GRIFFON: Thank you.

CHAIR MOURE-ERASO: I will have a question. As probably people know, the CSB-based recommendations have been strictly informed by the specific experiences of our field investigators. So I would like to focus my questions to the representatives of the investigators here from the Western office,

1 Mr. Holstrom.

We have heard today in the comments that CSB should use other strategies different than exclusively OSHA to address our prevention programs. And I would like to ask him two questions in reference to that. I would like him to comment on which other stakeholders were addressed on the investigations that we are dealing today and what recommendations were made to those other stakeholders different than OSHA.

And also the other part is that in the recommendations that we make to voluntary organizations that put guidelines, I want your comments about the fact that those organizations are basically -- the compliance with those guidelines is absolutely voluntary. And what is your experience on the industry people actually volunteering to embrace those recommendations? Mr. Holstrom?

MR. HOLSTROM: Thank you, Chairman Moure-Eraso.

To deal with your first question, which I understand is, do we just make recommendations to regulatory agencies or do we have other recommendations in relationship to these incidents that we are talking about today and the recommendations that are being considered, the answer to that is yes.

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I think taking the recent example of the Kleen Energy and ConAgra that were sort of merged together to create recommendations related to gas blows and purging and other fuel gas-related hazards, we made what I would call layered recommendations that include recommendations to standard-setting bodies like the NFPA, et cetera. We made recommendations to the turbine manufacturers in that case, who are the ones who really set the recommendations in the case of gas blows for the need to clean the gas piping, and although I think that those recommendations have either been seen as acceptable response or been closed, I believe.

And so in that case, the turbine manufacturers, who are actually the ones who need or demand that these pipes be clean to ensure the warrants for the turbines, have gone a long way to make those sorts of improvements. So we have standard-setting bodies. We have industry organizations. And so there are multiple levels that the recommendations were made at to address the issues of the hazards of releasing large amounts of gas in the vicinity of workers and sources of ignition in industrial environments.

I will give one more example. I won't go through each case but the example of Motiva. The CSB made recommendations not only to OSHA so that a number of positive PSM-related provisions would have been applied to this tank that, frankly, have holes in it with releasing vapors in the vicinity of workers. Flammable vapors and the number of PSM provisions on mechanical integrity,

management of change, hot work, et cetera,
would have been relevant and preventative in
this incident.

Not only did we make a recommendation to OSHA. We made a recommendation to API on mechanical integrity issues for storage tanks, to NACE, which is National Association of Corrosion Engineering trade organization, on standards related to that incident. We also made recommendations, a number of recommendations in that case, to the plant and I believe also to -- at that time, it was the PACE Union as well.

And so we made recommendations on a number of different levels to try to address the hazards, both at the plant in corporate-wide standard-setting bodies, unions, trade associations, et cetera. So there are a number of levels that we made those recommendations.

I believe the next question, Dr.

22 Moure-Eraso --

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1 CHAIR MOURE-ERASO: Voluntary.

2 MR. HOLSTROM: Voluntary

an important role in worker protection. In fact, within the Process Safety Management standards, other provisions that are called recognized and generally accepted good engineering practices, RAGAGEPs, apply. And that is an important point, although I would note that those only applied to mechanical integrity and process safety information and not necessarily other elements of PSM but still very important. And, you know, standard-setting bodies and voluntary standards are clearly very important.

Some of the weaknesses when you are weighing making recommendations to voluntary standard-setting bodies and regulatory agencies is the things that we looked at at the CSB, the extent of the problem, previous incidents. And most of these cases, we cited a number of previous

1 incidents in our report.

For example, in Motiva, although it's not in our report, we looked at a large number of previous incidents related to fires and explosions related to storage tanks. I think we have over 100 of those that we documented in an internal document within the CSB.

And so we look at the extent of the problem. Is this something that would be best addressed with the specificity of a voluntary consensus standard or do we need both a change to codes and standards and regulations?

And I think most people realize
that most of the OSHA standards were
originally voluntary codes and standards, many
of them based on standards of the late 1950s,
NFPA and other types of standards. And,
unfortunately, many of them because of the
problems people have addressed in today's
meeting have not been updated since the late

1 1960s. Many of these date back to that period.

One of those dealt with fuel gas safety. For example, in Kleen, there was an NFPA standard, but there wasn't a similar standard that was adopted by OSHA.

report on Kleen Energy and ConAgra was that those standards, in fact, impact a large number. You know, natural gas is in such wide use across the country that there are literally tens of thousands of workplaces that could be impacted. And we identified a number of incidents related not only to gas blows but also to purging. Out of ConAgra, we have a large number of incidents that were lifted. And we felt that it was important to address those, not only through consensus standards.

One of the issues I will conclude by saying by solely relying on consensus safety standards, in the words of a former Chair of the CSB, Carolyn Merritt, voluntary efforts are good. The problem is that not everybody volunteers. And so you can't always rely on voluntary consensus standards to ensure that changes will take place.

And often regulations are important to ensure that those actions would be taken. And even where you have the very important codes of NFPA and ICC, oftentimes those are adopted in different jurisdictions with different versions. In fact, in Connecticut, I don't know if -- my memory is it was an older version from the 1990s that had been adopted in Connecticut. It wasn't the most up-to-date version.

So, you know, if those versions were up-to-date and if OSHA standards reflected NFPA and other standards that were up-to-date, we would be living in a much improved world in terms of safety because change and improvement are the life blood of safety. Unless you're changing and improving, you're not adequately ensuring the protection

Second.

MEMBER GRIFFON:

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CHAIR MOURE-ERASO: Okay. We have
here a motion, and it has been properly
seconded. Is there any discussion?

MEMBER GRIFFON: Yes. I do want to discuss. One point I would make -- and I don't think it's going to make a difference here, but these were originally internal notation votes that we took, separate items. They were separated. So now they are rolled into one motion. But, like I said, I am not sure that it will affect a vote here, but I think we would have to record them as separate, three separate, votes, I believe. I am not sure.

Anyway, but I also want to speak.

I do speak in support of the motion. I also
want to be clear that we, the CSB, must
consider, as I said in my opening remarks that
we must consider, what steps we can take to
assist OSHA in making rulemaking or regulatory
change happen.

You know, I also think that it is

important to point out that by voting this way, I am not in any way condemning OSHA. I think I would rather, actually, classify this as remains open, but with our classification system, you know, we vote on this as open, unacceptable. But I think, really, OSHA has done some work on all of these fronts. And I think that is important to note.

I also think it is important and I uncertainly understand that by voting this way, I am not in any way intending to affect OSHA's process for setting their priorities. We certainly understand and appreciate some of those other many hazards that OSHA has to deal with, including some that were mentioned during public comment. That may well be. You know, OSHA has to sort out those priorities. On the other hand, I don't think that stops us from pushing for these federal regulatory changes.

So I just offer that for the record. And thank you, Mr. Chairman.

1 CHAIR MOURE-ERASO: Thank you.

2 Is there any more discussion?

3 MEMBER ROSENBERG: I just wanted

4 to thank Mr. Griffon for making those remarks.

5 I concur.

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6 CHAIR MOURE-ERASO: Thank you.

I would like also to have some comments, too. I would like to observe that our statutory obligation with the Clean Air Act is to identify what regulations of OSHA and EPA have basically not worked, have failed to prevent accidents and that. And that is part of our statutory obligation. It is the thing that we cannot doctor, that we cannot avoid. And we have to do it as our

If there are not any more comments, I ask Mr. Loeb, the General Counsel, to record the vote, please.

obligation. And that is why we are making

these recommendations today.

MR. LOEB: If Board members do not object to an en block vote on these three

very much to invite you but can't. And we are going to meet you to redo again at 1:30 to continue the program. So thank you very much.

MEMBER ROSENBERG: Thank you.

(End of Tape 1, Side A.)

(Beginning of Tape 1, Side B.)

CALL TO ORDER & INTRODUCTORY REMARKS

CHAIR MOURE-ERASO: Good

afternoon, everyone. Again, my name is Rafael Moure-Eraso. I am the chairperson of the Chemical Safety Board. I would like to welcome this afternoon to people that just came in to this U.S. Chemical Safety Board public meeting that is also described as a Sunshine Act meeting.

This morning we dealt with recommendations related to OSHA related to PSM and fuel gas. And the Board voted on them.

And this afternoon, we will take a new staff proposal based on CSB investigations calling OSHA to issue a comprehensive combustible dust standard for general industry. This is based

on four CSB investigations.

The Board also will vote on the designation of combustible dust as a CSB "Most Wanted Safety Improvement," to be advocated by the CS Board and the staff for the ages to come.

I would like to start by introducing Dr. Manuel Gomez, the Director of the CSB Recommendations. He is going to introduce the staff that is going to present the evidence for the recommendation of the staff.

Dr. Gomez?

DR. GOMEZ: Thank you, Mr. Chair.

Actually, it would be very easy
right now. I will introduce again for those
of you who were not here this morning, on my
right, Ms. Christina Morgan, who is a
Recommendations Specialist and will be
addressing the recommendations concerning
dust; and then on my far right, Donald
Holstrom, the Manager of our Denver Western

And, actually, before I begin, I wanted to recognize Mark Miser in the audience, who is the brother-in-law of Shawn Boone; also Katherine Rodriguez, who also lost her father in a workplace accident at BP Texas City. So thank you both for being here, really appreciate it.

In 2003, the CSB was deployed to
the scene of 3 major combustible dust
explosions in a single year. In January 2003,
explosions and fire destroyed the West
Pharmaceutical Services Plant in Kinston,
North Carolina. This facility produced rubber
components for drug vials and syringes. Six
workers were killed, and 38 others were
injured.

The CSB's investigation traced the explosion to a hazard that had developed in the facility over the years. Combustible polyethylene dust had accumulated on hidden surfaces above a rubber production area, providing a fuel for a series of explosions

and fires that destroyed this facility.

February 2003, the CSB deployed to the scene of another devastating accident in Corbin,

Kentucky at CDA Acoustics, which produced fiberglass insulation for the automotive industry. Seven workers were killed.

Thirty-seven were injured. And the facility sustained extensive damage. The cause here was combustible phenolic resin dust that had accumulated throughout the facility.

Finally, in October 2003, the CSB deployed to the scene of the accident that was just depicted in the video at the Hayes

Lemmerz facility in Huntington, Indiana.

Aluminum dust explosions and fires at this facility killed Shawn Boone and two others, one critically.

In total, these devastating accidents claimed 14 lives in 3 different states in 3 different types of facilities. In response, the CSB launched a comprehensive

hazard investigation study on combustible dust.

Released in November 2006, the study identified 281 combustible dust incidents between 1980 and 2005 that killed 119 workers and injured 718. The principal finding of the CSB's dust study is that a federal Occupational Safety and Health Administration, or OSHA, standard is gravely needed to control the risk of dust explosions in general industry. Three important findings underscored that conclusion.

The first was that reliance on voluntary consensus standards and fire codes is insufficient to control the hazard. The study acknowledged that voluntary consensus standards produced by the National Fire Protection Association provides details, valuable guidance for preventing and mitigating dust fires and explosions. However, these standards are voluntary unless adopted as part of a fire code by state or

1 local jurisdictions.

Not all states have adopted fire codes that require conformance to NFPA combustible dust standards. And jurisdictions within states often amend state-adopted codes. The CSB also concluded that, even in instances where codes are enforceable by state and local jurisdictions, fire inspectors rarely inspect industrial facilities. And code officials may be unfamiliar with dust hazards.

The second finding underscoring the dust study was that OSHA's enforcement efforts are insufficient to prevent combustible dust incidents. The CSB study found that while OSHA cited employers for failing to address dust hazards, most citations followed an incident and were, therefore, not preventive.

Citations also tended to be predicated on other OSHA standards, such as a general duty clause or other standards, such as General Housekeeping or electrical

standards, which are only generally related to dust explosion hazards.

Lastly, the CSB's study concluded that OSHA's grain-handling facility standard demonstrated that OSHA can successfully address dust hazards through hazard-specific regulation. Promulgated in 1987, OSHA's grain-handling standard substantially reduced the number and severity of combustible dust explosions in the grain-handling industry.

Upon the publication of its dust hazard investigation study in November 2006, the Board issued multiple recommendations.

Most notably, the CSB issued this recommendation, number 2006-1-H-R1, which is the subject of today's presentation, which called upon OSHA to issue a standard designed to prevent combustible dust fires and explosions in general industry that would be based on existing National Fire Protection Association dust explosion hazards.

And then came the deadliest

industrial dust explosion the United States
had seen in decades. On February 7th, 2008,
a series of explosions and fires rocked the
Imperial Sugar refinery in Fort Wentworth,
Georgia. Eight workers died at the scene, and
6 more would later succumb to their injuries,
bringing the total death toll to 14.
Thirty-six workers were treated for serious
burns and other injuries.

The cause of this devastating event was combustible sugar dust that had accumulated on floors and elevated horizontal surfaces throughout the facility.

The tragedy at Imperial Sugar demonstrated all too clearly that a general industry standard for combustible dust was needed. And OSHA announced its intention to commence rulemaking in April 2009.

When the CSB issued its own investigative report on the Imperial Sugar accident in September 2009, the Board recommended that the agency proceed

expeditiously with rulemaking in order to
prevent future catastrophes.

OSHA published its Advance Notice of Proposed Rulemaking in October 2009 and held a series of stakeholder meetings in Washington, Atlanta, and Chicago in early 2010.

estimated that they would conduct the next required step in the rulemaking process, which is convening a Small Business Regulatory Enforcement Fairness Act, or SBREFA, panel in April 2011, but the panel was not convened in April 2011. In fact, today, more than two years later, the SBREFA panel has still not been convened.

The last public action on OSHA's rulemaking was an expert forum convened by the agency in May 2011. Just a couple of weeks ago, OSHA's latest regulatory agenda estimated that the SBREFA panel will be held this November, 2013.

Meanwhile, between January and May 2011, the CSB found itself at the scene of 3 more combustible dust-related incidents at the Hoeganaes Corporation in Gallatin, Tennessee. The Hoeganaes Corporation manufactured metal powders. Five workers lost their lives in these accidents. And at least three sustained injuries.

When the CSB released its case study on these incidents in December 2011, it again implored OSHA to take action. This time the CSB called upon OSHA to ensure coverage under the forthcoming standard for combustible metal powders. And, most importantly, the CSB called upon OSHA to issue a proposed rule within one year, or by the end of calendar year 2012. That date has also passed.

In June 2012, OSHA informed the CSB that, although the agency could not commit to a date for issuance of a proposed rule, the rulemaking remained a top priority for the agency. And although the standard remains

critically needed, it should be acknowledged that OSHA has taken a number of important non-regulatory actions to prevent combustible dust incidents.

For example, even before the accident at Imperial Sugar, OSHA had initiated a combustible dust National Emphasis Program to inspect facilities that generate or handle combustible dust that may pose a fire or explosion hazard.

A month after the Imperial Sugar disaster, in March 2008, OSHA revised and reissued the National Emphasis Program to intensify its focus on combustible dust hazards. Educational outreach and enhanced enforcement efforts are both facets of OSHA's NEP. As of June 2012, more than 2,600 inspections have been conducted under the program and more than 12,000 citations issued.

In addition, in March 2012, OSHA amended its hazard communication, or HAZCOM, standards to adopt the globally harmonized

standard for classification and labeling of chemicals along with a requirement that safety data sheets include a section for unclassified hazards, such as combustible dust. That decision is currently being litigated.

OSHA has also addressed combustible dust hazards by providing additional training to its compliance safety and health officers, for example, through the OSHA Training Institute. And by publication of guidance documents, including a 2005 safety and health information bulletin, or SHIB, and most recently an April 2013 document discussing fire-fighting precautions at facilities that handle combustible dust. The agency has also redesigned its combustible dust web page to improve the accessibility of these resources.

Sorry. I am skipping all of my slides.

All of these actions are commendable and wholly consistent with both

OSHA's mission and the CSB's recommendations.
Unfortunately, the fact remains that a general industry standard is urgently needed to protect workers against the long-recognized and well-understood hazards of combustible

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OSHA has reported that it continues to conduct research and analyses to fulfill the requirements of the lengthy and complex federal rulemaking process. But it has yet to issue a proposed standard, despite the CSB's original recommendation in 2006 and its reiterations in 2009 and 2011.

For these reasons, both recommendations and investigation staff recommended that the Board vote today to designate the four recommendations it has issued regarding OSHA's dust standards with a status of open, unacceptable response.

Thank you.

CHAIR MOURE-ERASO: Thank you, Ms.

22 Morgan.

1 Before continuing with the 2 program, I would like to recognize in the 3 audience here Johnny Banks and -- I'm sorry. 4 I always have troubles with the first name of 5 Lucy -- Lucy Taylor. The two of them were the persons responsible for a very, very difficult 6 7 investigation on Hoeganaes that continues 8 through the months on having fatalities like 9 every two months. And it was very, very hard. 10 So I want to recognize the work that they did in that Hoeganaes work. So let's continue 11 12 with the program. I want to give it back to 13 Dr. Gomez to continue on the issues. 14 DR. GOMEZ: Thank you, Mr. 15 Chairman. And good afternoon to all. 16 I'm a little sorry that Mr. 17 Galassi from OSHA is not here because I also 18 don't have any PowerPoint slides. So we have 19 a lot in common, including that. 20 STAFF PRESENTATION: RECOMMENDATION TO 21 DESIGNATE THE ISSUANCE OF A GENERAL INDUSTRY

COMBUSTIBLE DUST STANDARD BY OSHA AS A CSB

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## "MOST WANTED SAFETY IMPROVEMENT,"

UNDER THE CRITERIA OF BOARD ORDER 46

DR. GOMEZ: The CSB Most Wanted
Chemical Safety Improvements Program is a
planned effort to identify the most important
chemical safety goals of the CSB in the form
of a most wanted list of chemical safety
improvements.

When fully implemented, the program will focus our limited resources to targeted advocacy efforts by Board members and staff on these issues. The guidelines that will govern the Most Wanted Chemical Safety Improvements Program can be found in Board Order 46, which is available in our web page and which was adopted in June of 2012.

The most wanted issues are to be selected on the basis of, and I quote here, "recommendations from CSB investigations, studies, hearings, and similar fact-finding activities" that seek to achieve, and I quote again, "important national-level safety

1 improvements."

A similar program has been operated by the National Transportation Safety Board for many years, reportedly with considerable success. For example, fatigue was one of the NTSB's most wanted issues for several years. And partly as a result of NTSB advocacy, all the major transportation regulatory agencies have recently made substantial improvements in their regulation of this risk factor.

Today, we want to propose that the Board consider the adoption of the issuance, as you have heard before, by OSHA of a combustible dust standard for general industry as the CSB's first most wanted issue.

In the remainder of this

presentation, I will first quickly summarize

the nature of the dust fire and explosion

problem, then share with you evidence that the

problem continues to exist, despite our

recommendations and despite important

enforcement and education actions by OSHA and others. You have heard about some of those before.

After briefly identifying some of the most important stakeholders that also favor prompt regulatory action, I will conclude by making the case for a strong CSB advocacy that should include adoption of the most wanted issue.

Combustible dust fires and explosions are relatively common in a very, very wide range of industries. And they pose a significant risk of fatality and serious injury to workers as well as risk of substantial property losses.

Many people are aware of the risk of such explosions in coal mines, where the combustible solid dust is coal, but any powdered combustible solid of sufficiently small size, particle size, in an enclosed atmosphere can burn and explode if a large enough concentration is present along with the

1 oxygen in the air and an ignition source.

These primary dust explosions

involve the rapid and very intense burning -and you saw some pictures of that -- very
intense burning of a combustible material.

And they alone can result in serious
incidents, but they also often lead to
secondary explosions, in which the blast wave
of a primary one disturbs accumulated layers
of dust, which, in turn, ignite and create
even stronger, more destructive pressure
waves.

Such secondary explosions are the most severe ones, as you saw just a few minutes ago, when Ms. Morgan showed you both the pictures and the video that showed the consequences of several secondary dust explosions the CSB has investigated.

Now, all of the evidence available to the CSB strongly suggests that the risk of dust fires and explosions is sizeable. And the reasons are fairly straightforward.

Without adequate design and controls, the methods employed in material handling and processing, especially in manufacturing industries, can result in the release and accumulation of dust, followed by subsequent dust explosions and fires, as I said, in a very wide variety of industries, ranging from agriculture and chemicals to food handling and metal processing. And there is evidence of dust incidents in these that I have mentioned and many, many other industry sectors.

Ms. Morgan also earlier summarized the findings of three combustible dust investigations that led to the CSB's combustible dust hazard study issued in 2006. She also summarized the findings of that study as well as those from the investigations of two subsequent severe explosions in a powdered iron operation and in a sugar manufacturer.

This investigation illustrates my point about the wide variety of workplace circumstances where dust explosions can occur.

And the key findings of our study in my opinion serve some repetition.

We identified 281 serious combustible dust incidents between 1980 and mid 2005, with 119 fatalities and more than 700 injuries, many of them quite serious, in 44 states. Altogether, the explosions that we have investigated have resulted in some 31 to 33 deaths, a couple of them the exact causal factors are not exactly determined, and many more injuries.

The report also pointed out that the estimates from our study are likely to be an undercount, an underestimate, for several reasons. First, the information available to the CSB was fragmentary, and it is based mostly on media reports.

Secondly, the CSB data collection systems are not designed as a comprehensive surveillance system for all catastrophic incidents, whether related to dust or to other agents.

And, finally, there is simply no comprehensive national repository of information concerning workplace dust fires and explosions.

The available data also strongly suggest that these fires and explosions have continued to occur with disturbing frequency since the issuance of the dust, the CSB dust, recommendations, since the substantially enhanced enforcement under the ongoing National Emphasis Program by OSHA, which you have heard about, and even after the hazard received national front page attention following the tragic deaths of 14 workers and the injuries to many more in the devastating explosion and the virtual destruction of a sugar-manufacturing facility in Georgia.

OSHA's own Advance Notice of
Proposed Rulemaking on combustible dust
published in the Federal Register in October
of 2009 listed 422 reported combustible
dust-related incidents between 1980 and 2008,

again evidence that the problem continues to exist.

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A search of the CSB's own data since our studies has identified an estimated 70 additional serious incidents, with an estimated 34 fatalities and 198 injuries.

And, again, I emphasize we think that this may be an undercount.

Also, another strong indicator that dust fires that may lead to explosions continued to occur with troubling frequency is a recent analysis of data from the National Fire Incident Reporting System, a database operated by the U.S. Fire Administration, a federal agency. This study identified in excess of 500 combustible dust-related fires reported to that system in 2011 alone. These were reported fire incidents that identified dust as the item first ignited. So that we cannot claim, and I am not here asserting, that they were all workplace dust incidents in the way in which we have been speaking about

1 until now.

But it is reasonable to postulate that some and perhaps many of those incidents, fires begun by where the first item was dust, could be considered near-miss workplace dust fires in the sense that they did not reach catastrophic proportions or lead to secondary explosions but likely had the potential to do so under different circumstances.

Again, my point is not the details of these signals or suggested evidence but the fact that they all point to the conclusion that this entirely preventible and very serious hazard is still very much present in American workplace.

Finally, the results that are publicly available so far from the OSHA combustible dust National Emphasis Program also help to draw a picture of the nature and widespread dimension of the hazard across general industry.

The NEP, as Ms. Morgan also

briefly mentioned earlier, is an ongoing inspection campaign focusing on some 30,000 facilities in 70 different industries considered by OSHA to be potentially at risk for combustible dust incidents.

under this program until late 2011, which is all the information that we have available, the latest that we have available, indicate that OSHA had issued some 12,000 violations. I believe that Mr. Galassi referred to 14 or more thousand this morning. I hope I don't get that wrong. And approximately 71 percent of those violations until 2011 were serious, willful, or repeat violations, clearly indicating that a lot of serious problems related to dust hazards exist in American workplaces.

Also of note is that approximately seven percent of the violations were issued under OSHA's general duty clause, which is a relatively rare and difficult form of

citation, as those of us who follow OSHA know.

This also indicates that, at a minimum, for

these places, no existing standards were

applicable to the hazardous dose conditions

that were cited.

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There is also broad support for the issuance of a dust standard. I can't possibly mention all of the parties that support it, but I will mention a couple. think perhaps the most heartfelt and, arguably, the most important support has come from numerous public statements by federal workers and family members of diseased and injured workers who have voiced their indignation and support in multiple CSB public meetings, in congressional oversight hearings, and through multiple statements, interviews, and other expressions in the media. know, some of those are here with us today.

Other important stakeholders, including major labor unions, have also expressed strong support for a dust standard.

In 2008, the United Food and Commercial
Workers International Union and the Teamsters
Union petitioned OSHA to issue an emergency
temporary standard, but their petition was
denied. Even the former chief executive
officer of the sugar manufacturer that I
mentioned earlier that suffered the tragic
explosion in Georgia has also publicly stated
his support for an OSHA standard, a general
industry OSHA standard.

The facility was rebuilt with state-of-the-art controls on the process that, reportedly at least, can prevent the recurrence of that tragic incident. So controls are possible.

There is also opposition, of course. I will mention only one example.

Various industry groups have filed court challenges against OSHA's inclusion of combustible dust in the new globally harmonized hazard communication rule. Ms.

Morgan made reference to that under the GHS,

Globally Harmonized System. This challenge is akin to a challenge to a dust rule. They have not been resolved.

And, lastly, many of you probably know that several bills have been introduced in Congress since 2008 to mandate that OSHA expedite the issuance of a standard, although none of them have become laws.

Ms. Morgan also earlier provided you an excellent summary of the chronology of CSB's dust-related recommendations and of OSHA's responses. It was the slow progress, illustrated by this chronology, that has led CSB staff to recommend that the response be classified as unacceptable. The same delays lead us now to propose that the Board adopt the issuance of this standard as the first most wanted issue under our program.

I think it is also important to note that the National Fire Protection

Association, NFPA, has recently brought together all its combustible dust-related

standards into one consolidated document:

NFPA 652. I am somewhat simplifying that, but

I think it is fundamentally correct.

We believe that this consensus standard can provide an extremely valuable roadmap to both facilitate and especially to expedite OSHA rulemaking on this issue, especially because that consensus standard addresses in a consensus way many of the important technical issues that have to be addressed in such a rule.

Arguably, this consensus standard could be, if you will, the shoulders on which the OSHA standard can stand. And its existence should help shorten the typically long time that it takes to produce an OSHA standard.

Obviously I am not talking about wholesale adoption. OSHA can't do that. They have to go through the rulemaking, standing about standing of the shoulders of a highly sophisticated document that talks about how to

control the hazards, not only that, but such use of the consensus standard would be consistent with the mandate of a piece of legislation called the National Technology Transfer and Advancement Act of 1995, which calls on federal agencies to make use -- and I am paraphrasing but accurately -- to make use of existing consensus standards when they are appropriate to achieve policy purposes, including rulemaking. I would argue that this NFPA standard fits into that category.

So, in closing, let me say that we think a few facts are clear. It is now ten years since the first of the three tragic dust explosions investigated by the CSB in 2003 and '4, which, as you know now, by now, claimed the lives of 14 workers and prompted the more comprehensive CSB dust study.

It has been nearly seven years since the CSB issued that study with a regulatory recommendation to OSHA and nearly five since one of the most painful examples of

the need for the standard occurred, the
entirely preventible and horrific explosion at
the Imperial Sugar manufacturing complex in
Georgia, after which our then Chairman John
Bresland said that, and I quote, "The urgency
for action was greater than ever."

While OSHA has undertaken and we have spoken about them, some vigorous enforcement actions, and also taken some very valuable steps to disseminate information about the dust hazard and how to prevent it, the evidence is abundant in our view that these steps have not been enough, that workers continue to be killed and injured in dust incidents that are entirely preventible, and that an OSHA dust standard is badly needed.

It is for these reasons that we respectfully recommend that you, the Board, adopt the issuance of this OSHA rule as the first most wanted issue.

Thank you.

CHAIR MOURE-ERASO: Thank you very

| 1 | much   | Dr  | Gomez.  |
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| _ | mucii, | Dr. | GOILLEZ |

## PUBLIC COMMENTS

CHAIR MOURE-ERASO: Our next item
in the agenda is public comments. And I would
like to ask Dr. Horowitz, our Managing
Director, to facilitate the discussion. Dr.
Horowitz?

DR. HOROWITZ: Thank you, Mr.

Chairman. We have eight or so people who signed up in the room for comments. And then we have some statements that have been emailed as well. And I will again ask all of our commenters to try to limit themselves to about three minutes. They can submit longer materials into the written record.

Our first commenter is Mark Miser.

And he is representing the United Support and

Memorial for Workplace Fatalities and is the

husband of Tammy Miser, who appeared earlier

in video.

MR. MISER: Hello. And I thank you for the time to address the Committee. I

1 am Mark Miser, M-a-r-k M-i-s-e-r.

I have always valued in-depth investigation and recommendations from the CSB. And if it wasn't for them, our family wouldn't have been able to finally put the pieces together for the unknown circumstances of my wife's brother's last breath. For such a small organization, the CSB I believe actually does their research. And I find them comparable to the National Fire Protection Agency in their diligence.

The CSB has brought the combustible dust issue to the attention of OSHA since 2002, one year before Tammy's brother was tragically killed, during which combustible dust was introduced to the 112th Congress and reintroduced to the 113th Congress. I know that combustible dust has also been on OSHA's regulatory agenda off and on since President Obama's first term and before.

We really need to take a hard

stance and let our government know that we won't stand down until there is a combustible dust law, something to protect us. I believe that we can achieve this with the help of the CSB and other determined organizations like ours, USNWF.

Having said that, I feel the whole system to protect the American workers is marginal, at best. Instead of protection agencies working together for the common interests of the employees and their employers, they let politics get in the way of progress for safety.

According to Dr. Celeste

Montforton, only three worker safety health
rules have been established in this
administration. And I have to ask, are our
leaders really that busy? Even if a rule does
make it to the Office of Management and
Budget, it is held hostage. OIRA review is
limited to executive orders, only 90 days.
and, yet, some collect dust for over two

1 years, no pun intended.

The system is a train wreck. It seems that each organization designed to protect the workers is disconnected. This makes it very difficult for the families from the standpoint we don't know who to challenge. Is it OSHA, our congressmen and women, the President? We ask, who is the government serving if not the people who pay their taxes?

And, last, why is it acceptable for families and their communities to needlessly suffer? And why are we here today asking if combustible dust need be on the most wanted regulation list with the status open, unacceptable response? Without question, it should be. It should, at the very least, remain on the agenda until a comprehensive combustible dust regulation is finally issued by OSHA.

Thank you.

DR. HOROWITZ: Thank you. And thank you for traveling here for this meeting.

Next is Mr. Bruce Johnson,

2 representing the International Code Council.

And, just a reminder, for any of you dialed in, you can email any comments to comments@csb.gov.

MR. JOHNSON: Thank you. And good afternoon.

My name is Bruce Johnson. I am the Director of Fire Service Activities for the International Code Council.

The I codes are currently adopted at the local or state level in all 50 states. And they are updated every three years by our consensus process. The updates often include changes to the model I codes that are based upon recommendations from the Chemical Safety Board following the investigation of industrial fires, explosions, or other events.

The Chemical Safety Board has provided supporting testimony on several current code change proposals that were heard at the ICC code development hearings in Dallas

this past April and will conclude in October in Atlantic City. These include an ISC code change proposal, F-245, which will strengthen the language in the ISC, requiring enforcement of the applicable NFPA combustible dust standards.

This is also in the 2012, the current, ISC edition. Unmitigated combustible dust is treated as a high occupancy, or an H occupancy. So we are putting additional recognition into this hazard that is being discussed today.

We have also increased our awareness training in all of our code development programs for those building and fire officials to understand the importance of recognizing and mitigating through their enforcement efforts the combustible dust problem.

We also had code change proposal F-280, which my colleague from NFPA, Guy Colonna, spoke about this morning, which will

now reference the new standard NFPA 56 as part of the flammable gas code and the fire code for 2015.

The ICC's Fire Code Action

Committee also submitted ISC code change

proposals that addressed earlier Chemical

Safety Board incident investigation findings

related to explosion venting, hot work on

storage tanks, and secondary power

requirements for hazardous materials.

The Chemical Safety Board staff also worked with ICC on emergency code change proposal for the international fuel gas code back in 2010 that addressed the safety hazards related to flammable gas purging. That was an emergency code action, action by the ICC members. And that was incorporated as a permanent change to the fuel gas code of 2012.

Thus, involving the participation in the ICC model code development process by staff from the Chemical Safety Board is critical to updating future versions of the I

codes with requirements aimed at preventing future industrial incidents that cause injury, death, and other risk to the public.

The technical expertise of the Chemical Safety Board investigative teams along with other stakeholders interested in building safety are vital to the creation of comprehensive and adoptable model building construction and fire safety codes that are developed by the ICC.

The ICC commends the Chemical
Safety Board for its role in investigating
incidents and for providing their
recommendations to responsible federal
agencies, organizations dedicated to producing
the model safety codes and standards, such as
ICC and NFPA and other jurisdictions involved
in public safety.

The 2059 codes that will be available next year will contain important safety requirements, thanks to the investigative work, hazard analysis, and

hazard mitigation recommendations of the Chemical Safety Board.

A recommendation that ICC would like to make to the Chemical Safety Board related to the topic of today's hearing is to encourage greater public-private collaboration between federal agencies. This is that Transfer of Technology Act that Dr. Gomez referenced a few moments ago. Federal agencies such as OSHA and other standard development organizations, like ICC and NFPA, can certainly collaborate.

With current model construction of fire safety codes and standards being widely adopted and enforced across every state, many deficiencies noted in outstanding Chemical Safety Board recommendations could be mitigated through reference to these model codes and standards by the enforcing federal agency. This would address the Board's concern with the insufficiency of voluntary consensus standards, as referencing the codes

and standards would make these requirements mandatory in the same way that OSHA has referenced the NFPA and ICC codes as a compliance option to meet with their requirements for exit routes and emergency management in the workplace, another example of the known hazards associated with combustible dust that are comprehensively addressed by the latest I codes and the NFPA combustible standards, again, that were just referenced and that are incorporated by reference.

To facilitate OSHA's rulemaking process to develop an occupational combustible dust regulation, a requirement to allow compliance with the most current model codes and standards as a means of demonstrating regulatory compliance would be a timesaving alternative that would allow local inspectors to augment OSHA's resources. With thousands of local code officials performing building inspections and enforcing the model code

requirements, this compliance alternative would enhance the frequency of building inspections far and beyond what could be accomplished with only OSHA's inspection staff.

If the federal agencies were to update the regulations by incorporating by reference the appropriate current national model codes and standards and thereby encourage adoption of the administration of current safety codes at the state, county, city, and local level, workplace safety relating to building and fire safety risk would be greatly enhanced.

ICC looks forward to continuing to work with the Chemical Safety Board to future, to ensure recommendations given to ICC will be thoroughly considered by the ICC members engaged in our consensus code development process.

We thank you for the opportunity to make these comments today.

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DR. HOROWITZ: Thank you.

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Next is Meghan Housewright of the

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National Fire Protection Association.

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MS. HOUSEWRIGHT: Good afternoon.

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My name is Meghan Housewright. I am with the

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National Fire Protection Association. And

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thank you for this opportunity to update the

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Board on our work on combustible dust.

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I just wanted to elaborate a

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little bit on Dr. Gomez's remarks on NFPA 652.

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So in discussion items that were within the

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OSHA ANPRM, comments were included regarding

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current NFPA combustible dust standards. And

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right now there are five standards that exist.

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And four of them address specific industries

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where solids can create dust of a specific

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type of composition. Right now that is

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agriculture and food processing, woodworking,

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and wood processes, metals, and sulfur.

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The comments in the OSHA narrative

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questions suggested that it was difficult to

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figure out which NFPA standard applied and

that in some cases, the requirements are inconsistent.

In response to these comments and input from the CSB, we convened an expert task group to develop an alternative strategy to the structure of our combustible dust project. To address the issue of possible overlap and inconsistent requirements between the documents, we introduced a correlating committee. This committee is not intended to focus on the specific technical requirements but, instead, to address correlation and consistency between industries, dust types, and ultimately individual standards.

The second critical outcome from this process is in the formation of a new technical committee, established to work solely on fundamental requirements applicable to all industries and all dust types. By establishing a new committee and proposed new standard -- and that's NFPA 652, the fundamentals of combustible dust -- the

existing industry or dust-specific standards can then focus their attention on those requirements unique to either the industry or the specific types of dust.

The correlating committee manages the relationship between the five committees, the Fundamentals Committee, the Agriculture, Metals, Woods, and General Dust, and assures that there is a correlation between the committees on technical, on key technical, points and ensures that requirements between the documents are consistent. The Correlating Committee also guides each committee any time there is a possible action on requirements or that there could be potential overlap.

In the time since the first instance occurred in 2003, each of the NFPA combustible dust standards have been revised at least two times. Each of these revisions has considered the lessons learned from the incidents and has been factored into specific changes where applicable.

reached its first major stage: completion of the first draft. The committee developed a preliminary draft, published it for review and input, considered and addressed the input, and approved the first draft through a letter ballot. The first draft will be posted to the Fundamentals Technical Committee web page on or before September 6th of this year. And public comments may be submitted online through the web page link until November 15th, 2013.

The committee meets again to act on the public comments in January of 2014.

And the NFPA Standards Council considers issuing this new NFPA standard in November of 2014 if no other open items remain.

Pending further progress by OSHA to develop a federal standard on combustible dust, NFPA believes the work on NFPA 652 should be strongly considered as such time as the agency moves forward towards publication

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Also, OSHA staff currently serves on each of the technical committees for the NFPA combustible dust standards, including the new committee on fundamentals.

In addition to working with OSHA,
NFPA has also assisted several of the states
in their response to recommendations from the
CSB through training seminars and other
details that we have provided to state and
local officials.

Thank you again for this opportunity to provide comments.

DR. HOROWITZ: Thank you, Ms.

15 Housewright.

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Next is Matthew Clark,
representing the Bakery, Confectionery,
Tobacco Workers and Grain Millers Union. Mr.
Clark?

20 MR. CLARK: Thank you. Thanks
21 very much.

22 My name is Matthew Clark. And I

am a research specialist with the Bakery,

Confectionery, Tobacco Workers and Grain

Millers International Union. And I just want

to say on behalf of the leadership of our

union that we welcome this opportunity to

attend this open meeting and make a public

comment.

Our union represents workers
throughout the food processing industry,
tobacco, agriculture, sugar, and grain
milling. For the purposes of this meeting, it
is primarily our members working in grain and
in sugar that are most at risk from
combustible dust hazards. I should note that
at some of our baking facilities that have
silos, we have had explosions as well.

Anyone who has been working in any of these industries for any kind of length of time will tell you that dust accumulation and the risks that are associated with that is something that workers deal with on a daily basis.

At many of the older facilities,
the dust is unmanageable. At some facilities,
dust-collecting equipment that has
malfunctioned or needs repair may sit idly by
for days, weeks, even months at a time.

At many facilities, there is
little or no training in combustible dust
hazards. Generally, training across all
industries is inconsistent and certainly not
uniform. Contract workers may only be on site
for several hours or perhaps several days, may
receive no training whatsoever on the
potential hazards of combustible dust.

Simply put, employers at many of these facilities across the country are not treating combustible dust as a hazard. And I would hate to say that -- well, some but I think it is probably many employers are purposely ignoring it as a hazard. And I know it is clear through conversations with fellow labor colleagues that this is happening across all industries where combustible dust is a

1 hazard.

Now, it is important to note, especially for arguing it, that in the 1980s, OSHA did pass a standard that impacted combustible dust. And, of course, that was mentioned earlier. That was the 1987 Grain-Handling Standards Act.

But I think it is important to note that this was not a combustible dust standard. It was a much larger standard designed to focus on a slew of issues that were plaguing the grain-handling industry in the late '60s and late '70s.

On a positive note, the standard did bring down combustible dust explosions, as was illustrated earlier, but the problem is that dust explosions in the grain-handling sector continue to happen on a yearly basis. The hazards have not disappeared. Walk into any mill. Walk into any sugar mill. Walk into any grain elevator. And there is a massive amount of dust accumulation that has

not gone anywhere. The grain-handling standard has not solved that problem.

off, I think it is having a comprehensive combustible dust standard. Somebody else earlier had mentioned "comprehensive" being the key term. I will quickly just state a couple of things: one that involves worker input into hazard identification, into worker training because they know the hazards best. They are the ones working on the floor, and they know the hazards best.

We need a standard that promotes continuous training. We need a standard that allows workers to report a hazard or a near-miss without fear of reprisal. We need a standard that will hold employers responsible for their actions but, most importantly, their inaction because that is what I see, is inaction. And we need a standard that clearly states what an employer must do, clearly states what an employer must

do, whether it is engineering controls, housekeeping. Again, for us, the grain-handling standard is so lacking when it comes to that.

So, in closing, I would just like to add that one of the things that comes up publicly after any kind of combustible dust explosion is that it could have been preventible. In our industries, it happened after DeBruce. It happened after Imperial Sugar. It happened after a Sara Lee silo went up. It happened after a ConAgra grain. Every single time these explosions happen, afterwards it comes out that it was entirely preventible.

industry, in the grain-milling industry, that standard is insufficient. So we are pushing for obviously an all-inclusive standard, a comprehensive standard, that includes all industries and includes some of the issues that I had outlined.

So I want to thank you very much again on behalf of our organization. Thank you.

DR. HOROWITZ: Thank you.

And next is Robyn Robbins, representing the United Food and Commercial Workers.

MS. ROBBINS: Thank you.

My name is Robyn Robbins. I am
with the Occupational Safety and Health Office
of the United Food and Commercial Workers
Union. The UFCW represents thousands of
workers in food manufacturing industries.

I want to first thank the CSB for having this open meeting and giving the opportunities for those of us representing the workers and loved ones who are affected by these dangerous hazard that give us the opportunity to address you at today's meetings.

I am here on behalf of UFCW members who work in industries where

combustible dust hazards exist. Hundreds of workers in industries such as grain-handling, sugar production, paper, plastics, metal, and pharmaceuticals have either been killed or severely injured as a result of these explosions. And we take this opportunity to strongly support the recommendations made by the Chemical Safety Board related to the prevention of combustible dust explosions.

These recommendations urge OSHA to develop and publish a comprehensive dust standard for general industry.

We support CSB's efforts to continue to highlight the need for a dust standard and join it in urging OSHA to move ahead with rulemaking on this crucial issue.

However, in my comments, I would like to highlight the following. OSHA has had many opportunities to better regulate combustible dust in general industry. In 1970, the OSHA Act was passed by Congress. It was stipulated that OSHA should adopt

appropriate consensus and technical standards into OSHA's safety and health regulations.

Several NFPA standards were adopted. However, NFPA standards addressing the prevention of combustible dust explosions, which existed at that time, were not.

In 2008, following the Imperial Sugar refinery explosion, which resulted in the death of 14 workers and severe burns and injuries to dozens more, as Dr. Gomez noted, the UFCW and the Teamsters petitioned OSHA for an emergency temporary standard as well as seeking expedited rulemaking for a dust standard. In that petition, we noted the grave dangers workers faced in these facilities.

At that time, however, OSHA issued a directive through the NEP program that required each area office to conduct a minimum of one inspection per fiscal year. And OSHA ultimately issued the Advance Notice of Proposed Rulemaking on combustible dust in

1 2009, October.

And we could not agree more with OSHA's observations at that time that the existing regulatory regime is fragmented and incomplete. Existing OSHA standards do not regulate important aspects of combustible dust hazards. And the consensus standards related to combustible dust are large, complex, numerous, and interrelated and make it difficult for employers to comply with them.

And OSHA went on to say that the risk of combustible dust explosions is considerable. And a single comprehensive standard addressing all of these hazards will likely provide clarity for employers and increase safety for exposed workers. This was the gap in the federal protections in 2009, and this is the gap that exists still today.

We know OSHA faces many obstacles in its efforts to adopt new standards. And it is evident to us that OSHA has the desire and the interest to move forward. However, we

urge a focus on the Office of Management and
Budget and the Office of Information and
Regulatory Affairs to do whatever they can to
remove the obstacles and pave the way for this
vital standard.

At the time, we welcomed the Advance Notice of Proposed Rulemaking when it occurred in 2009 and were pleased that OSHA, even with the limits it faces on rulemaking issues, has continued to vote staff and other resources to work on this rulemaking.

However, we don't know when the next combustible dust incident will occur. It could be later today. It could be later next week.

For the families of Gallatin,

Tennessee, it has already tragically come and
gone. For Chris Sherburne, whose husband,

Wiley, was killed at Hoeganaes on January

31st, 2011 after suffering 95 percent burns on
his body, the delays are "just rubbing salt in
a really fresh wound."

1 As we reflect on this unfortunate 2 history of delays while dust fires and 3 explosions continue to occur, we ask all of 4 those with the power to do so to assure that 5 OSHA moves quickly. The time for a standard on combustible dust is now, not next year or 6 7 the year after that. It must do its job now. 8 But, more importantly, OSHA must be allowed to do its job and finally give workers and 9 10 families and communities the protection they deserve and they most certainly need. 11 12 I want to thank you again for the meeting. And we look forward to more such 13 14 opportunities from the Board. Thank you. 15 DR. HOROWITZ: Thank you. 16 And, as I understand it from your 17 written statement, that statement is on behalf 18 of your union as well as Change to Win, AFL, 19 the Bakery Workers or is that --20 MS. ROBBINS: Actually, that 21 statement is --

Am I incorrect?

DR. HOROWITZ:

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Engineers appreciates the leadership demonstrated by the U.S. Chemical Safety Board in holding a public meeting today, July 25th, 2013, to bring attention to the need for OSHA to advance standards that can help ensure all employers take responsibility for managing the risks of explosions in the workplace.

This meeting not only is an opportunity for the occupational safety and health community to come together and discuss needs changes in standards. It also help remind us of our shared responsibility to provide employers, workers, safety and health professionals, and emergency responders with the necessary tools for helping manage the risk of workplace explosions, whether or not OSHA is able to advance these standards.

Realistically, any call to advance OSHA standards must take into account that the key obstacle to improving those standards is not necessarily OSHA. Our nation's process for adopting or even improving workplace

safety and health standards is broken and in dire need of a significant overhaul.

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As a community, we must join in finding a way to give OSHA the ability to move effective standards forward in a reasonable way. ASSE has included several suggestions to improve OSHA's standard development abilities in our draft occupational safety and health reform bill. Encouraging cooperative rulemaking, ensuring OSHA relies on consensus guidelines when promulgating new rules, freeing OSHA to update referenced voluntary consensus standards are just a few ways the process can be fixed. ASSE is open to other ideas and hopes this public meeting will be a catalyst for discussion on how to best support a more foundational OSHA standard-setting process.

ASSE also appreciates CSB's plan to use this meeting to identify a most wanted safety improvement. While ASSE considers an appropriate combustible dust standard vitally

important, the safety improvement, we believe, has the widest positive impact on the overall management of workplace safety and health risks is a truly risk-based OSHA injury and illness prevention or I2/P2 standard.

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An effectively written I2/P2 standard has the potential of changing the very foundation of our nation's approach to regulating workplace safety and health by moving employer focus from simply meeting prescriptive standards to taking an active responsibility for identifying risks in each workplace and then establishing a plan to address each risk. An appropriate I2/P2 standard would give every employer the opportunity to manage safety in the same way of our safest, most successful employers and safety and health professionals achieve safe and healthy workplaces. ASSE encourages CSB to consider the I2/P2 standard as a most wanted safety improvement.

ASSE thanks CSB for its leadership

and hopes our comments can expand the discussion to efforts that if achieved can help meet CSB's goal of more effective oversight of workplace safety and health from OSHA.

Thank you very much.

DR. HOROWITZ: Thank you.

Next is Mr. Bill Cajola,

representing the AFL-CIO.

MR. CAJOLA: Thank you very much.

My name is Bill Cajola. I am in the Safety and Health Department of the AFL-CIO. And we appreciate the opportunity to provide comments at this public meeting and thank the CSB for holding an open session.

The AFL-CIO strongly supports the development and promulgation of a combustible dust standard by OSHA. It is an important issue, a very important issue. And it is necessary to have a standard in order to effectively address that issue and that problem.

And the CSB's activity in this area has been critically important. You have been extremely helpful in highlighting this issue and the need for new regulation to comprehensively address combustible dust.

After the refusal of the Bush administration to promulgate a standard, the Obama administration moved on this issue and put it on their regulatory agenda.

We are extremely frustrated with the speed and progress of regulatory activity at OSHA, but it is not just limited to combustible dust. Other issues that are important to worker safety and health are languishing. And silica is being one of the most recent examples where it has been sitting stuck at OMB and OIRA for 2 and a half years and counting in a process that shouldn't take more than 90 days.

The process itself of OSHA rulemaking is long and cumbersome for all OSHA standards, but the delays in many cases

currently are not the fault of OSHA. The fault lies more broadly with the regulatory process itself. What we are seeing is blockage of all OSHA standards at the Office of Management and Budget and OIRA. We believe that OSHA is committed to promulgating a combustible dust standard.

A finding by the CSB that OSHA's response on combustible dust is unacceptable or most wanted is not sufficient alone to move the rulemaking forward. So we urge the CSB to use its authority to address the broader problem and weigh in directly with OMB and OIRA and ask it to give OSHA the support it needs to move forward and to provide the budgetary support that is necessary for OSHA to undergo rulemaking for combustible dust.

We also urge the CSB to convey the importance of the combustible dust issues to members of Congress and the necessity that OSHA be allowed to move forward with the rulemaking. We think that this broader

approach is the thing that will move this
thing off dead center and get us a rule.

Thank you very much.

DR. HOROWITZ: Thank you.

Is there anybody else in the room who would like to sign up?

MS. WALTER: Yes.

DR. HOROWITZ: And last, if not, is Karla Walter, Center for American Progress.

MS. WALTER: Hi. I would like to thank the Chemical Safety and Hazard

Investigation Board for convening this public meeting to discuss the issuance of a general industry standard for combustible dust.

My name is Karla Walter, and I am the Associate Director of the American Worker Project at the Center for American Progress Action Fund.

The American Worker Project conducts research into increase the wages, benefits, and security of American workers and to promote their rights at work. The American

Worker Project supports the Chemical Safety
Board's recommendations to the Occupational
Safety and Health Administration that it
proceed expeditiously to issue a standard to
prevent combustible dust fires and explosions.

When combustible dust fires and explosions occur, the consequences are grave. Workers die or are seriously injured. For example, a 2006 CSB report found that there were 281 combustible dust incidents between 1980 and 2005 that killed 119 workers and injured 718 more and a huge combustible dust explosion at Imperial Sugar in Fort Wentworth, Georgia killed 14 workers and injured another 36 in February, 2008. Yet, this accident was found to be entirely preventible by the Chemical Safety Board.

There is much that can be done to prevent future combustible dust fires and explosions. Under the leadership of Assistant Secretary for Labor for Occupational Safety and Health, Dr. David Michaels, the agency has

been focused on using its existing enforcement authority to deter serious unsafe work conditions.

For example, OSHA is using its combustible dust National Emphasis Program to increase its enforcement activities, focus on industries particularly at risk for combustible dust explosions, and change industry-wide behavior by publicizing these enforcement efforts.

Yet, without a robust general industry standard for regulating combustible dust, agency enforcement efforts are limited. Unfortunately, there are many regulatory hurdles to implement important workplace safety standards. A 2012 report from the U.S. GAO found that it took OSHA more than 7 years on average to develop and issue safety and health standards.

OSHA is currently working on promulgating a combustible dust standard. And we hope that the agency will be able to

proceed more efficiently to issue this standard.

We support OSHA's efforts to move forward with the rule. And we applaud the CSB for convening this hearing to highlight the issue and help ensure that workers are protected.

Thank you.

DR. HOROWITZ: Thank you.

Any other speakers in the room?

(No response.)

DR. HOROWITZ: Okay. We received a written comment, Mr. Chairman, from the American Chemistry Council. And they resubmitted their comments from 2010 to OSHA when OSHA was involved in their Advance Notice of Proposed Rulemaking. And they wrote that they believe that OSHA can most effectively accomplish the goal by continued enforcement of existing relevant standards and formalized educational outreach. And they did not support a new standard.

We received a comment from the National Association of Sara Title III Program Officials and some related groups. And, if I can summarize, "We studied the Most Wanted Chemical Safety Improvements Program with interest. Without regard to the unfortunately chosen name, it appears to be a program that has little chance of improving accident prevention for these reasons." And they enumerate several reasons, and they include they want a focus on accident prevention and more common types of accidents, I guess. And "We want and need CSB to provide information, rather than, " their words, "picking fights with sister agencies over the adequacy of their regulations.

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And we need timely reports." And they conclude by saying, "It is not possible to regulate our way to accident prevention."

And that was submitted by Mr. Tim Gatehouse (Phonetic.) The full statement is in your record, Mr. Chairman.

We received a couple of comments
from a Mr. John Afded (Phonetic.). He writes,
"The 2006 CSB combustible dust study needs to
be amended to include all combustible
dust-related incidents and not solely
combustible dust-related fires and
explosions." And he references a study of
NFER's reporting data that I think Dr. Gomez
also mentioned. He goes on that "A broad
range of NACE codes are affected by dust
hazards broader than are covered by the
current NEP."

And, lastly, he asks, "Why is the CSB going to begin including of the fire service and key findings and recommendations in conjunction with the combustible dust case studies?" And that question, Mr. Chairman, I think, in fact, most of the reports have spoken directly to the fire service, most recently in the report on the Hoeganaes fires. The CSB made recommendations to the Gallatin Fire Department specifically for additional

codes and training. And that has actually
been a feature of I think most of the reports
that we have done, going back to '03 or '04.

And we received, lastly, a statement from Tammy Miser. And she writes, "As I look back at the very first congressional testimony I had given in 2008, I made a statement 'No matter how much time goes by, the pain never goes away. It never fades. And the incident never dies.' Our family members' and victims' losses are a long, needless sentence because a few companies couldn't or wouldn't do what was right. I hold on firm to this belief.

"It has been nine years since I lost my brother Shawn in an aluminum dust explosion. It pains me each and every time I hear of another dust explosion. I know what the families, coworkers, and surrounding communities will have to endure.

"The Imperial Sugar plant explosion in 2008 is one of the best arguments

we have for supporting nothing less than a combustible dust regulation. It took 72 long, agonizing days before some of the victims succumbed to their injuries. Just a few days before then, one victim was released, leaving two still in critical care. To be honest, I have no clue what happened to the last Imperial Sugar burn victim. There are no words to describe how savage this is. We would not allow this to go unnoticed if it were an animal.

"Imperial Sugar also had a facility in Gramercy, Louisiana, which had to be issued imminent danger orders and shut down by OSHA until the plant was free of the very same hazard because they refused to do it voluntarily.

"The facts are people are still dying from dust explosions with little repercussion. It is still just a cost of doing business. And our government is giving them a green light. The question should be,

is it acceptable to knowingly allow workers

and the surrounding community to be severely

maimed or killed? I say no. And I wonder how

many, if asked, would agree that it is

acceptable.

"This is not a war. There are no casualties. We live in a country that allows all to pursue a dream. And we are entitled to do so but not at the expense of others' life and limb."

That's it, Mr. Chairman.

CHAIR MOURE-ERASO: Thank you, Dr.

Horowitz.

BOARD QUESTIONS, DELIBERATION AND VOTE

CHAIR MOURE-ERASO: So we will continue the agenda. The next item of the agenda is Board deliberation. So if any member of the Board has any question to the staff on these issues? Mr. Griffon?

MEMBER GRIFFON: I don't have to wait for a formal motion to say that I totally support the staff recommendation to keep this

classified as open, unacceptable. I think it is pretty clear, at least to me, that we need a national dust standard. So I fully support it.

I just have one question for our staff. And that is, you know, I think it is very important to note that several of the incidents that we have investigated have involved what is classified as low-combustibility dust. And one of the most recent ones is at the Hoeganaes facility.

And, you know, I put quotes around

"low-combustibility dust."

I wonder if in our study or in the numbers, Dr. Gomez, that you went over from 2005 on, if we have any breakdown of how many of those incidents involved what some would classify as low-combustibility dust or I guess that would be maybe looking at a range of the KST values or something like that.

Have we looked at how they might sort out in terms of low-combustibility dust?

DR. GOMEZ: No. We haven't done a comprehensive review of those issues that you mention. I think it would be fair to say that our assumption is that that would be addressed carefully during the rulemaking process.

MEMBER GRIFFON: Sure. Sure.

7 Okay.

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8 CHAIR MOURE-ERASO: Member

9 Rosenberg?

MEMBER ROSENBERG: I don't have any questions.

CHAIR MOURE-ERASO: I don't have any questions myself either. So I will call the question.

MEMBER ROSENBERG: Okay. Shall I?

16 CHAIR MOURE-ERASO: Yes.

MR. LOEB: Sure.

MEMBER ROSENBERG: All right. I
move that the following four recommendation
status changes related to the issuance of a
general industry standard for combustible
dust, as presented by the staff, be approved

| 1  | by the Board. There are three. I'll read       |
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| 2  | them. "One, to the U.S. Occupational Safety    |
| 3  | and Health Administration, recommendation      |
| 4  | number 2006-1-H-R1 from the combustible dust   |
| 5  | study; two, to the Occupational Safety and     |
| 6  | Health Administration, CSB recommendation      |
| 7  | number 2008-5-I-GA-R11 from the Imperial Sugar |
| 8  | report; and, third, to the U.S. Occupational   |
| 9  | Safety and Health Administration,              |
| 10 | recommendation 2011-4-I-TN-1 and; oh, four,    |
| 11 | recommendation number 2011-4-I-TN-R2, both     |
| 12 | from the Hoeganaes case study), all be         |
| 13 | designated with the status of open,            |
| 14 | unacceptable response."                        |
| 15 | Do I hear a second?                            |
| 16 | MEMBER GRIFFON: Second.                        |
| 17 | CHAIR MOURE-ERASO: Having heard a              |
| 18 | proposal and a second, I think we are ready to |
| 19 | vote. So I am asking the General Counsel to    |
| 20 | record the vote.                               |
| 21 | MR. LOEB: Dr. Rosenberg?                       |
| 22 | MEMBER ROSENBERG: Aye.                         |

Second.

MEMBER GRIFFON:

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CHAIR MOURE-ERASO: Okay. So I would ask the General Counsel to record the vote. Having heard the proposal and the second, I think we are ready to vote.

say.

MR. LOEB: Can we do this by acclimation? Is there general acclimation?

MEMBER ROSENBERG: Yes, there is.

MR. LOEB: Do I hear any dissents?

MEMBER ROSENBERG: No.

MR. LOEB: I think it's fair to

MEMBER ROSENBERG: Okay. Mr.

Chairman, can I say one thing?

CHAIR MOURE-ERASO: Sure. We have some concluding remarks now.

MEMBER ROSENBERG: Okay. Before
we go on to the concluding remarks, I just
wanted to say a couple of things. This was a
wonderful meeting. And I am very excited
about our launching our Most Wanted Safety
Improvements Program, with combustible dust
being the first on the list.

Deborah Hersman of the NTSB said that the most wanted list is the most powerful tool they have to highlight their agency's priorities, and I could not agree with her So in this vein, to take advantage of more. the momentum that we started here today with this program, I move that the Board schedule another public meeting in Washington within the next four months to discuss staff proposals for the next four items on the most wanted improvements to determine our agency's top five advocacy priorities; how we are going to implement the program and with what resources; and, finally, a status report on all open investigations. MEMBER GRIFFON: I second the motion. CHAIR MOURE-ERASO: I don't think it is appropriate to have a motion on this. I mean, you are making some comments about

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this, but --

Neal R. Gross & Co., Inc. 202-234-4433

It was a

MEMBER ROSENBERG:

1 comment seguing into a motion --

2 CHAIR MOURE-ERASO: Well --

3 MEMBER ROSENBERG: -- to continue

4 the momentum of this program.

CHAIR MOURE-ERASO: I mean, I acknowledge what you said. I listened to what you said. But I don't think it is appropriate to deal with it in a motion. I mean, I think that it is perfectly all right that we -- definitely we are going to consider public meetings in the future.

Order 46 days that we have to continue in public meetings to put in things on the list. So yes, we are going to continue doing that. That is, I don't think there is any need to deal with a motion on that.

MEMBER GRIFFON: Board Order 46
hasn't been adopted yet. And I think we have
a motion on the floor, seconded. I think it
is appropriate --

CHAIR MOURE-ERASO: Motion 46 is

the motion that established the program of our most wanted list. And that motion, that Board order, says that we are going to establish public meetings to have a list of other matters that we are going to include on that most wanted list. I mean, I don't see the need to entertain a motion on this since basically we already have agreed that this is the procedure that we are going to do to include the most wanted chemicals in our list.

MEMBER GRIFFON: It is a specific motion to ask for a meeting within the next four months, including certain items. And Beth and I feel strongly about it.

I think there is a motion on the floor, seconded. I think we should just proceed to a vote if there is no more discussion.

CHAIR MOURE-ERASO: I would like
to perhaps have a short recess to discuss with
my program here about this is totally new, I
think. We have an agenda, and this is

something new on the agenda. So if you allow me for a few minutes to discuss this?

(Whereupon, the foregoing matter went off the record briefly.)

CHAIR MOURE-ERASO: Well, I mean,
I don't want to be difficult with this. But
when we called the Federal Register for this
meeting, we said that we will discuss,
entertain other issues to be voted on at the
discretion of the Chair.

I don't want to throw my weight around, but I don't think that it is necessary to have any specific motion and vote on it.

So on my discretion, I think that I don't want to take your vote. I don't think that I have to take your vote on that.

MEMBER GRIFFON: Well, I think any Board member has the prerogative to make a motion at our open Sunshine meetings. And I also think the momentum we had this morning and this afternoon from all the public commenters, they really appreciate the

opportunity to have our work done in a public format like this. And I think we should just commit to a schedule. I mean, I think within four months is a very reasonable request. And I think we should move to a vote on this.

is made on the premise that new items to be discussed and to be voted on are at the discretion of the Chair. And I repeat myself in saying I don't think that it is necessary to go through this, and I don't want to take a vote on that, at my discretion.

MEMBER GRIFFON: Well, I think I will make a note for the record that since it was a motion and seconded by me that we are in the majority anyway and that, even if you refuse to take a vote, it is pretty clear that the Board has spoken here.

CHAIR MOURE-ERASO: I will take note of that. I think this seems to me not very serious, to tell you the truth, when we have already a system under Board Order 46 in

which we are going to continue developing this program. I don't understand what is the need to do this.

And so, you know, I still insist that, on my discretion, again, we will take note about your vote and your proposal and your second. We won't entertain your proposal.

## CONCLUDING REMARKS

CHAIR MOURE-ERASO: I then would like to have any closing remarks that I would like to present to close the meeting. My closing remarks are that I would like to observe that this is a statutory congressional mandated task to address OSHA and EPA regulations that apply both to the deficiencies in current regulations and to recommend new regulations. That is a key obligation of the CSB. And I intend to pursue this activity vigorously.

Our votes today are for a status change in PSM and the fuel gas investigation,

also the vote of continuing to pursue a request for a comprehensive combustible dust as well to inaugurate, as we did, our most wanted safety improvement by designing our campaign to obtain the OSHA standard for a comprehensive combustible dust standard. All are actions that we believe are going to prevent the catastrophic actions that we were dealing with today, and it is going to save lives. And that is what our agency is all about.

I declare this meeting finished.

And I would like also to thank the public participants, the people this morning and the people in this afternoon. I think this has been a very important meeting, a very important public meeting. We are committed, according with our Board Order 46, of continuing to having these meetings to establish more items in our most wanted safety improvement list. And these will be, of course, announced as public meetings in the

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