UNITED STATES OF AMERICA
CHEMICAL SAFETY AND
HAZARD INVESTIGATION BOARD

E.I. DuPONT DE NEMOURS and CO., INC.,
FLAMMABLE VAPOR EXPLOSION
DuPONT YERKES PLANT
TONAWANDA, NY NOVEMBER 9th, 2010

PUBLIC MEETING

THURSDAY
APRIL 19th, 2012

6:00 P.M.

BOARD MEMBERS:

RAFAEL MOURE-ERASO, Chairman
JOHN S. BRESLAND
MARK GRIFFON

CHRISTOPHER WARNER, General Counsel

INVESTIGATIVE TEAM:
JOHNNIE A. BANKS, CFEI
MARK WINGARD, CFEI
CHRISTINA MORGAN, MPH
C-O-N-T-E-N-T-S

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MR. MOURE-ERASO: Good evening and welcome to this public meeting of the U.S. Chemical Safety Board, the CSB. Everybody please take a seat and everybody, I think there are enough seats here in the front if somebody wants to, okay.

My name is Rafael Moure-Eraso. I am the Chairperson of the CSB Board and with me today are Board Members John Bresland and Mr. Mark Griffon. And also joining me here on the table is our General Counsel, Chris Warner. On the other table are the CSB staff members, Johnnie Banks, which is the team leader for this investigation. Mark Wingard one of the investigators. And also we have with us Christina Morgan, who is a Senior Member of our Recommendations Department.

The CSB is an independent non regulatory Federal Agency that investigates serious chemical accidents. The investigations examine all aspects of chemical
accidents, including physical causes related to equipment design as well as inadequacies in regulations, industry standards and safety management systems.

Ultimately, we issue safety recommendations which are designed to prevent similar accidents in the future. The purpose of today's meeting is to present the Investigation Team's findings and draft safety recommendations into a November 9, 2010 hot work accident at the DuPont facility here in Buffalo, New York.

I would like to start with a brief moment of silence to acknowledge the victims of this accident, Richard Folaron, who was fatally injured in the incident, and William Freeburg, who was injured as a result of the accident. So please stand with me.

(Whereupon, a moment of silence was observed.)

MR. MOURE-ERASO: Thank you very much. The accident occurred as a result of
sparks or heat produced from hot water igniting the vapors within the tank. As you will hear this evening, the CSB found that the primary cause of the blast was the failure of the company to require the interior of the storage tanks, in which hot work is to be performed, to be constantly monitored for flammable vapor.

As we are a safety agency, before we begin, I'd like to point out some safety information from the facilities here. If everything is normal and there is not an emergency, you will exit through the same door that you entered into the room. If however, there is a fire or an earthquake or a tornado or other emergency, please take a moment to notice the additional exits, there are two other exits on the side which you can use also to get out. So that's the safety part from the physical premises here. I also would ask you to mute your cell phones so that these proceedings are not disturbed, starting with
I would like to acknowledge first the CSB Investigation Team, who will be presenting their draft report to us today. They will describe their findings on the incident and propose safer recommendations for preventing future accidents.

As an introduction, in 2010, the CSB issued a safety bulletin on the dangers of hot work. This bulletin could be found on our website, Hot Work Quality. That summarizes eleven accidents that occurred during hot work on or in the vicinity of chemical tanks. I find it tragic that we continue to see life lost from this hot work accident, which continue occurring all too frequently, despite long known procedures that we know that exist that can prevent them.

Facility monitors have an obligation to assure the absence of any flammable vapor in areas where hot work is to take place. Explosion hazards can be
minimized by testing inside tanks as well as in areas around them.

Following the Team's presentation, there will be an opportunity for myself and my fellow Board Members to ask questions to the Investigative Team on the recommendations they are making for us to vote. Then we'll be -- we'll be opening the floor for public comments. If anyone in the audience wishes to comment publically, please sign at the tables in the adjacent area so that we can be calling them during the public period.

Please note that we will have a limit on public comments to five minutes per person. And if you take more than five minutes, you are going to be taking the time of the person next to you, so keep that in mind. So please keep to the time limits. At the conclusion of the public comments, the Board will formally take a vote on the final report and then the vote. The report will be put on the website and also the video that
describes the visuals of this accident will also appear on the website and will be available for viewing and for downloading if you would like to use it.

After that, we are going to have a session in which, you know, after we finish the part of the -- upon investigation, we are going to have a brief meeting that is also a public meeting, in which we are going to be presented for the public or draft for the next five years, the Strategic Plan of the Chemical Safety Board and I will be telling you about this once we finish the business of the DuPont investigation.

I would not like to continue without saying, that I -- that we thank the DuPont Buffalo Investigation Team for their strong commitment and dedication to their work and I would also like to thank the audience for being proactively interested in a common hazard that can result in deadly consequences if the hazards are not truly assessed.
I would now recognize my fellow Board Members for any words that they have as an opening statement. Mr. Bresland.

MR. BRESLAND: Thank you, Mr. Chairman. I don't have very much to say this evening as part of an opening statement, but I -- it is distressing though on a regular basis we do see accidents similar to this where a flammable material is being used on welding and burning is taking place close by. Unfortunately, either through ignorance in some cases that we have seen or through just lack of diligence that these terrible accidents occur.

And I have always felt as someone who used to work in the industry, that there are a couple of ways to get yourself killed in -- if you're working in the chemical industry. One is confined space, entering a tank. And the other is burning and welding in a flammable area. And unfortunately this accident happened in -- above a tank where
burning and welding was taking place and a
flammable vapor was inside the tank, resulting
in the terrible tragedy that we're here to
talk about this evening.

I certainly look forward to
hearing from the Team and hearing what their,
the results of their investigation and what
their recommendations are.

MR. MOURE-ERASO: Thank you, Mr.
Bresland. Mr. Griffon.

MR. GRIFFON: Thank you. I would
first like to also offer my condolences to the
friends and families of Mr. Richard Folaron
and Mr. William Freeburg. I should note,
unfortunately, most of our investigations are
these types of accidents that result in
fatalities. It's the nature of our work.
This is yet another case, I feel, that
something that was highly preventable and yet
resulted in a fatality.

I also wanted to reflect on the
fact that we're here one week before Workers'
Memorial Day, April 28th, which is a day of remembrance for workers killed on the job. And I think the current numbers are approximately 12 workers dying a day at the job, which I think our message is clear and we, as a global we, I think have to do much better. And we're hoping that we can do a small part in that with our findings and our recommendations and our work on the Chemical Safety Board. Thank you

MR. MOURE-ERASO: Thank you, Mr. Griffon. At this time I would like to introduce the CSB Lead Investigator of this investigation, Mr. Johnnie Banks. Johnnie.

MR. BANKS: Mr. Chairman, Board Member Bresland, Board Member Griffon and Mr. Warner, ladies and gentlemen, good evening.

The DuPont Yerkes Investigative Team is prepared to present our findings from our investigation of a flammable vapor explosion, which occurred at the DuPont Yerkes facility in Tonawanda, New York. This
incident occurred on November 9th, 2010 and
resulted in the death of a contract worker and
the serious injury to another.

I'd like to take this opportunity
to provide an overview of the agenda for
tonight's proceedings. We'll begin with the
Team's presentation of investigation findings.
I will move from there to entertain questions
from the Board. The public will be invited to
offer comments. The Board Members will then
vote on the Team's proposed findings and
recommendations. And finally we'll have a
closing comment from the Chair.

Before I start, I'd like to take a
moment to also introduce the members of the
Team. To my immediate left, Mr. Mark Wingard,
CSB Investigator. And from our
Recommendations Group, our Recommendations
Specialist, Ms. Christina Morgan. Also, an
investigator who participated in that
investigation, who unfortunately can't join us
tonight, is Ms. Lucy Sciallo-Tyler.
Continue with the presentation of tonight's agenda. We'll move to an overview of the DuPont facility followed by a brief description of the process. We'll illustrate this with a presentation of a video animation of the process and the chain of events that led to this tragic incident. We will then proceed from there to our investigation findings and the key learnings and finally, the proposed recommendations.

In taking a look at the company overview, DuPont Corporation is headquartered in Wilmington, Delaware. It operates in more than 90 countries worldwide and has more than 60,000 employees globally. In 2011, generated revenue in excess of 32.7 billion dollars and is the second largest chemical company in revenues globally. It provides -- also provides safety consulting services to the industry.

The DuPont Yerkes facility is located in Tonawanda, New York, right outside
of Buffalo and is the site of a 100 acre facility that employs approximately 600 workers. DuPont has operated the facility since 1921.

The facility manufactures polymers and surface materials such as Tedlar or polyvinyl fluoride or PVF, the chemical process involved in this incident. PVF is used in a variety of applications as a film or a surface protector due to its resistance to weathering and flammability lowering properties.

The Tedlar process converts flammable vinyl fluoride gas to PVF, a polymer in water slurry. The PVF slurry passes to insulated holding tanks and PVF -- PVF is pumped from those tanks for further processing. Now in this diagram here, which is a simplified diagram of the process, vinyl fluoride from storage on site is mixed with water and is routed to a reactor, where from there it proceeds to a separator where un-reg
vinyl fluoride is recycled through a compressor back to the reactor and a solution of PVF slurry is routed through piping with steam injection into the slurry tank area.

Prior to entering the slurry tank area, there is a flash tank where steam and vinyl fluoride vent into the atmosphere. The material is then, proceeds into one of three slurry tanks, or at the time of the incident, three slurry tanks. That's important to note that since this incident occurred, slurry tank number one has been removed and is no longer part of the process.

There is an overflow seal loop, U tube, right there that's depicted in slurry tank number two. And once the material settles into the tanks, it is routed to drying and packaging via pumping on the bottoms of those tanks.

The three-foot diameter flash tank vents small concentrations of flammable vapor directly into the ambient atmosphere, so the
area is equipped with a flammable vapor air monitoring device to notify personnel when explosion hazards are present. Continuous air monitors are located on the cat walk near the slurry tank three and on the flash tank vent pipe.

Here's a photo of some equipment directly involved in the incident. Slurry tank number three. Here's slurry tank number two. And as I mentioned earlier, slurry tank one, which was in place at the time of the incident, but which has since been removed. You have an overflow line that connects all three tanks. And here we have the slurry flash tank overflow line.

The slurry tanks are eleven feet in diameter, 19 feet tall and have a capacity of about 10,800 gallons. The tanks shell and top are one-quarter inch thick stainless steel. Each tank has a hinge, unsealed steel cover. The non combustible PVF slurry passes to one of three insulted slurry holding tanks.
numbered one, two, or three. These are in the
tank form.

Under normal operating conditions,
slurry was pumped to slurry tank three.
Slurry tanks two and one were used as overflow
storage space in the event slurry tank three
was filled. Slurry tank one was generally
kept empty of slurry. The slurry tank feed and
drain lines were equipped with isolation
valves. Slurry tanks have a common equalizer
line near -- attached near the tops of the
tanks and blind flanges are installed in the
equalizer line to isolate one tank from
another if one of two tanks are operating
while the third is undergoing maintenance.

Looking at the properties of VF's,
it is a colorless gas. It is highly flammable
in ambient conditions with an ether like odor.
VF vapors are heavier than the air and will
accumulate in low areas. VF is classified as
a reasonably anticipated human carcinogen by
the National Institute of Environmental Health
Science Toxicology Program.

The maintenance contract for the work that was ongoing at the time of the incident was Mollenberg-Betz. DuPont hired Mollenberg-Betz, a third-party contractor, to do work on the SJ support. Mollenberg-Betz operates a large steel fabrication facility in Buffalo and has provided skill and maintenance services to DuPont in the past.

The contract welder performed, with welding experience, completed the work on tank two, but delayed repairs on tank one as necessary repair materials were not available. Tank one work was scheduled for November 9th, 2010, after the unit restart. DuPont engineers determined it was safe for the slurry tank one to be completed after the process restarted.

In the next portion of the presentation, we'll present a series of animation videos that will take you through the chain of events that led to the incident.
and that portion will be conducted by my colleague, Mr. Wingard.

(Whereupon, a video was played.)

MR. WINGARD: The video you just saw was only an excerpt of the full video that was produced as part of this investigation. Pending approval of the report tonight, the full video will be available for viewing on the CSB website tomorrow, at WWW.CSB.GOV. I recommend you all go and watch the video to get a better idea of the investigation.

Also, this presentation goes through the report but the full report is also out on the table and pending approval, will be on our website as well. I recommend you all go and read that to get a better understanding of the case.

As the animation shows, this incident occurred during hot work activities at DuPont. Hot work is any flame or spark producing operation, including welding, grinding and cutting. By definition, hot work
generates multiple ignition sources. If these
ignition sources can reach combustible dusts
or flammable gases, they can ignite, leading
to fire and explosions, which can cause injury
or death.

Anytime hot work is going to be
performed, certain precautions need to be
taken to assure that it's carried out safely
and no injuries occur.

Unfortunately, CSB has
investigated hot work many times in the past.
In March of 2010, the CSB released a safety
bulletin which discussed the dangers
associated with hot work. This bulletin can
also be found on the CSB website. This safety
bulletin identified 60 facilities caused by
hot work in the years from 1990 to 2010.

The bulletin went into depth and
summarized eleven hot work incidents, nine of
which the CSB had investigated. From these
eleven incidents, seven key lessons were
taken. These key lessons, if followed, will
help reduce the likelihood of hot work incidents.

Two of the key lessons from CSB hot work bulletin point out failures which occurred, which contributed to the incident at DuPont. One of these key lessons, to monitor the atmosphere, read: In the safety bulletin, conduct effective gas monitoring in the work area using a combustible gas detector prior to and during hot work activities, even in areas where a flammable atmosphere is not anticipated.

Another key lesson, test the area. Reads: When welding on or in the vicinity of storage tanks, properly test and if necessary, continuously monitor all surrounding tanks or adjacent tasks.

If these key lessons had been applied at DuPont on the day of the incident, it is likely that the disaster would have been averted.

How to safely conduct hot work is
generally well understood, however, power
incidents continue to occur with alarming
frequency. As a result of the continued
occurrence of hot work incidents, the CSB
continues to investigate this practice and
anticipates releasing a hot work product in
the future, which will include a large scale
recommendation.

The CSB is currently looking at
government regulations and industry standards,
which could be improved or implemented to
prevent hot work accidents, such as this, from
occurring again.

Effective air monitoring is vital
to safely conducting hot work. As the video
showed, on the day of the incident, DuPont
technicians monitored the air above the tanks
where hot work was to be performed but no
monitoring was done of the atmosphere inside
of tanks one, two or three. Had the inside of
these tanks been monitored prior or during hot
work, the contractors could have been warned
of the dangerous atmosphere inside the tanks
and would not have created the ignition
sources which led to the explosion.

When performing hot work, permits
are needed to ensure that hot work is done
safely and all precautions are taken care of
before the work begins. On the day of the
incident, the contractor foremen filled out
the hot work permit and had it signed off by
DuPont personnel as he was instructed to do.
However, the DuPont individuals who signed off
on the permit, had limited knowledge of the
Tedlar units in the slurry tanks. The
individuals who signed off on the permits,
were not aware of the crack in the seal loop.
They also would not have been aware of what
affect this would have inside the atmosphere
of the slurry tanks.

They also would not have been
aware of the loss of the compressor, which
increased the amount of vinyl fluoride going
into the slurry flash tank, which, the crack
in the seal loop, would increase the amount of flammable vapor inside the slurry tanks.

Had the appropriate people signed off on the hot work permit, they may have insisted on increased precautions that could have prevented this incident.

Process Hazard Analysis, or PHA, is one element of OSHA's Process Safety Management Program, which is a regulation that covers chemical processes containing highly hazardous chemicals or large quantities of flammables, as discussed in this presentation.

PHAs, using several methodologies, systematically assess a chemical process for potential hazards and evaluate safeguards to prevent incidents. PHAs are generally performed by a team of experts and employees who are familiar with the process. They are required to be updated every five years. The PHA's are a vital part of any safety program at a plant or facility.

Although the slurry tanks were not
covered under DuPont's PSM coverage, they were included in DuPont's PHA. A PHA performed by DuPont personnel prior to the incident determined that vinyl fluoride could not reach the dangerous levels in the slurry tanks. The consideration of vinyl fluoride reaching the slurry tanks creating a flammable atmosphere was not considered.

I will now go through some industry codes and standards that give guidance on how to safely conduct hot work.

The National Fire Protection Association is an industry consistent organization that develops and maintains standards and codes related to fire prevention and response. Various federal, state and local authorities have adopted NFPA codes and standards.

As with any consistent standard, when a particular standard is not a regulatory requirement, individual companies can adopt the standard as part of their own policies and
procedures. This is frequently in the best practice in the industry.

The FPA 51B, titled Fire Prevention, during welding, cutting and other hot work gives general guidance for contractors and property managers who manage, supervise and perform hot work.

The NFPA standard is not intended to contain all necessary safety precautions and work practices involved in job specific work such as hot work on atmospheric tanks.

The NFPA 51B, recommends purging containers of flammable liquids and vapors prior to initiating hot work. It also gives sample hot work permits. It talks about how to appropriately fill out and get clearance for doing hot work.

NFPA 326, safeguarding tanks and containers for entry, cleaning or repair, give precautions specific to hot work performed on storage tanks, like the tanks involved in this incident. 326 states, that work on tanks or
containers, shall be permitted only after the characteristics of the atmosphere within the tank or container have been determined.

It also recommends isolating any tank vents prior to initiating hot work. The Occupational Safety and Health Administration, or OSHA, issues and enforces standards and programs for workplace safety and health.

OSHA Regulation 1910.252 regulates hot work. It is titled: Welding, Cutting and Brazing General Requirements. This document provides industry requirements for performing hot work. 252 prohibits cutting or welding in the presence of flammable atmospheres and requires all lines or connections to pipes or vessels to be disconnected or blanked prior to starting hot work.

The OSHA standard also incorporates the 1962 Edition of NFPA 51B by reference. After the incident, OSHA inspected the DuPont facility and cited them for failing to comply with Regulation 1910.252. This
1 regulation does not require companies to
2 monitor the inside of tanks prior to work,
3 doing hot work.

4             Process Safety Management, or PSM,
5 is an OSHA regulation which contains
6 requirements for preventing or minimizing the
7 consequences of catastrophic releases of toxic
8 reactive flammable or explosive chemicals.
9 Though enacted in 1992, vinyl fluoride is a
10 flammable glass, it is covered under PSM
11 anytime a process contains more than 10,000
12 pounds, such as the Tedlar process.
13             DuPont considered the Tedlar
14 process PSM covered up to the slurry flash
15 tank, however that was the end of their PSM
16 coverage for that section. They did not
17 consider the slurry tanks covered under PSM.
18             The CSB investigation, concluded
19 at the time of the incident, the slurry tanks
20 should have been PSM covered. Had the slurry
21 tanks been included in DuPont's PSM coverage,
22 management of change would have likely been
done on the failed seal loop. This would have
forced DuPont to analyze how operating with
this broken loop would affect the safety of
the system.

Mechanical integrity inspections
likely would have identified this failed
sealed loop and the tank corrosion earlier.

Now I'll go through a summary of
the findings the Investigation Team had in
this investigation. Number one, DuPont PHA's
made the incorrect assumption that vinyl
fluorides in the Tedlar process could not
reach flammable levels in the slurry tanks.

Number two, DuPont restarted the
unit after incorrectly concluding that the
defective seal loop did not increase the risk
of vinyl fluoride vapor transfer into tank
two. Flammable vinyl fluoride vapor flowed
directly from the flash tank into tank two.

Number three, DuPont did not
properly isolate and lockout tank one from
inservice tanks two and three prior to
authorizing hot work on tank one.

Consequently flammable vinyl fluoride vapor passed directly from tank two into tank one through the overflow line that accumulated to a concentration above the lower explosive limit.

Number four, the DuPont hot work permit procedure did not require testing the atmosphere inside tank one for flammable vapor even though the work required welding directly to the tank top.

Number five, the individuals who signed off on the hot work permit, were not knowledgeable in the operations and hazards of the Tedlar process.

Number six, the repair work created several ignition sources which most likely ignited the flammable vapor. Welding and grinding increased the metal temperature significantly above the vinyl fluoride vapor above the ignition temperature and generated hot sparks.
And finally number seven, OSHA's hot work standard did not specifically require gas monitoring inside containers intended for hot work, even though it is recommended by industry safety practice guidelines.

Now the following are key lessons the Investigation Team hopes industry will take away from this investigation. There are three of these. Number one, welding to the outside surface of a tank or container generate heat and sparks near the weld area. The extreme temperatures and sparks will likely ignite flammable materials present inside the equipment.

Number two, before starting hot work activities, all process connections on tanks and similar containers should be completely isolated by closing valves, installing blanks and disconnecting pipes to ensure that all possible and known sources of flammable materials cannot enter the containers at anytime.
And number three, the atmosphere inside any container previously containing flammables, regardless of size, should be tested before authorizing any hot work involving grinding, cutting or welding on the outside surface and the atmosphere must be continuously monitored during the work.

Thank you. We'll now have Christine Morgan go through our proposed recommendations for this case.

MS. MORGAN: I want to begin with a brief overview of the CSB's Safety Recommendations, which we issue to protect workers, the public and the environment.

Recommendations are the agency's primary tool for effecting widespread and lasting safety improvements. Recipients of CSB recommendations include local, federal and state governments with the ability to approve laws and regulations and to enhance regulatory enforcement activity, professional organizations and trade associations which
issue voluntary consent standards, best
practice guides and industry safety alerts and
corporations and facilities that may improve
safety management systems to prevent the
occurrence of incidents.

Our recommendations are formulated
to specifically address the findings of CSB
investigations and studies and they focus on
system or management level improvements
necessary to prevent future accidents.

CSB's Office of Recommendations
follows up with the recipients of all CSB
recommendations and posts their status on line
at CSB.gov/recommendations.

With that, I will introduce the
four recommendations which the Investigation
Team are proposing to the Board for approval.
Although the CSB continues to review best
practices for hot work operations, this
evening the Team is proposing four
recommendations to the DuPont Corporation.

Recommendation 1 reads as follows:
Develop and enforce a corporate quality control policy and procedure to require that all DuPont facilities audit their hot work permitting systems to ensure that all potential explosion hazards associated with hot work activities are identified and mitigated before hot work is started. All relevant forms required for permits are complete in accordance with corporate policies and industry standards, including NFPA 326 and NFPA 51B, before hot work is started and that appropriate DuPont personnel officially approve hot work permits by signature or equivalent consistent with DuPont's policies before hot work is started.

R2 reads as follows: Revise corporate policies and procedures to require all process piping, vent piping or similar connections to be positively isolated using closed valves, blind flanges or pancake blanks before authorizing any hot work.

R3: Revise corporate policies and
procedures to require that the atmosphere
inside a container be monitored for flammable
vapor prior to performing any welding, cutting
or grinding on the container surface

And finally R4: Revise corporate
policies and procedures to require air
monitoring for flammable vapor inside the
container for the duration of the hot work
consistent with industry standards NFPA 326
and NFPA 51B. Create a policy for determining
criteria for requiring continuous or periodic
testing for the duration of hot work.

And with that, I will turn it over
to the Board for questions to the
Investigation Team. Thank you.

MR. MOURE-ERASO: Thank you very
much, Christina. Following this formal
presentation from the Investigators, the Board
will ask questions on the investigation from
the Investigative Team. So I will ask first,
Mr. Bresland, if you have any questions?

MR. BRESLAND: Thank you. Thank
you, Chairman Moure. I have several questions
and maybe I'll ask one or two to start with
and then you can come back to me later. One
question I have that in thinking about your
presentation this evening that I find quite
puzzling, is the OSHA regulation on burning
and welding. What slide number is that, Mr.
Banks? I think this is the 20 -- 28, yes.
Where it says OSHA does not require internal
monitoring for hot work.

And in thinking about this, I
guess I just don't -- I don't understand why
that would be the case. And I would assume as
we go through this process in the months
ahead, that we'll have a recommendation coming
out of this to OSHA because most of the
incidents that we see involving hot work
involve tanks that are blowing up. It doesn't
seem logical that they wouldn't have a
requirement for monitoring inside the tanks,
although I am sure that most companies who are
doing hot work, would be monitoring inside
their tanks to make sure there isn't any flammable materials.

But in the cases that we have investigated, that has been a failing. Any idea why that would have been left out of the OSHA requirements or the current OSHA standards?

MR. WINGARD: No, I mean, we agree, we think it's an issue that bears further investigation and recommendations. We'll say that the OSHA regulations seems to be outdated based on the 1960, on the NFPA work, so it could be that if we learn more about hot work, OSHA is just not changing their regulations to keep up with the times. I agree with you.

MR. BANKS: And also, as was discussed earlier today at a press conference, there is an ongoing discussion and study of hot work incidents throughout the country where we have developed more expansive recommendations to address those perceived
shortcomings.

MR. BRESLAND: In this particular incident, at the -- had there been a requirement at the DuPont plant for monitoring inside the tank, how would that have -- what -- how would that have taken place? What would they have done or what should they have done?

MR. BANKS: I think prudence would have dictated that some type of gas testing internal to the tank to determine absolutely that there were no flammable materials in that tank. And if there were say some structure to doing that where it was done every time, we presume it would have been done. And in the incident that we have coming through our screening service on a routine basis, there's a lack of that adherence to absolutely determining that the tank or equipment that's being welded on or hot work is ongoing, that there is an internal check to absolutely determine there are no flammable material
inside.

MR. BRESLAND: But it's not a difficult procedure to carry out, if you connect a piece of hose to the measuring device, drop a hose into the -- or a piece of tygon tubing.

MR. BANKS: Yeah, there are devices that can be used to make that determination. They can be operated by plant personnel, by plant fire department personnel, to evaluate the amount of flammable concentrations in the tank, if they need the oxygen content. If there's any other toxic material such as H2S, that would be in the tank as well.

MR. BRESLAND: I'll pass for now but I'd like to come back.

MR. MOURE-ERASO: You wanted to add something, Mark.

MR. WINGARD: I would say that for confined spaces, this is frequently, they do these tests inside tanks, so, I mean, the
technology is there and it's easy to implement, so just say expanding that to do the hot work as well would be a very simple way to make a very strong change for safety.

MR. MOURE-ERASO: Thank you, John. We'll ask Mark, if you have any particular questions.

MR. GRIFFON: Sure. Just to stay on the OSHA permit theme, can you tell me, just to clarify, I think you noted in the presentation in the report, that a procedure and permit in this case were not followed or -- and that resulted in the problems and the incident. But did you also examine the procedure and the permit, you know, as it existed and whether it complied with OSHA requirements, with other requirements?

MR. BANKS: Yes.

MR. GRIFFON: And what did you find, I guess, is the question?

MR. WINGARD: Sure. In looking at DuPont's corporate hot work permitting policy,
it seems to follow 51B pretty well. If they had done as the policy calls correctly, it seems like they could have caught this. Whether or not they would have evaluated the seal loop crack effectively and said that we shouldn't do this hot work due to the possibility of vinyl fluoride, is hard to say with any certainty.

But it really was the practice of signing off on the permits and getting the affected people. So the structure was there to do it correctly based on the regulations and standards that exist. It was just actually doing it where they failed.

MR. GRIFFON: And just to follow-up on that, along those same lines, did -- in the sign off, I think this is of a particular interest to me, the supervisor signing off on the permit, apparently didn't have a working knowledge of this operation. Is that fair -- fair to say? And my question would be, why was this person signing off?
Why was this person the designated person to sign off on the hot work permit?

MR. WINGARD: Well, for the hot work done that day, he should not have been the person to sign it. The department that signed off, where individuals signed it off from, having worked with these contractors, as they did work in a different area, that they were allowed to sign off hot work permits. So the contractors believed that this was the appropriate person to get the signatures from. And so when they went there, the person should have realized it was work outside the -- or should have -- DuPont should have not allowed him sign off on those.

MR. GRIFFON: I think, I am not trying to focus on the individual either. I think the individual thought he was approving the work to move ahead, authorizing the work, not necessarily signing off on the hazards that they might face. But I guess my question is, how could that system have -- have -- it
seems like that system was broken.

MR. BANKS:  I guess as best we can make out, because there was an ongoing working relationship between the gentleman that had signed off and the group that was doing work on work that was in another area, they felt comfortable going to sign off on work. That's how team events occurred, just one worker trying to help folks get the job done.

MR. GRIFFON:  And just the last and then I'll let Rafael go.

MR. MOURE-ERASO:  We'll have another round.

MR. GRIFFON:  Yeah, one more follow-up on this line of questioning. Just on the permit, I noticed and I -- in the report it mentions that there was someone monitoring the area, not inside the tank but monitoring the area at some point in the job. And in reading the procedure, my understanding was for this type of area, monitoring wouldn't have been required by DuPont's procedures. So
I am wondering why -- why was this person even monitoring for this work? They didn't expect flammables to be in this particular tank, so why was the monitoring being done at all and was it under the direction of the Health and Safety group or -- or who was -- who sort of authorized this to go ahead?

MR. WINGARD: Well, the information we gained from talking to individuals at DuPont, was that at the facility, anytime any hot work is done, no matter where it is, the technician comes out to test, to do the air monitoring to make sure that there's no flammables present.

So it's unfortunate that although they have this, and they go above and beyond when hot work is done, there is no policy requiring them to do the same for inside containers or tanks. But anytime, from what we gained, anytime any sparks was done anywhere in the plant, there was a lab technician out there to make sure there was no
MR. GRIFFON: Does that lab technician report through the Health and Safety sort of chain or are they, do you know, I don't know if you know?

MR. WINGARD: I can't say off the top of my head, I don't know

MR. GRIFFON: Okay. I will turn it over to Rafael.

MR. MOURE-ERASO: Thank you. I have a kind of a simple technical question that I am trying to understand about the chain of events. They -- you -- you put in the graphics and it was also in the video, a crack seal loop, I guess, in tank number two, and I am not clear about what role that cracked seal loop have in the accident?

MR. BANKS: Well, we surmise that the crack occurred when material in the pipe froze and fractured it. Unbeknownst to the operating crews, there was -- the expectation there would be a seal that would prevent flammables.
vapors from migrating from one tank to another.

Once that fracture occurred, the liquid seal was lost, and so vapor was allowed to -- VF vapor was allowed to migrate over into tank one.

MR. MOURE-ERASO: It first accumulated in tank two and from there it migrated to tank one?

MR. BANKS: Yes, sir.

MR. MOURE-ERASO: Okay. You have another question, John.

MR. BRESLAND: Getting back to this issue of who signed off on the permits. It's always been my experience if you're signing a safety permit, you're really signing to protect somebody's life and make sure that nothing bad happens. And I am just really puzzled as to how someone at this facility, and I visited the facility several months ago, and I saw this sort of geographical distance between where the accident took place and
where the person who was or one of the people who was signing off on the permit was located and it was, geographically, it was quite a long distance away.

I am just puzzled as to how someone could sign off on a permit without understanding what the hazards were. That just doesn't -- doesn't make sense to me that that would be allowed to happen. Do you have any -- maybe I am not asking the right people to explain this to me.

MR. BANKS: I think that there was an honest expectation that there would not be flammables in the tank to begin with. I think that's -- you can, just point one. As I said earlier, just point two, is that they had relied on individuals to sign off and give them access to equipment in the past without incident. And those are the pieces of evidence that we found that -- that kind of point in the direction of how things, you know, evolved the way that they did. And if
-- do you have anything to add?

MR. WINGARD: I mean, I'll say you're right, that the person not involved in the unit shouldn't -- shouldn't sign off on hot work in that unit. It just seemed that the practice at DuPont had, the individual who signed off, didn't -- didn't think of it that way or hadn't been taught to view it like the way you said you would view it if you were signing hot work permits. I think it shows a failing more on DuPont's part than the individual's part.

But in the past there was really no -- no one came through to check on this person signing off on hot work permits and saying this is appropriate and this isn't. So I believe he was just signing off for them to go do their work. He didn't view it as him being responsible for their safety, which wasn't communicated to him.

MR. BRESLAND: No more questions.

MR. MOURE-ERASO: Thank you, John.
Mark, do you have another question?

MR. GRIFFON: Yeah, just another

one on this question of the sign off, I don't

want to harp on this for too long, but my

understanding was that this wasn't the first

-- I mean, this person had been signing off on

other projects where -- where -- we he -- was

that appropriate in the other cases or was it

equally inappropriate, and just that no

accidents happened?

MR. BANKS: I think the area that

he was working on was in, I believe the

utilities were, piping that wasn't likely to

be involved with material that was volatile as

was involved in this case and that became part

of the way they were signing off on the -- on

the hot work.

MR. GRIFFON: And -- and does

anybody review these works, these hot work

permits? Do they go somewhere into the Health

and Safety System? Does someone do a quality

review on these things and is there at some
point that somebody that looks at several of
these that are signed off by an individual
that might not have been appropriately signing
off and, you know, is there a mechanism to
catch this sort of thing, I guess is what I am
asking?

MR. WINGARD: I will say not that
we have seen. Doesn't mean completely that
there isn't one but, I mean, there does not
seem to be one in the permits that we checked.

MR. GRIFFON: Let me switch gears
for one more question. Question on management
of change, I know you brought that up and --
and I guess my question is that when they
identified, in this work they identified the
defective seal loop, loss of the compressor
and also they had removed insulation from the
tanks, was there -- I know there wasn't a
formal management of change process, I think
because it wasn't identified as a PSM area,
but was there any kind of -- did you find any
-- I can't imagine that they wouldn't have
stopped the work and said wait a second, we
got some -- we got some changes here. We need
to reassess. Was there any informal
reassessment and did you -- did you look at
what they -- what they reviewed and how they
came to the conclusion that it was okay to
proceed?

MR. WINGARD: So the information
we have is that when they saw the seal loop,
it was cracked and the group who looked at it
and discussed it, realized that it was a non
insulated line. It wasn't electrical trades,
so they determined that it must have cracked
the first winter it froze and so when it was
installed it must have been cracked and that
it had been operating in this condition for
some numbers of years and so just they didn't
consider the hazard that this crack was a
safety interlock with a slurry flash tank
above, so they figured it was there for years,
so they could continue to operate and wait
until next turn around and get the unit
restarted.

But they discussed it and determined that it had been there for so long that it was probably not a new hazard and it didn't pose a hazard, which obviously proved to be incorrect.

MR. GRIFFON: And you said they figured that it was there, I mean, wasn't there a question as to when the seal loop was put in and why it was put in? I mean, did they even know why the seal loop was -- this was a modification to the original design, wasn't it? I mean, did they even know why it was put in?

MR. WINGARD: It does not seem to be that they knew why it was put in. And the PN -- PNID's for the unit actually don't indicate that seal is there.

MR. GRIFFON: Okay, I will turn it over to the Chairman.

MR. MOURE-ERASO: Thank you, Mark.

I have just one last question, I guess. I
I understand that there was an OSHA inspection after the accident, and I would like to -- to, if you could describe what was -- what were the OSHA citations and also, why do you think that OSHA didn't site this particular procedure under PSM?

MR. BANKS: Well, there were, I believe nine citations and most of them were for failure to make the workers aware of the hazards. The fines totaled 61 -- 61,000 dollars in fines for the -- for the breach.

MR. MOURE-ERASO: And why did was not considered PSM operation?

MR. WINGARD: You have to talk to the OSHA investigator inspectors. We determined that it should have been PSM covered. So if they went in and only focused on the failure of the lockout tag out and the hot work, which were a number of the citations and just didn't focus on that aspect, you'd have to talk with them.

MR. MOURE-ERASO: Okay. All
right. Well, if there's no more questions from the Board.

MR. GRIFFON: Can I?

MR. MOURE-ERASO: Yes, one more follow-up.

MR. GRIFFON: Yeah. Yeah. Just on one final topic, I promise. The last section 4.9 I think it is in the full report, on the audits, you noted in that section that DuPont internally, I am not sure if it was corporate level audits or if it was site level audits, but that they had -- had scored very highly in two previous audits in 2006 and 2010, and actually I want to got the words that were used, the audit report stated that the PHAs were, quote, "very well managed and executed" and are of, quote, "consistently high quality".

And these were done I believe in -- in 2009 and 2006, I think. I may not have that right, I guess I am asking, did the team review these audits and do they agree with
these conclusions?

    MR. BANKS: Well, we did review them and we felt that there was -- that they didn't measure up to the assessment of these -- these PHAs indicated.

    MR. GRIFFON: So you agree with their conclusion?

    MR. BANKS: No, we did not agree that they measured up to these conclusions that were captured in this assessment.

    MR. GRIFFON: Okay.

    MR. BANKS: In the PHA.

    MR. GRIFFON: And can you point to any, I know it's not in the report, but you say they missed, you feel they missed many deficiencies that were brought out in this investigation. Can you give me an example of some deficiencies. I guess the PHA for this process line would be one, or I don't know.

    MR. WINGARD: Well, I mean, you and I can say the PHAs don't consider the seal loop consideration at all. And it's an
interlock controlling a flammable from a PSM process to an area where they don't expect flammablesto ever be. And this isn't discussed in the PHAs at all, even though its failure obviously let flammables get to an area that they classified as no flammables being in.

MR. GRIFFON: Can I just, I mean, I guess I just wanted to make one last statement before we move onto voting on the report or -- but I mean, I view this -- this investigation in this incident as a little bit more than just a hot work incident. I mean, I think it, you know, you touched on many questionable decisions and activities that were leading up to the incident and I think some of these suggest a failure in safety systems, management safety systems and I guess I just would -- I urge all of us going forward internally to being more rigorous at identifying and investigating these higher level issues because I -- I note that our
recommendations don't go in that direction but I think, you know, these higher level findings on management systems can have serious and important impacts on not only this local DuPont Yerkes facility, but broader industries, other industries and nationally.

So I think -- I just think that there, at least there's some questions that I have on the organizational issues and the management of safety at this facility. But I agree with the decision not to include that in this report because we didn't quite pull the strings far enough to identify some of those. But I urge us in the future to -- to consider that seriously. Thank you.

MR. MOURE-ERASO: Thank you, Mark. At this time, we're going to proceed to public comments. We have a list of people that signed up for public comment and I am going to start first with the person that signed first. That doesn't mean that anybody from the public, when we go through the list...
afterwards, also could approach the microphone and have their five minutes of comments.

I will start to ask that the person that goes to the microphone, spell their name and please spell it so that the person taking records can get it exactly. And also describe their organization that they're representing or, you know, and also, as I mentioned before, please limit the -- the comments to five minutes.

So the first person that I have in the list is, I guess, Mr. Gary Guralny. So if Gary could please do better work than I did, spelling your name, please.

MR. GURALNY: It's Gary Guralny, G-A-R-Y G-U-R-A-L-N-Y. I am President of the Local Union at the Yerkes facility and I am also President of Council of Unions within the USW Steel Workers Union. And I have contact with other workers within DuPont as well.

I had a question, if I could ask, was there any consideration given to the fact
that with the October shut down, the vent line
that ultimately allowed the vapors to cross
across all three tanks, had been totally
disconnected and the maintenance department
was directed to reconnect that vent line, and
the -- there was some mechanics that
questioned the rationale with that, given the
fact that they knew the work wasn't done on
tank one, did that ever come out in your
overall investigation or was it considered at
all?

MR. BANKS: It did not come up in
our investigation, no.

MR. GURALNY: Pardon me?

MR. BANKS: It did not come up in
our investigation.

MR. GURALNY: Okay. And one other
thing, I was there that day and it has
affected my life and I feel for the people
that knew both individuals, Mr. Folaron and
Mr. Freeburg, and my condolences once again on
behalf of my local to those people. And I
just -- I can't say enough about how badly the
people that work at my place felt about
everything that happened. Thank you.

MR. MOURE-ERASO: Thank you very
much, Mr. Guralny. The next person is Mr.
James Valenti.

MR. VALENTI: Yes, thank you, Mr.
Chairman. My name is James Valenti, V as in
Victor, A-L-E-N-T-I. I am an International
Representative with the United Steel Workers
of America, District 4 Safety, Health and
Environmental Coordinator.

We're here today to comment on the
U.S. Chemical Safety Hazard Investigation's
Board Case Study of the November 9th, 2010
explosion at the Yerkes DuPont facility in
Buffalo, New York that killed one worker and
injured another.

In May of 2011 OSHA fined DuPont
61,000 and cited them for nine violations
related to this explosion. In January of this
year, OSHA has opened yet another
investigation in its plant regarding workers' health. That's an ongoing issue.

Those who follow the workings of the Chemical Safety Board know that last September the Board approved its 173 page investigative report into a series of three chemical releases that occurred over a 33 hour period on August 22nd and 23rd, 2010 at the DuPont Corporation's Belle, West Virginia Chemical Manufacturing Plant.

One of these releases was a deadly phosphine gas and it took the life of one worker and others were exposed as well. OSHA fined DuPont 43,000 dollars related to these releases, including serious violations for not performing a thorough process hazard analysis for its phosphine operation, and not training workers to properly work with chemical and installing energized electrical conductors.

In addition, OSHA cited DuPont for failing to properly record workers' injuries and illnesses. Last fall, OSHA again was
called to this facility to investigate occupational illnesses of three workers. Last month OSHA again cited the facility, this time for violations of hazard communication standard that requires employers to provide health and safety information about hazardous chemicals to its workforce.

Some have expressed surprise that the company involved in all of these incidents is DuPont, after all, DuPont touts a very low injury and illness rate and even has one facility that claims to have gone 60 years without an OSHA loss work day injury.

DuPont has devoted part of its business to consulting other companies on process safety and occupational risk management. And in their literature they quote "drawing on over 30 years of real world DuPont experience." Our expert consultants help protect our organizations, people and assets from process dangers, operational risks and potential cause of hazard industrial
DuPont was awarded the National Safety Councils Green Cross Safety award in 2006. And just this week, 17 DuPont manufacturing facilities across the U.S. were awarded CSX transportation's 18th annual Chemical Safety Excellence award. One of those 17 plants was the DuPont Yerkes facility here in New York.

One recent headline wrote quote "Even best in safety had bad days". DuPont has long been praised for what has been seen as its safety accomplishments. In the 2004 American Society of Safety Engineering Symposium entitled Achieving World Class Safety, Samuel Gowardo, MACSP, stated this, quote, "companies who have exceptional safety management processes in place utilized line management as the foundation for their success".

DuPont used this concept while operating black powder mills in Brandywine.
River in Delaware over 200 years ago. Not only were line managers personally responsible for the start up operations at these mills, but their families were required to live adjacent to them. They learned the concept of line safety management ownership and accountability from a self preservation perspective.

Two hundred years later, it remains the primary reason DuPont has been consistently recognized as one of the safest, if not the safest, company in the world. That article, by the way failed, to mention that in 1818, 40 workers were killed in an explosion at the same DuPont Brandywine, Delaware gunpowder manager facility.

The fact is, between the 1818 explosion at the DuPont facility in Delaware that took the lives of 40 workers and today's hearing focusing on the explosion that took a worker's life at the DuPont facility in New York in 2010, there has been a history of
worker injury, illness, death, as well as
community, environmental and public health
harm, all related to DuPont.

In addition to the most recent
tragedy at DuPont's Belle and Yerkes facility,
the following examples from this history:
1997, DuPont settled a lawsuit with more than
400 residents of New Jersey for 38.5 million
dollars regarding lead, mercury, arsenic and
chemical solvent contamination from the
munitions plant in Pompton Lakes, New Jersey.
In 2003, DuPont agreed to provide lifetime
medical monitoring for 15 hundred current and
former residents.

February 1999, DuPont agreed to
pay a $70,000 penalty to OSHA for failing to
record 117 occupational injury and illness
cases in '97 and '98 at its Seaford, Delaware
plant.

2005, more than 75 residents,
including police, fire and ambulance crews
near a DuPont plant in Northeastern Kentucky
filed a lawsuit over their exposure to an
October 2004 chemical leak of sulfuric acid.

DuPont had created a new warning
system for notifying people in a ten county
area of any problems at their Greenup County
plant as part of an agreement with PA after
the previous leak. But the system was not
used on the afternoon of October 11th, 2004
when a break in a pipe released hundreds of
pounds of sulfuric acid onto the ground, air
and water around the plant. 179 residents
eventually sued DuPont over this incident. In
July of 19 -- of 2009, a jury returned a
verdict of over 1.25 million for six of those
who sued. In October 2011, all of the
litigation regarding the October 2004 chemical
-- chemical release, was officially settled in
U.S. District Court for an undisclosed amount.

December 2005, DuPont settled an
EPA case paying 16.5 million regarding
accusations that the company had concealed
information about the dangers of a chemical
used to make Teflon. The agreement presented the largest civil administrative penalty to date reached under federal environmental laws.

2007, DuPont agreed to pay 70 million dollars in penalties and recommendations to resolve air pollution claims against four of its sulfuric acid plants in four states.


December 2010, DuPont agreed to pay a 3.3 million dollar fine to EPA for failing to report possible health risks involving its chemicals. This agreement settled 57 toxic substance violations dating back before May 2006.

November 2011, former DuPont chemical plant worker won $500,000 in a whistle blower retaliation lawsuit. The New
Jersey Superior Court Appellate Division
upheld the lower court's decision to award
500,00 to a former DuPont chambers works New
Jersey employee who said he was retaliated
against for filing an OSHA complaint. He had
raised concerns about what he believed to be
potential public safety hazards in a phosgene
reactor.

While the CSB's case study
regarding DuPont Yerkes plant here in Buffalo
has identified some of the specific
attributing factors to the November 9th, 2010
explosion, what has yet to be undertaken is an
analysis of why this company is again the
subject of a CSB report for workplace fatality
less than a year after another CSB report
detail chemical releases in a fatality at yet
another DuPont plant.

When faced with such devastating
history of injury, illness, loss of life and
environmental danger year after year after
year, we do not believe that the tragedies at
DuPont Yerkes and Belle plants can be viewed in isolation from each other, from this longer history of serious and ongoing harm regarding occupational and environmental health and safety.

In order to determine what has gone so wrong in DuPont's corporate culture to allow for this history of harm, we strongly recommend that an in depth study be taken to identify underlining or root causes that are responsible for multiple and continual and devastating programs and policies that are greatly in need of correction.

Until or unless this is carried out, we fear that tragedies will continue and we will be at yet another hearing regarding CSB reporting concerning a DuPont facility in the not so distant future. If the CSB does not have adequate funds to support such in depth corporate culture investigation, we recommend that an independent panel be created similar to the Baker panel following the BP
Texas explosion in 2005.

The CSB could be very helpful in selecting independent voices for this panel. The United Steel Workers International and the members of our USW Local at Yerkes DuPont appreciate the efforts of the investigators and the Board relative to this tragedy at this plant.

Our members at DuPont expect their employees to live up to its reputation of being the best. They deserve no less, lives and livelihoods are at stake. Thank you

MR. MOURE-ERASO: Thank you very much, Mr. Valenti. We appreciate it. I would like to say that we acknowledge your request and that the Board will deliberate and listen to it and will listen very carefully.

MR. VALENTI: Thank you, Mr. Chairman.

MR. MOURE-ERASO: The next person that we have is John Scardella.

MR. SCARDELLA: Thank you, Mr.
Chairman. My name is John Scardella, S-C-A-R-D-E-L-L-A. I am the Program Administrator for the United Steel Workers Charitable and Educational Organization and was the assigned investigator for the USW and with the Local investigating this accident.

In promotional materials produced for DuPont's sustainable solution documents in 2011, DuPont asserts that they can help your business in providing ways to prevent process related injuries and accidents achieved, sustainable improvements in business continuity and assessed productivity, among other business attributes.

This can be done by using DuPont's collaborative approach to process safety and operational risk management using world class process safety performance. Quote, "Achieving a competitive edge, also requires a system that drives continuous improvement and protects the companies, employees, its surrounding community, the environment and its
DuPont believes that sustainable safety performance requires a robust PSM system driven by operational discipline, in addition to occupational and behavioral safety management systems.

Equally important, DuPont contends, focus on both the cultural aspects of an organization, the technical elements will help your business sustain improved process safety management performance.

I raise these points from their promotional material to illustrate stark differences from what they say and what they practiced on November 9th, 2010.

I'd like to walk through the case study to illustrate the ineffectiveness of DuPont's process safety in this accident while keeping in mind that these significant errors are related to the corporate culture of safety that works its way down to the local level.

In Section 2.3 of the case study, it states that Mollenberg-Betz was selected to
repair the heavily corroded agitator support
due to their availability on site. This
raises the question of how such prior planning
for this repair was done, because the
contractor was already on site and available.
I think Mr. Banks had said it was basically
get the job done.

In Section 3.1, the study
indicates that the engineers concluded the
slurry tank could be returned to service
without repairing the split in the U leg seal
loop. DuPont engineers believed that its
likely purpose was to limit steam in the flash
tank from flowing into the slurry tank, as
Dennis Hendershot demonstrates, not
understanding the engineering intent of
systems can result in catastrophic events.

Further, no management of change
was carried out for the process to continue
with this compromised seal loop, which is
required under the PSM standard. Further, the
studies state that on November 8th a
1 compressor within the Tedlar unit
2 malfunctioned and a unit was restarted without
3 the compressor, significantly increasing the
4 VF vapor present in the PFS slurry flow,
5 flowing into the slurry flash tank. Again,
6 this was done without management of change.

    And Section 3.2, on the morning of
8 November 9th, the contractors completed a hot
9 work permit. The contractors did not check
10 out the valves on the slurry tank with any
11 DuPont employee prior to starting the hot
12 work, a failure of their own hot work
13 practices.

    4.1 reiterates the importance the
14 management change that was not done in the
15 previous section cited. The DuPont have
16 documented analysis of the potential of VF in the tank given these
17 changes within the system.

    They proceeded with a defective
19 seal loop and the compressor out of service,
20 so who deemed this safe? As stated in the
Section 4.3, the hot work procedure was within the guidelines set forth in NFPA 51B. This procedure recognized that the contractor may be -- may be unfamiliar with process safety or activities in the area that would be performing work and does require a construction field engineer in an area proprietor responsible for assuring that the contractor understood the potential hazardous conditions. The permit was designed primarily for contractor use, and the contractor is required to complete the Safety Task Assignment, STA, to address potential hazards in the hot work area. All employees doing the hot work were required to read this STA and sign and then -- read it and then sign it.

The question that must be asked at this juncture is, how are they trained to recognize these hazards? We see none from the report. What were the hazards that were identified in that STA prior to the accident. DuPont determined that the construction field
engineer in that area propriety would be responsible for helping the contractors understand the potential hazardous conditions.

The contractor did not know what the -- what the flash tank was or which chemicals were present inside it, again, raising the question of the training for the project and the hazards associated with welding and grinding.

Lastly, the construction supervisor and construction field engineer completed the hot work permit without answering the questions. They were left blank, according to the report. Are chemicals present? What chemicals and flammables, combustibles present? They were left blank on the permit. If a permit has blanks, does DuPont deem the permit complete? On November 9th, DuPont violated its own process safety procedures by allowing a construction engineer to sign the permit who had no work knowledge of the Tedlar process.
Further, the construction engineer obtained the proprietor's signature from someone in the service department. I believe Board Member Griffon asked a significant number of questions about this. The service department is responsible for mail, yardwork and related tasks. It was not located near nor was it related to the Tedlar process. DuPont's policy clearly states that the proprietor should be knowledgeable about the area they are signing off on, and that the proprietor should walk down the area where the hot work is being done. This was also not done.

In Section 4.5 concerning the lockout procedure, clearly states that isolating piping systems and hazardous processes should include blocked valves and/or a blind flange. The issue here is what is the best industry practice, especially from a world class leader in PSM, that isolating a piping system and hazardous processes, must be
blocked or blind flanged.

In Section 4.7.3, states that if DuPont had included the slurry tank and slurry tank flash tank overflow line in their PSM program, they would have been required to fix the cracked loop seal before starting the unit or ensuring that the cracked seal loop poses no safety hazard.

DuPont concluded that OSHA's PSM coverage did not extend to the slurry tanks, despite the CSB's safety bulletin of 2010 on hot work permit and its safety bulletin in 2001 on management of change. Yet this is a world class leader.

Section 4.9 states: a corporate audit in 2006 that performed an audit --

MR. MOURE-ERASO: Mr. Scardella,

one minute.

MR. SCARDELLA: Yes.

MR. MOURE-ERASO: One minute.

MR. SCARDELLA: Oh, I am sorry.

4.9 states the corporate audit in 2006 that
performed -- performed an audit of PSM system in the Buffalo facility but it did not include the contractors. Again, this was raised by the Board.

All of these issues listed above are from the company that searched the collaborative approach to process safety and operational risk management using world class process safety.

Lastly, the United Steel Workers would like to request further investigation into the safety practices of DuPont from a corporate perspective. This request is based upon the facts repeated herein since DuPont is instructing other corporations in world class process safety performance, we believe these institutional concerns should be investigated at the corporate level, faulty and fatal practices and the instructions of those practices and process safety should be a concern of this Board. Thank you.

MR. MOURE-ERASO: Thank you, Mr.
Scardella. The next person on the list is Ms. Erin Heaney.

MS. HEANEY: Heaney.

MR. MOURE-ERASO: I am sorry, please, you can spell your name and identify your organization.

MS. HEANEY: My name is Erin Heaney, E-R-I-N, H-E-A-N-E-Y. I am the Director of the Clean Air Coalition of Western New York. We are a grass-roots environmental health and justice organization that represent the folks who live up against the DuPont plant and the surrounding neighborhood. Several of our member are here tonight.

I was going to make a very similar argument that Jim Valenti made earlier, that DuPont aspires or claims that they have an incredible commitment to sustainability, and yet their track record over and over again, much like the workers safety track record, shows that that is not the case, but I won't bore everybody with detail. There's just a
few things I want to point out.

DuPont has consistently been named one of the dirty dozen by PERK organizations because DuPont puts over nine million residents in potential danger if a chemical catastrophe were to occur. DuPont has over 20 super fund sites. It is the number one producer of dioxin in the United States according to the EPA TRI, and has been sued several times by the EPA for withholding evidence showing harmful affects of its Teflon chemical.

In Tonawanda, DuPont has been out of compliance with the DEC for the last three years. DuPont emits 21 percent of the emissions for all of Erie County. And DuPont emits several things into the air that our residents are exposed to day in and day out.

So I just have a few things to say. I find it extremely mind boggling that there are no air monitoring being done when -- when this incident happened. Air monitoring
is something that the residents have pushed
for in the neighborhood surrounding the plant
for years and we're glad that it's part of
recommendations tonight.

We would also encourage this
Chemical Safety Board to push the
Environmental Protection Agency to use the
general duty clause of the Clean Air Act to --
to force facilities like DuPont and many other
large Title 5 facilities, to actually
substitute out chemicals like vinyl fluoride,
vinyl fluoride from the manufacturing process
to begin with.

There's over 100 labor unions and
environmental organizations that have asked
President Obama to direct EPA Administrator
Leader, Lisa Jackson, to use the General Duty
Clause to help phase out the toxic chemicals
that are also highly flammable.

This is very important because the
chemicals that exploded or caused the
explosion is a known human carcinogenic highly
flammable. DuPont said it was at safe levels.

There's no amount of -- there's no safe level
of a human carcinogenic for workers or for
communities. And so we would wonder, can
DuPont be using a less toxic substance to
begin with or something that is less flammable
to begin with.

We would also recommend that
DuPont, in future accidents, you know, heaven
forbid there ever be them, communicate with
residents in the neighborhood. Residents who
live close to the plant, were not notified
except through the general media, like over,
you know, the mainstream media, that DuPont be
in communication with residents.

In this case, the residents were
not exposed to anything harmful, but that
could easily happen in the future

And then finally, we would just
lift up with what the steel workers are
calling for today, calling for a further
investigation into the root cause of these --
these accidents that happen that really we believe stem from a corporate culture. This is not just the one isolated incident. It's part of the corporate culture at DuPont. That's all.

MR. MOURE-ERASO: Thank you very much. Are there anymore statements?

MR. COOK: I'll be very brief.

Roger, R-O-G-E-R, C-O-O-K, former Director of the Western New York Council of Occupational Safety and Health, and a member of the Advisory Board of the New York State Pollution Prevention Institute in Rochester.

I think most of the concerns I have, have been raised, but one of the gentleman on the Board did say that he felt that this was a failure of management safety systems and has real questions of organizational issues to the extent that your investigatory team has not raised that and it seems to me that the report is incomplete and that we should have a total investigation of
the entire system that failed here and I would hope that you would consider -- the Board would consider that we go back to the drawing board on that issue, particularly because the amount of vinyl fluoride that is stored on site.

The fact that there are releases, we don't know how much is getting into the air. We don't know how much worker exposure there is. We do know that it's a carcinogen, and -- or a suspected carcinogen. And further, when it, of course when there's -- when there's a flame involved, it turns into hydrogen fluoride and we have acute exposures.

I think those broader issues should be part of the mandate of this investigation and I would just urge that the Board consider the report incomplete and that a total report be issued that would address the larger organizational systems failures as others have raised. Thank you.

And I would say the Advisory -- I
will report to the Advisory Board of the New
York State Coalition Institute on this, if
there is ways you can see some collaboration,
as Ms. Heaney mentioned, if there are
substitute products or things like that, I
think that we need to begin to investigate.
That's an awful lot of vinyl fluoride and that
-- that potentially could cause a catastrophic
situation. I think just as we deal with near
misses in the workplace, maybe we ought to --
the investigation ought to look at what if
this thing went even larger than it did. What
are the worst case possible scenarios? I
think that community and those workers deserve
nothing less, so thank you.

MR. MOURE-ERASO: Thank you.

There's another.

MR. PACE: My name is Keith Pace,
I'm -- that's K-E-I-T-H, P-A-C-E. I am not
affiliated with any of the parties involved in
this. I am here as a private citizen here
tonight.
I have a couple questions for the Investigative Team. One, because I didn't hear it come out, was the permit for the other tank that was repaired during the shut down, was that permit signed off by the same department or by a different department within DuPont?

MR. WINGARD: The -- in the tank, slurry tank two, the appropriate person signed off on the --

MR. PACE: So it was a different department that signed that. Thank you. And then in your key lesson number three on -- on slide 43, it was very specific that flam -- vessels that had been involved in flammable service should have certain things done. In the recommendations you have launched, any reference to vessels that have been involved in flammable service and that's all very generic to all vessels, which to me seems to dilute the focus on the areas where the highest hazard is, which is areas that are
known to have handled or potentially have
handled flammables.

In this case, one might imply you
should treat a tank which had been in nitrogen
service or water service, the same as one
which had been in gasoline or toluene service,
is there a reason for that, the loss of that
focus?

MR. MOURE-ERASO: Well, if I might
say, you know, in our process, the public
doesn't -- the director, they are questions to
the -- and you know, like, we'll take your
questions into consideration and try to answer
--

MR. PACE: Okay.

MR. MOURE-ERASO: -- directly but,
you know, we wouldn't like to on the specifics
of the findings of the report with the -- with
the investigators. We will very glad consider
your question and try to answer on that
specific, you know.

MR. PACE: Okay.
MR. MOURE-ERASO: I would like to put that in the record.

MR. PACE: Thank you.

MR. MOURE-ERASO: Is there anything else?

MR. PACE: No, that's it, thank you.

MR. MOURE-ERASO: Okay. You gave us your name and --

MR. PACE: Yes.

MR. MOURE-ERASO: -- we need your address and some additional information.

MR. PACE: I can fill it out.

MR. MOURE-ERASO: Another comment.

A lot of comments. Two comments.

MR. ELOPHANT: Good evening. My name is Bruce Elophant. I am with the New York State Office of Fire Prevent -- sorry, Fire Prevention and Control and the Hazardous Material Bureau. I was on the scene the day of the accident. I just -- I had -- while I am not refuting the causation or finding of
anything of the Investigative Team, it's more
of a technical question about the slide show.
Does the slide presentation become part of the
record on the website of public viewing as
well as that video or is it just the report?
Give me -- give me -- give me two minutes --
give me one minute here and I will explain why
I am questioning this. I am going back to
slide --

MR. MOURE-ERASO: Your question
from counsel here is that what goes in the
website is the report and the video.

MR. ELOPHANT: Okay, let me just

MR. MOURE-ERASO: This is just an
aid for the report.

MR. ELOPHANT: Okay. Relative to
slide 28 that was mentioned earlier, slide 28
was -- was about, does not require internal
monitoring for hot work relative to 1910 252.
In 252, just to be clear, that doesn't give
the wrong inference, it states that -- that
when the nature of the work can be performed
falls within the scope of -- of a previous
paragraph, which refers to not being able to
move that area or put up proper further
guards, certain additional precautions may be
necessary.

Further, it goes on, that in the
presence of explosive atmospheres, mixtures of
flammable gases, vapors, liquids or dust with
air, more explosive atmosphere, a chemistry
that may develop inside uncleaned or
improperly prepared tanks or equipment which
had previously contained such materials or
that develop in areas with an accumulation of
combustible dust.

So what this is saying is that
certain additional precautions may be
necessary and if the workers have been trained
to monitor accordingly, they should use those
tools. But it doesn't specifically say what
wrench to use either. But I believe that is
inferring that further monitoring should be
done based on your environment. I just wanted

to point --

MR. MOURE-ERASO: I am sorry, you

are -- you are referring to the slide 28?

MR. ELOPHANT: Slide 28.

MR. MOURE-ERASO: Slide 28, where

you were reading from is the OSHA standard?

MR. ELOPHANT: Is the OSHA

standard, CFR 1910 252. Specifically it was

1910 252 A2, which is special precautions. And

then the subsection I was referring to beyond

that is 1910 252 A2 6 VI, subsection C beyond

that. So A2 VI and then C, I just wanted to

point that out, okay. Thank you.

MR. MOURE-ERASO: Thank you.

MS. MAJEROWSKI: Good evening. My

name is Karen Majerowksi, M-A-J-E-R-O-W-S-K-I.

I am a member of the Clean Air Coalition and

a concerned citizen. I do not live far from

DuPont. Last year I was involved in a

chemical incident that left us breathing in

toxic chemicals for over 23 hours. And I can
tell you, I can smell different toxins coming from the industry, you know, the different companies and industries within the neighborhood I live in.

You know, safety is first. Safety for their employees. Safety for the community. There's no communication within any of the companies within the Tonawanda area that when there's an incident involved, that they notify the community and I think that should be DuPont's number one issue, is safety for their employees and the people who live around their community. That's all I have.

Thank you.

MR. MOURE-ERASO: Thank you very much. Any other statements? Yes, please.

MR. CARIDI: My name is Joel Caridi, C-A-R-I-D-I District 4, Local 2777 with the USW. I have just got one question, maybe for the Investigative Team or the people here from DuPont. Do you have any records that those tanks periodically, maybe once a
year, are entered and checked for broken agitator blades, excessive wear on the side walls? Did you see any of that in your investigation? Thank you.

MR. MOURE-ERASO: I think probably you should ask that question directly to -- I mean we wouldn't have any -- any -- anyway to know of those specifics to the company itself, to DuPont, unless you have information?

MR. BANKS: We don't have any direct knowledge.

MR. CARIDI: You don't have anything like that. Okay, thank you.

MR. MOURE-ERASO: All right. Any other comments? Board Member Griffon has some comments to make on the -- go ahead.

MR. GRIFFON: Yes, I just wanted to follow-up on Mr. Valenti's comment and request I guess to the Board and several commenters brought up this -- the question of safety culture and I just -- I just thought it's worth while pointing out that this --
this question of safety culture is not a new one. I mean, it's come up from investigations back to Three Mile Island and Chernobyl and in our own investigation of PB Texas City in 2005, it certainly was a finding there.

And I just wanted to point out, sort of to reinforce what Chairman Moure-Eraso said, that — that we, in our Strategic Plan that we're going to discuss after a little break here, we are, in our draft anyway, we are making a proposal to further study this question of safety culture. I think we want to study what it means. How people define it. How do you measure it. How do you know if you have a good safety culture or not and how do you, to sort of bench mark it, how do you compare yourself across the industry.

I think there's a lot of important issues to discuss under that and, you know, it's not just something that comes from this investigation, it's -- it's certainly been brought up in several of our investigations.
and across industry sectors, so we think it's
an important issue and it's in one of our
goods and our Strategic Plan is to look into
that further. So I just wanted to make that
point. Thank you for the comments.

MR. MOURE-ERASO: Okay. Is there
any more discussions from the public? All
right, before proceeding to -- to the process
of the vote, I would like to thank very much
the institutions and the persons that have
participated in the public session and I know
it takes a lot of effort to prepare and to
stand up and to give us input of your ideas on
this issue and I would like to thank everybody
that make any statement today. I would like
to make that clear. We will follow down the
process of voting on the report, so.

MR. GRIFFON: Well, I can offer a
motion.

MR. MOURE-ERASO: Yes, yes, the
first thing is -- the first part of the
process is that one of the Board Members offer
a motion of our report.

MR. GRIFFON: Yes, I'd like to offer a motion, Mr. Chairman, a motion to approve the CSB Case Study and Recommendations Report Number 2011-01-5-NY regarding the Agency's investigation into a hot work incident that occurred at the DuPont Yerkes plant in Tonawanda, New York on November 9th, 2010.

MR. MOURE-ERASO: A motion has been made and we need somebody from the Board to second it.

MR. BRESLAND: Mr. Chairman, Mr. Chairman, I will second it. I also would like the opportunity before the final vote to make a statement.

MR. MOURE-ERASO: Please proceed.

MR. BRESLAND: This is the second DuPont incident that we have investigated and had a public hearing on within the last year. And by way of full disclosure, I used to work for DuPont, it was 50 years ago. I was a lab
technician at a DuPont facility in Northern Ireland. And I left that two year experience with DuPont having a very --- having a -- as a 20 year old, having a very strong sense of DuPont's attitude, very positive attitude towards safety, so.

And I have always, when I have done presentations around the country, I have always used DuPont as an example of a company that has a strong safety culture and strong safety programs. However, that -- that confidence has been somewhat disturbed by what I have seen in the -- in our investigation of -- of the Belle plant and of the Yerkes plant. I'd just like to quote from a statement that I made at the Belle public meeting quoting, this is me speaking, "these findings, the findings that we found at Belle, would cause us great concern in any chemical plant, but particularly in DuPont with its historically strong work and safety culture. I hope that DuPont officials are examining their safety
culture throughout the company and throughout the company worldwide”.

That's what I said at the Belle, West Virginia public meeting and I'd like to reiterate that -- that statement this evening. I am not going to repeat it again but certainly I feel that we need to -- DuPont does need to take a hard look at their safety programs based on what we have seen in the these two incidents.

MR. MOURE-ERASO: Thank you, John. Are there any more comments for the Board members in the discussion of the motion?

MR. GRIFFON: No.

MR. MOURE-ERASO: I don't have any comments either. Okay, we have a motion on the floor, the motion say to approve the CSB Case Study and Recommendations, and recommendations in the report 2010 011 New York regarding the Agency's investigations into a hot work incident that occurred at the AEI DuPont and Company Yerkes plant in Tonawanda, New York
November 9, 2010. That's the motion. So I would like to ask for the votes. Board Member Bresland, what is your vote?

MR. BRESLAND: I approve.

MR. MOURE-ERASO: Board Member Mark Griffon?

MR. GRIFFON: I approve.

MR. MOURE-ERASO: And my vote also is that I approve. So we have unanimously approved the report. Thank you very much for all the presence here, for all the people that participated. We are going to proceed now to additional Board business in reference to our Strategic Plan and we are going to take a five minute break to make the transition, so thank you very much.

(Whereupon, the above-entitled matter briefly went off the record.)

MR. MOURE-ERASO: Okay, we are proceeding with additional CSB Board business. At this time we will be presenting the CSB Draft Strategic Plan for the years from 2012
for, to 2016. We are required by statute to prepare a Strategic Plan every five years and this is for this period of the next five years.

We have a policy draft of the Strategic Plan in our website. It has been there for about a month, a couple weeks. For two weeks. We have received a number of public comments in our website, the Strategic Plan and we wanted to have this opportunity to have a public meeting here to get additional public comments on it.

So I would like to invite the Deputy Manager Director of the Chemical Safety Board, John Lowe, to provide a brief overview of the Strategic Plan. Mr. Lowe has been one of the persons that have worked the hardest on this for -- has been an effort of almost a half a year and I -- I thank Mr. Lowe for the efforts and the preparation of the draft of this Strategic Plan. So Mr. Lowe, please proceed with the presentation.
MR. LOWE: Thank you, Chairman. I want to thank you for giving me this time slot, right before dinner, so I know what I am standing between, so I will try to keep it succinct as possible.

First of all, this has been an extended process that we have gone through, that we started last spring. We have -- we have decided to do a lot of research on how other agencies were approaching Strategic Planning. In particular, we looked at NTSB, which people may know, that CSB was modeled after the NTSB's model, how they were -- how they were developed.

As a matter of fact, we identified a person over at NTSB that came over and worked with us for about eight months to help us develop a structure of how to do this plan. And part of that structure was, we took the time to interview a number of our internal employees and we also went out and met face-to-face with a number of stakeholders.
As a matter of fact, I think we met with about 15 to 20 stakeholders one-on-one to get their input before we even started writing or thinking about where we should head. That also included a survey of the employees. And then after the survey was done, we went into drafting the plan. And the plan was drafted and completed last month and then put onto our public -- onto our website for public comment and that's where we are today and now we're at the public meeting section.

So some of the findings, I just wanted to share with -- with the Board from our interviews with our stakeholders, in particular was that universally, across the board, whether it was they represented industry workers, environmental groups, we heard loud and clear what the CSB does, matters and is valued. They appreciate what we do. They understand the value that we bring to the table.
All our stakeholders told us that they use our reports and recommendations, videos, to help prevent future accidents. And so I think we have to remember that and what our focus should be in terms of developing the plan.

Now, when looking at the mission of the CSB, we -- we stated the mission this way for the coming year, for the coming five years, to independently investigate significant chemical accidents and hazards and effectively advocate the implementation of the resulting recommendations to protect the workers and the public and the environment.

I think this is pretty much similar to what we had before, but there -- we did try to focus more on the implementation of the recommendations, part of the statement. We, this year we have gone to three goals. In our previous Strategic Plan we had five and we have combined some of five that were are still doing the same amount of things, but we have
combined some of them to be more effective in
the way we measure and look at things.

Goal one really focuses on the
conducting of incident investigations and
safety studies that involve accident releases
or potential releases of hazardous chemical
substances. So goal one really is focusing on
all the work we do on the investigations, from
start to finish, from the -- from the time we
deploy to the time we develop recommendations
during -- during the investigation to the
final public meeting that we come here, like
we did here today.

Goal two focuses on improved
safety environment protection by ensuring that
the CSB's recommendations are implemented and
broadly disseminated, the CSB findings,
through advocacy and outreach. And this
really focuses on making sure that the
recommendations like we -- like we had today
are not just words on a paper, but we go and
make sure that they're truly implemented by
companies, organizations, federal agencies and so forth, whoever we make it to, through advocacy and outreach.

And one of the newer sections of this will be focusing on a most wanted program, which will be something that is an important goal for us that is similar to what NTSB does, if you're familiar with them, they have a most wanted program of open recommendations that they focus on and help them determine what incidents to go to and so forth. So that is something that is going to be accomplished underneath this goal.

The final goal is to preserve the public trust by maintaining and improving organizational excellence. This is an infrastructure goal to make sure that we do all the things that we need to do to keeping the agency running.

When you look at the stakeholder feedback that we received from the public comments that have been up on the website, I'd
like to talk about the themes they have seen so far. One of the things that they have asked is to define the potential releases and what we meant by that. So we're going to look at the wording and give some wording changes to that so it's more specific in terms of potential catastrophic releases. We're looking at some of that, some of those, some of those kind of -- some of that kind of language.

We're also looking at the timeliness of the investigations and recommendation responses. And with this, we have heard from the stakeholders that, you know, they want the investigations to get done in a timely way, because they want to learn from what the accidents that occurred. And we will, in the new Strategic Plan, have a metric that will follow this to make sure that the investigations, you know, stay on track.

In addition, also recommendations response, looking at ways to measure how
quickly people respond to that and how quickly
we respond to the folks that send in their
response to the investigation, which is also
important.

Next, there was some talk about
investigations versus studies, the
stakeholders told us that it was important
that the investigations are still done and
done in a timely way, but they also see the
value in our studies. The dust study is an
e example. The study that we have done that has
had a lot of impact. It's created a lot of
awareness, and so they have asked us to look
at the resources we have and try to figure out
which -- where to spend our money and time.
Safety culture was one I think that Mark
brought up previously.

Also, some of it got cut off, here
but communication with the stakeholders. We
heard consistently across the board that we
need to improve our communication with
stakeholders and make sure that they're not
just in the loop at the beginning but they're
in the loop through the whole process. And
they know where we are in the process and so
forth, and so that's something else that we're
going to work on through this -- through these
next four years.

And then the final one was just
tightening up the wording and making the
document more -- more concise. So just kind
of the timeline of where we're at, we have the
public meeting about the plan today. Between
now and the 30th we'll be still reviewing the
comments and happy to sit down individually
with anybody as we get back to the office and
so forth, to go through any comments that you
want to. And then our plan is by April 30th
to present a revised plan to the Board for
consideration and adoption. That's it. Any
questions?

MR. MOURE-ERASO: Thank you very
much, Mr. Lowe. And the objective of this --
of this session is to get input from the
public, from the list of people that signed,
we have Mr. Scardella from the United Steel
Workers first, so if you will please proceed
to the microphone.

MR. SCARDELLA: Thank you, Mr.
Chairman. John Scardella, S-C-A-R-D-E-L-L-A,
Program Administrator for the Steel Workers
Charitable and Educational Organization. The
United Steel Workers would like to comment on
the upcoming Strategic Plan for 2012 to 2016.
The USW is very supportive of the CSB
continuing to conduct in depth investigation
and focusing on identifying root causes and
making recommendations for prevention of
industrial incidents in the future.

The USW is concerned that while
taking on such an important mission, the CSB
remains to have very limited funding. We urge
congress to increasing funding in the future.

USW believes that it is vitally
important to have an independent federal
agency non regulatory focusing on identifying
root causes for the purpose of improving
safety, the CSB provides a great service for
all stakeholders.

The USW is in support of more CSB
studies, safety studies. This will allow the
CSB to investigate reoccurring issues that
they have identified in other investigations
but do not necessarily have the time to
investigate in depth and each individual
investigation.

A safety study allows the CSB to
better leverage with their limited resources.
Several of those issue are very important to
the USW and cut across several different
industrial sectors and therefore can be very
valuable in effecting safety change on a
broader level.

The USW strongly supports further
study of the impact of HF, of echolocation
units in the refinery sector and possible
alternatives. The USW has studied the impact
of HF in our refineries, representative
refinery locations and have a number of concerns not only on the workers of these locations, but the communities in which these refineries are located.

The USW strongly supports further work on performance indicators. The PB Texas City incident resulted in preliminary changes in this area but we believe more discussion and analysis would be useful in identifying most appropriate leading legging indicators, reporting of data collected from these performance measures, use of data at the local, corporate, national level to improve safety and reduce the potential for high consequence low probability accidents.

USW also supports the further study of -- or a public hearing on safety culture. We believe this is a term that has come to have many different interpretations, including some which we feel are not appropriate and not helpful in approving the safety. We believe that the CSB is uniquely
positioned to study this issue and to conduct public meetings on this issue.

USW strongly supports the CSB looking further at the future of PSM, including an assessment of other possible regulatory models. The PSM rule has been in place for 20 years. And over the last 12 years, the CSB has pointed out many of the shortcomings of the CSB PSM rule. While we believe it has been a ground breaking regulation at the time, we feel that it is certainly time for reconsideration, what worked, what needs to be updated, et cetera. Thank you.

MR. MOURE-ERASO: Thank you very much, Mr. Scardella. Is there other public comment? Yes.

MR. COOK: Yes, I think just --

MR. MOURE-ERASO: Wait.

MR. COOK: R-O-G-E-R, C-O-O-K.

MR. MOURE-ERASO: Okay, give us your name again on the record and your
MR. COOK: Former Director of the Western New York Council on Occupational Safety and Health and still a consultant and serve on the Advisory Board of the New York State Pollution Prevention Institute.

I think the only -- well, I think when we look at the DuPont issue, we're really looking at a company that has used what we called behavior based safety and the onus is usually put on the worker and I think that you, I don't know your name, sir, but on the Board here, raised a fundamental issue here that it's about organizational systems and putting, having the right systems in place that really is what leads to prevention of these things.

And I guess my only question is that in your, I guess in the investigation, that really doesn't seem to get addressed. Does that go beyond the mandate then, you are just restricted to only speak to the specific
incident, you can't broaden that to talk about
the failure of the system itself in the report
and/or do you have to do that independently as
a kind of lessons learned from the industry,
I guess?

I mean, one of your stakeholders
said the what if scenario, it just seems to
me, at least in traumatic, in the traumatic
areas of injury, we use the near miss thing.
This thing could have gone even wider, it
seems to me. The community was very, very
concerned about that. They have still got all
that vinyl fluoride on site and what's -- what
do we know, you know, how are we going to
prevent this kind of stuff from happening
again.

So, I was just a little
disappointed that the investigation didn't
report on that broader, kind of near miss
catastrophic kind of scenario.

MR. MOURE-ERASO: Thank you very
much. I really appreciate your comments.
Also the comments of Mr. Scardella is there any other comments? I would like to ask if the Board members would like to make some comments on this. Start with Mr. Bresland.

MR. BRESLAND: No comments. I have read, obviously I have read the draft report and I have read the comments that we have received from our stakeholders as well. Are those on -- are the public comments on our website? Will they be on our website?

MR. LOWE: Not yet. We're still working through that.

MR. BRESLAND: Okay. But apart from that, I would like to commend Mr. Lowe and his colleagues on an excellent job putting all this together. I know it was a six month effort and it looks like it's going to be a very well used effort in the future. So thank you.

MR. LOWE: Thank you.

MR. MOURE-ERASO: Thank you, Mr. Bresland. Mr. Griffon.
MR. GRIFFON: Yes, no, I agree with great efforts on all the members of the team putting this product together. I know it took quite a while to construct. I would ask more, just a process question I guess, I am assuming that we, as a Board, will have in the near future, according to John's timeline, an opportunity to deliberate on some of the public comments we received. I know we received quite a few written comments and some, I mean, I have done some preliminary review on them, but certainly not equipped to discuss tonight and it's just getting a little late, as you pointed out, but I assume we're going to have a future opportunity to deliberate as a Board on this plan.

MR. MOURE-ERASO: Thank you, Mr. Griffon. Yes, I would like to say that -- that we're going to take very much into account the written comments that we have received in the website and we are going to deliberate on them. And also we especially
appreciate the comments of the -- that have been presented here by Mr. Scardella, Roger, I am sorry your name again, I think those are important things that are on the record and that we would like include also in our deliberations. After we get all this input, we are going to have a vote on approving the Strategic Plan and that will happen, according with your timeline, very near, in the very near future. I guess, we, according with what we have promised our Inspector General, I guess it's going to be in a month, a couple months, so, you know, we are going to be moving with due speed on this.

So thank you very much to everybody that participated in this meeting. We appreciate your attendance and we appreciate your -- your -- your involvement and concern with the CSB investigation and the fatal hot work accident at the DuPont facility. And thanks again to the Team for their very informative presentation. And
thank you all who attended this evening. So
I always wanted to do this, you know, with
that, these proceedings are adjourned.

(Whereupon, the above-entitled
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Neal R. Gross & Co., Inc.
202-234-4433
CERTIFICATE

This is to certify that the foregoing transcript

In the matter of: Explosion at DuPont Yerkes Plant

Before: US CSHIB

Date: 04-19-12

Place: Buffalo, NY

was duly recorded and accurately transcribed under my direction; further, that said transcript is a true and accurate record of the proceedings.

______________________________
Neal R. Gross
Court Reporter