U.S. CHEMICAL SAFETY BOARD

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CHEVRON RICHMOND REFINERY

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PUBLIC MEETING

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WEDNESDAY,

JANUARY 15, 2014

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U.S. CHEMICAL SAFETY BOARD MEMBERS PRESENT:

RAFAEL MOURE-ERASO, Ph.D., Chairperson,
U.S. Chemical Safety Board
MARK GRIFFON, Member, U.S. Chemical Safety
Board

BETH J. ROSENBERG, Sc.D., M.P.H., Member, U.S. Chemical Safety Board

STAFF PRESENT:

DANIEL M. HOROWITZ, Ph.D., Managing Director RICHARD C. LOEB, General Counsel *HILLARY COHEN, Communications Manager DON HOLMSTROM, Director, Western Regional Office

*AMY McCORMICK, Contracting Officer AMANDA JOHNSON, Investigator DAN TILLEMA, Team Lead

This transcript produced from audio provided by the U.S. Chemical Safety Board.

PROCEEDINGS

2 (6:30 p.m.)

CHAIRPERSON MOURE-ERASO: And

that's kind of a reflection of the magnitude

that these problems can have. In here, we

have problems with the air. In Charleston,

West Virginia, they have serious problems with

the water.

Before we go any further

(inaudible), it's necessary that we review the safety exits. If nothing happens to us and everything is normal, you will leave the building the way you entered.

But if something goes wrong, you have to be aware that there is two exits here, two emergency exits, in addition to the two ones that are in the front over there. We are supposed to do that in the safety meeting.

I would like to introduce my

fellow board members and the people that are
here on the panel. I am Rafael Moure-Eraso.

I am chairperson of the U.S. Chemical Safety

1 Board.

And with me I have, to my left,
Dr. Beth Rosenberg, CSB board member. I have,
to my right, Mark Griffon, which is also a CSB
board member. The three of us are, at this
time, the board of the Chemical Safety Board.

Also with me here, to my right, is the General Counsel of the Chemical Safety

Board. And, you know, he is going to be helping us to deal with any legal or any matters that relate to how to run the meeting.

Mr. Richard Loeb is here, sitting to my right.

Also here is the investigative team with the director of our Western office is sitting to my left and our medical director and our communications director is sitting to my right. We'll go into details in those presentations when they are to speak.

I don't know if all of you were able to see an agenda. There is an agenda of how we're going to proceed that I am going to

1 read as follows, the agenda.

The first thing I would like to do is I am going to give you some introductory remarks from the Chair. I am sure you all know that we released the last draft of our federal report, this precisely one that we are looking today, at a press conference here on December the 16th, 2013.

The objective of that press conference and releasing the report then was to ask for public comment on the contents of the report and specifically on the recommendations of the report.

And the comments are in and can be reviewed on the CSB Website with our specific responses that we have to the comments that were presented.

The period that we asked for people to send comments were from December 16th through January 3rd. And we got a substantial amount of comments that we reviewed.

We have considered and we have incorporated suggestions from these comments in the final report that we are discussing today.

The comments that we received were from the State of California, from California OSHA, I'm sorry, from Federal OSHA, from the Chevron Company, from the University of Texas A&M, the Mary K. O'Connor Center for Process Safety.

We have comments from the American Petroleum Institute for the United Steel
Workers Local 5 which is the one that represents the workers here in Richmond and also comments from the United Steelworkers
International.

We have comments from the Center for Chemical Process Safety, from the American Institute of Chemical Engineers. We have comments from the American Fuel and Petrochemical Manufacturers, the American Chemical Council, the Western States Petroleum

Association, the California Refinery Action
Collaborative and from 15 individuals that it
was their statement.

The work of our staff has been the diligent and difficult work of trying to understand and incorporate the suggestions that we thought that were relevant into our final report.

That report today is going to be presented officially. And we are then voting, the Board is going to vote for approval or disapproval of the recommendations as they appear in the report.

The reasons that we are here, that we deployed to this problem and initiated these investigations, is because we believe that we have a fundamental refinery safety problem in the United States.

In 2012 alone, the CSB tried 125 significant process safety incidents at the U.S. petroleum refineries. Seventeen of these took place in your State, in California. The

current regulatorry system clearly is not working to make these facilities as safe as is possible for you.

Refineries account for the highest number of reportable accidents among the facilities who are covered by the EPA risk management program rules in the whole United States. Refinery is the Number 1 industrial group that has the most frequent accidents that are reportable in their R and P.

We have examined a Swiss MS.

REYNOLDS: report. Swiss Re is a great
insurance company that looks at production
worldwide. And this company reported, with
data from 2005, that the dollar cost of losses
for accidents in U.S. American refineries was
almost three times that same cost of losses
from refineries from the European Union. So
we do have a problem in refineries.

In the world of the CSB, six of our current 13 ongoing CSB investigations are in U.S. refineries.

The OSHA, after our recommendation on the BP Texas City explosion in 2005, initiated a new emphasis program on process safety management that looks at refineries.

And we took a sample of refineries in the United States. And they have serious problems of compliance with the process safety management to be in this study that is called the Emphasis Program for refineries.

All of these facts are presented in detail, properly annotated, in the CSB investigation report that we are voting on today and that can be found outside.

Our CSB report finds that the regulatory system in the U.S., we find it wanting. The CSB report today calls for sweeping changes in the way refineries are regulated in California.

Our investigation team will outline this report to you in detail. I urge you to listen carefully to the special recommendations that the Board will consider

for the State of California to establish a more rigorous safety management regulatory framework for petroleum refineries.

You will be hearing about what will be a new approach in this country for refinery regulation, the Safety Case regime.

The principles the Safety Case framework actually use regulatory systems in the United Kingdom, in Australia and in Norway.

The applications of similar principles of the Safety Case regime are also found in the United States. You will look at the safety management of the Nuclear Regulatory Commission and of NASA principles of Safety Case are applied there. And they are now conforming to the U.S. experience of safety management.

By adopting our recommendation of the Safety Case regime, the State of California could become the National test bed for refinery safety regulation designed to prevent catastrophic failures.

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Over the years, the CSB has gathered a lot of data on the root causes of biochemical accidents and has evaluated the opportunities of the refinery and chemical industry regulatory system.

I believe all of us on the Board appreciate the work of our investigatory team that has focused on this root cause and has looked at all the issues that I am presenting to you today.

We also would like to applaud the work of the government of California interagency task force for their proactive approach to protect workers and public safety in California following our interim report last April and for the progress that they have us on our recommendations to this particular report.

Now, I would like to call on my colleagues of the CSB Safety Board for any opening remarks. So Member Rosenberg?

MEMBER ROSENBERG: Thank you.

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Good evening. The CSB found that Chevron had been warned at least seven times over a decade that pipes were subject to sulfidation corrosion and they should be inspected and, if necessary, replaced.

as Congressman Miller, agreed that the pipe failure was really a management failure to heed any warnings of its own employees and evidence from experts. Chevron's management failure has yet to be explained.

And now we are proposing a different regulatory regime which has been widely touted as a new, improved safety regime.

There are many appealing aspects of the Safety Case regime which you will hear about tonight. While I do not oppose trying to implement some of the positive aspects of the Safety Case regime in California, I have reservations.

The idea of industry making the

case to a competent regulator that it can carry out its business safely and having labor provide checks and balances is a very nice model if all three parties have somewhat equal power. Safety Case regime can work if labor, Government and industry are balanced.

I have real concerns that if we implement the Safety Case regime, we will simply be duplicating the same power relations of weak labor, weak Government and strong industry in a different format.

In the offshore oil industry in the U.K., Safety Case has shown to improve safety, not so on onshore facilities.

Dr. Nancy Leveson, an MIT

professor of engineering systems who served on
the Baker Panel that was convened by the CSB
in the aftermath of the BP Texas City incident
in 2005, says in her public comments that,
"The available evidence indicates that the
Safety Case offers no superior protection
against process safety incidents."

In fact, the poor use of Safety
Case has been faulted in numerous accidents.
An independent review of the 2006 loss of the
RAF Nimrod which resulted in 14 fatalities
leveled harsh criticisms of the Safety Case
regime including that, "The Safety Case regime
has lost its way, led to a culture of paper
safety at the expense of real safety."

Rory O'Neill, long time labor
activist in the U.K., editor of Hazard
Magazine and good friend of the United
Steelworkers, in a recent email sarcastically
referred to the magic Safety Case because it
was falling so far short of expectations.

In an email yesterday, O'Neill said the Safety Case is, "Amounting to enormous piles of paper submitted to an agency with few and rapidly declining resources to scrutinize them and fewer still to detect compliance."

On the other hand, what we have now is not working. And you deserve something

better. I understand your eagerness to try something new. This report is a very good start to exploring a new possibility about what a Safety Case regime could be.

But the public comments, as well as what I've learned about Safety Case in the last year, give me pause. there is much more to learn from other countries that have a Safety Case regime about how it actually works in practice. I'm uneasy with the fact that Safety Cases are not public documents. So you and I can't see them.

Three months ago, I asked you

Judith Hackitt, the head of HSE which is U.K's

OSHA, about the role of labor in Safety Cases.

She said that Safety Cases are mainly

negotiations between companies and the

Government, and labor isn't really involved,

nor is the public.

I cannot, in good conscience, recommend something where labor and communities might be weakened in any way.

Further, even if you decide to implement the Safety Case regime, it will take years to train regulators in industry and figure out how it dovetails with regulations. Safety Case regime is a long term plan. You need more immediate remedies that have not been implemented.

Contra Costa County has been touted as a model program in refinery safety, yet there were failures.

The CSB investigators know the gaps in the safety program and made two recommendations in our previous report but left some gaps without remedies.

These include the need for more resources to allow reasonable staffing levels with adequate salaries for inspectors and for inspectors to have direct enforcement authority rather than having to refer violations they find to the district attorney with a recommendation for enforcement. The CSB could investigate this problem quickly and

1 make appropriate recommendations.

The issue of timely abatement has been brought up in this state. Currently, the employer is not obligated to correct a violation if the employer files an appeal.

And we know litigation can take years. If the violation presents a serious hazard, it makes no public health sense for a known hazard not to be corrected.

Washington State has a version of the timely abatement and even when an appeal is filed while still giving employers due process rights. OSHA supports this.

Assembly member Nancy Skinner and Senator Loni Hancock passed such a bill last year that was vetoed by the Government. But thankfully, they have not given up and will re-introduce it. We at the CSB should be involved in this effort.

These few issues of resources for
Contra Costa County inspectors expanding
enforcement authority and timely abatement are

remedies that the CSB could make recommendations on now.

So to summarize, this report is a very, very good start in illustrating the benefits of Safety Case regime. The staff is to be commended for their excellent work thus far.

I don't think we, that is both the staff and the Board, have had time to adequately examine the down sides of Safety Case regimes in practice and how we can prevent them from occurring here.

More importantly, there are clear short term remedies that need our immediate attention to protect workers and the public.

Thank you.

(Applause)

CHAIRPERSON MOURE-ERASO: The statement of Board Member Griffon is next.

MEMBER GRIFFON: Thank you, Mr. Chairman. Good evening. I'm excited to be here in Richmond once more to discuss some

possible solutions which could go a long way to preventing another incident like the one that took place in August 2012.

I want to start by stressing what

I mentioned in the meeting that we had in

April of 2013. These type of incidents at

refineries around the U.S. are far too common.

I also say, again, that I believe a significant factor contributing to the incidents in the refinery sector is the age of the facilities.

The fact that was stressed in the U.K. health and safety executive study, which showed that 50 percent of the major hazard loss of containment events were primarily due to aging plant mechanisms such as corrosion, erosion and fatigue. Any regulatory solution we consider must consider this important factor.

Chevron was clearly aware of a corrosion problem and yet repeated warnings were dismissed. If Chevron management had

listened to their own experts, this incident may have been prevented.

I am very interested in gaining a better understanding of what appears to have been management's failures. And as Dr.

Meshkati from the University of Southern

California noted in his comments to the CSB, the oil refinery industry's safety culture, and its senior management safety consciousness and genuine commitment are the keys to moving above and beyond the bare minimums achieved by regulatory compliance.

These type of management failures, it seems to me, are independent of the regulatory framework in place. I look forward to our final report on Chevron which will cover these organizational questions.

So, we're here tonight to discuss the regulatory findings and recommendations for the County and the State.

When we first made our decision to investigate the incident, a big factor was the

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effect the incident had on the community and the effectiveness of the Contra Costa County
Health Services model. After all, this model was a model held up and touted by the CSB for years.

In the CSB, their report, an entire section was dedicated to describing the Contra Costa model. And yesterday, someone in Charleston, West Virginia, was calling for implementation of CSB recommendations for Kanawha County to adopt a model like the Contra Costa County.

We need to know if this model didn't work. And we need to, if possible, make recommendations to improve the effectiveness of the Contra Costa Industrial Safety Ordinance.

The draft regulatory report makes many very interesting findings with regard to deficiencies in the current process safety regulations and provides a good description of an alternative model for Safety Case.

While the staff deserves credit
for their extensive research, the report
leaves many questions unanswered. Comments
received from a wide spectrum of stakeholders
and experts in just the past several weeks
indicate more study is needed.

The American Fuel and Petroleum

Manufacturers said the CSB should continue to

study and analyze different regulatory

regimes.

Professor Michael Baram of Boston
University said discussing implementation
issues would also correct an obvious imbalance
in the report. And Mike Wright of the United
Steelworkers said a great deal more work needs
to be done before a Safety Case system can be
fully considered as a regulatory model for
California.

I agree with these comments. It also seems clear that many of the elements of Safety Case may have applicability to the current regulatory approach. This raises the

question should the CSB advocate for total reform of the regulatory regime to a Safety Case regime? Or should we propose to strengthen the current regulatory approach?

I would argue this is not an either/or proposition. We can and should do both. In the near-term, I think it is important to put forward options that strengthen the current regulatory approaches.

For example, it seems to me that an adequately resourced agency with a sufficient number of highly qualified inspectors is needed in the current system as well as a possible Safety Case regime.

And also, it seems reasonable to me to give the current regulator the authority to require generally accepted best practices.

Perhaps such a change does not require a regime change.

Considering recommendations to fix the current regulatory approach may require further work on the part of the CSB. But it

is also much more likely to have a more immediate effect on improving safety for California, and Contra Costa County refineries and the communities near the refineries.

It is critical that the CSB consider these more immediate options for both Cal/OSHA and the Contra Costa Health Services.

I believe the Safety Case approach is a very interesting model which may be the future for process safety for highly hazardous facilities in California and in the United States. However, it is also clear to me that much more needs to be studied, especially with regard to implementation.

The draft report focuses on the strengths of the Safety Case approach abroad but falls short in addressing obstacles or challenges to implementing such a regime in California or the United States.

Please don't misinterpret my statement to be against the concept of Safety Case. In fact, quite the opposite is true.

I believe it has some very appealing attributes.

But I also believe that for this report to have the greatest impact it needs to be more complete. The report needs to address the criticisms head on and include a complete assessment of challenges and potential obstacles to implementation in California.

To close, I would like to say we have a unique opportunity to consider reforms of process safety, not only in California but across the Nation.

The multi-agency working group established under the Executive Order 13650 specifically asked for input on whether OSHA and EPA should consider implementation of a Safety Case regulatory model.

Additionally, OSHA has an open request for information regarding the PSM, process safety management requirement. A strengthened CSB report could provide nearterm solutions as well as a path toward

1 broader reform. Thank you.

(Applause)

CHAIRPERSON MOURE-ERASO: Thank

you, Member Griffon. Following the agenda, we
have another request from the various elected

officials and the representatives to address
this group.

The first person that I would like to give their statements is Mayor McLaughlin, Mayor of the City of Richmond. So Mayor McLaughlin?

(Applause)

MAYOR MCLAUGHLIN: Hello.

Welcome, everyone. I want to welcome you all, the community, everyone here, the organizations.

I want to thank the CSB for holding your public meeting here. I want to thank the CSB staff for your long, hard hours in investigating this and, of course, the Board in their review and investigation of all the matters that are related to the oil

1 industry's problems and impact to that.

We feel, in Richmond, and we know other areas of the Bay, and other areas of California and our Nation suffer from it as well.

Now, the Richmond Chevron Refinery is the second largest oil refinery in the State of California and the largest in the Bay area. And in Richmond, our residents have suffered decades of severe consequences from its presence.

For too long, we've lived in the shadow of this polluting industry, suffering the impact of what comes out of the smoke stacks. And it's rained into our air and into our lungs. And we've suffered the impact of incidents that have sent us into our homes sheltering in place.

So I'm here today to stand with community members, community organizers, and responsible members of the scientific community to say that it's essential that the

oil industry be held accountable to us.

Children in Richmond already suffer disproportionately from severe asthma. They are hospitalized for this condition at twice the rate of children throughout the County.

After August 6th, 2012, the day of the fire, time and time again I have heard testimony from residents about how the fire has impacted their lives, burning eyes, breathing difficulties, other respiratory problems and concerns about other very, very serious symptoms as well.

In fact, we know over 15,000 residents went to local hospitals with a host of serious symptoms. And, of course, 19 workers nearly escaped with their lives. So we know that this was a horrible incident. We know that the horrible black plume of toxins spread across Richmond and way beyond.

It's great that the CSB staff has recommended such a progressive and aggressive

approach to safety. That is what is needed in our community that has suffered for too long with the risk and health impact of this refinery.

staff for its work on investigating the fire of 2012 which, by the way, was only the most recent of dozens of incidents that have occurred from Chevron Richmond refinery over the past 20 years.

They are recommending, as you heard, the Safety Case regime which is already used in European countries. It's used by the U.S. Nuclear Regulatory Commission, and it's used by NASA. It needs to be used by the oil industry as well.

It shifts the focus to prevention, and it shifts the burden to the industry. We want the industry to show us how major hazards and risks will be reduced as low as reasonably practicable. The industry needs to move from a reactive approach to a preventative

approach. And that's exactly what's being recommended.

Now, these recommendations are very important to us here in Richmond.

Because we have a long history of an environmental justice movement. And this new Safety Case is absolutely what is needed.

And we should not move forward with any permits for any projects of any oil industry, I should say, not only of any projects here at the Richmond Chevron Refinery. We should not move forward with any permits until the Safety Case regime is implemented.

(Applause)

MAYOR MCLAUGHLIN: And I want to say that that's already being worked on in terms of the Industrial Safety Ordinance. I know the Health Department in the County is working and the community groups. And I will be supporting that we intensely insert into this ordinance the Safety Case regime.

And I know we have our Vice-Mayor and Council Member, Council Member Rogers,
Vice-Mayor Beckles, that are on our committee to review the ISO, the Industrial Safety
Ordinance. And that is what I know I will be looking for in that ordinance.

So I want to end with basically saying, you know, in Richmond, we're on the cutting edge of a lot of progressive issues.

And that's because we want nothing short of environmental justice, economic justice and social justice.

We have no choice. This is our home. We're the ones that hear the sirens.

We're the ones that are forced to pull our kids off the streets when the sirens go off and come into the homes and, you know, duct tape the doors and the window and stay in our homes, as if we're in prison, until we're told all's clear, never knowing how much harm is out there, what the toxins are, what the risk is to us, and our children and grandchildren.

We're the ones that cannot stand by and let an incident like what happened on August 6th, 2012, ever, ever happen again.

Chevron is a multi-billion dollar company. It has the means to do what is right in a preventative way. So we know they can do a whole lot better. We call on the Board to please know that this is right for our community.

We will move ahead anyway, regardless. But we call on you to do what is necessary for our rights, our safety and our health. And so we will move forward to do the right thing for our community with the elected officials who are committed to stand by our community.

We thank you for your investigation. We hope you vote to move forward with all the recommendations. And with that, we call on Chevron to do better, because we demand it of you.

(Applause)

CHAIRPERSON MOURE-ERASO: Thank
you very much, Mayor McLaughlin. The next

person is the Vice-Mayor Beckles.

(Off microphone discussion)

VICE-MAYOR BECKLES: Good evening, everyone. So glad to see so many faces here tonight supporting our community. That's really a beautiful thing. So my name is Jovanka Beckles. I'm the current Vice-Mayor of the City of Richmond.

You know, for many years the only places that people of color could afford or were welcome in were the areas that others regarded as too dangerous or too unpleasant.

so it's no surprise that the makeup of the community closest to Chevron is disproportionately people of color and low income individuals. It's also no surprise that we have to fight so hard to get Chevron to take the steps that truly protect these communities.

Now, how many of you know that,

you know, if this corporation might be a little bit more motivated if its executives lived right next to the refinery. How many of you --

(Applause)

(Off microphone discussion)

VICE-MAYOR BECKLES: Exactly.

But in reality, the social factors that lead the world of the community are not really relevant.

The fact is that there is now a community in close proximity to a very dangerous operation. And the needs of people must always come first or we all lose our humanity.

We are not just talking about the big events like that of August 12th that could have blown up this community. And it did considerable health damages to our community. But we're talking about the smaller events that don't make the news, the leaks or the flaring that put greater amounts of toxic

chemicals into the air of people who are already suffering from high asthma rates.

The Chemical Safety Board has identified the problem as not just one of Chevron's neglects. The CSB is saying that we don't have a regulatory system that actually protects us from the dangers inherent in the refinery process.

The Board is recommending a doctrine of a more rigorous safety management program for refineries in California, specifically, well, the talk of the framework that's already being done in the U.K.

However, as a member of the committee, the safety ordinance committee, I'm insisting, I'm insisting that the Safety Case procedures be implemented in the ISO for Contra Costa County.

Now, this would be the first step.

We realize that. Board Member Rosenberg is

actually correct, because without a stronger

(inaudible) that represents the people and not

1 corporations can this protect us.

So I thank you all so much for being here and a big, big thank you, big thank you to the Chemical Safety Board for your work on behalf of us. And we certainly hope you will vote on behalf of us. Thank you.

(Applause)

CHAIRPERSON MOURE-ERASO: Thank
you, Vice-Mayor Beckles. I would like to go
now to Barbara Johnson from the Office of
Congressman George Miller. Ms. Johnson?

(Off microphone discussion)

MS. JOHNSON: Thank you very much for the opportunity to bring Congressman
Miller's message to you here tonight. It's a little lengthy, so I'll get right to it.

"Dear Chairman Moure-Eraso,

Members Griffon and Rosenberg, I want to thank

the CSB for coming back to Richmond. I regret

that I'm unable to be there this evening, as

we have votes in Washington, D.C. today.

"I'm grateful to the CSB for

breaking ground on the discussion over Safety
Case model as a possible alternative to the
existing regulatory framework that is failing
to prevent all too frequent major accidents,
and fires and releases from oil refineries.

"There are objective indicators worth noting. Financial losses at U.S. refineries which pour into insurance data have been three times higher than in European Union countries and the Far East.

"What is new and different about
the Safety Case is that facilities must
demonstrate to an expert regulator that they
have assessed major accident hazards, have put
in place barriers and safety management
systems and that these systems are working.
Importantly, this demonstration is tied to
consent to operate.

"According to experts, the Safety
Case model has reduced major accidents at
offshore oil platforms. However, what is of
particular interest is this, have major

accidents been reduced at the oil refineries after the Safety Case regime was implemented. It would be helpful if CSB could provide that data to clarify that point.

"While this report lays a valuable foundation for further discussion on processes and safety reforms, I would be remiss if I did not note that there are near-term opportunities for improvement in Cal/OSHA and the Contra Costa County Health Services programs that were excluded from the CSB report. I would respectfully ask that you consider these changes prior to finalizing this report.

"Before we examine the role of regulators, it's important to keep in focus that the root cause of the August 6th, 2012, fire was, at its core, a management systems failure.

"We know that there was failure to conduct inspections with 100 percent of piping at risk for sulfidation corrosion as called

for in Chevron's internal procedures and in industry guidance. Why did management fail to adopt these recommendations from its metallurgists and materials engineers?

"Chevron is filled with
extraordinary engineering expertise, but to
this day it remains puzzling how knowledge
about catastrophic failures caused by
sulfidation corrosion, coupled with red flags,
were not credited in the decision making
process that allowed paper-thin piping to
remain in use.

"It has been nearly a year since Cal/OSHA assessed nearly a \$1 million fine against Chevron. It is the largest fine in Cal/OSHA's history.

The agency issued 25 citations, including 11 in the most serious category designated as willful and serious. Those include Chevron not following its own policies to replace the corroded pipe, not implementing its own emergency procedures and pervasive

violations in leak repair procedures such as the failure to replace pipe clamps at the turnaround or sooner.

"Clamps are commonly used as temporary repairs to allow refineries to fix leaking pipes without having to shutdown the operation. But they are just that. They're temporary.

"Cal/OSHA found Chevron left clamps in place far longer than the previous turnaround in violation of well-accepted industry guidance. Cal/OSHA ordered the pipe clamps to be replaced by March 4th, 2013.

"Yet ten months later, I'm advised that some of the clamps put on valves and pipes carrying hydrocarbons and hydrogen have yet to be replaced and that Chevron will not replace these until the next turnaround in late 2014.

"This begs a number of questions.

Why is this the case nearly a year after

Chevron was cited? Who has assessed whether

there is an acceptable risk of keeping these clamps in place?

"Under the California labor code, an employer is not obligated to correct a Cal/OSHA safety violation if they file an appeal. Chevron appealed its citations on February 19th, 2013, and the legal requirement to correct these violations has now been blocked until the litigation is completed. Litigation can take years to resolve.

"The California model is not the only model. Oregon and Washington State both require timely abatement when an appeal is filed while giving employers due process rights.

"Assembly Member Nancy Skinner and Senator Loni Hancock have passed a bill last year that requires employers to correct serious and willful safety violations while litigating appeals unless they can demonstrate to Cal/OSHA or a judge that the health and safety of workers will not be adversely

1 affected by postponing the abatement.

"This framework ensures affected workers and their unions have a voice in that decision. Regrettably, this bill was vetoed by the Governor.

"I would respectfully add that the CSB, prior to finalizing this regulatory report, assess the issue of timely abatement and consider making recommendations to the Legislature and the Governor on this matter.

"This should not be a new issue, as my staff raised this issue with the CSB last October. Further, timely abatement will be an issue whether or not Safety Case regime is adopted.

"An employer's ability to effortlessly block timely abatement during the pending of an appeal is at fundamental odds with worker and public protection.

"The failure to close this loophole and require abatement while employers litigate led to the needless deaths of two

barge track workers near Pleasanton last year.

"In the opinion of many experts,

Contra Costa has the best Industrial Safety

Ordinance at the County level anywhere in the

country.

"When the fire broke out on August 6th, 2012, and a shelter in place order was issued, the CSB deployed to assess what went wrong but also advised my office that, in light of this release, they wanted to see if the Industrial Safety Ordinance and Contra Costa's Health Services program had opportunities for improvement.

"I was pleased that CSB provided Contra Costa County and the City of Richmond with two recommendations regarding the Safety Case ordinance, ISO, in its interim report.

"I understand Supervisor John
Gioia and Richmond City officials are working
diligently to implement these recommendations,
particularly strengthening requirements for
process hazard analysis and demonstrating the

1 use of inherently safer systems.

"CSB staff has identified other gaps in the Contra Costa safety program.

However, recommendations were not included in the regulatory report before us today. These include the need for Contra Costa Health

Services to have direct enforcement authority under the Industrial Safety Ordinance.

"Since enforcement under the ISO has to be referred to the district attorney and his office has to decide whether to bring such action in court, enforcement actions are rare at best.

"When inspectors do find violations, they are generally limited to issuing recommendations. By contrast, Contra Costa Health Services has authority to directly enforce the California Accidental Release Program regulations.

"It is logical to expand the County's enforcement authority and also cover the ISO. Now, the CSB assessed whether the

ISOs could be more effective if Contra Costa
Health Services had the authority to bring
enforcement actions on its own instead of
making recommendations when violations are
identified.

"If so, it's timely to issue a recommendation that could strengthen," I'm sorry. "If so, is it timely to issue a recommendation that could strengthen the enforcement?

"The need for added resources to assure comprehensive facility inspections, the hazardous materials program has a budget of only \$1.2 million and was allocated a mere five employees to carry out inspections in the seven major facilities covered on the ISO plus 38 other facilities covered under CalARP.

"As a result, hazardous materials program officials can only inspect a fraction of the operating units in refineries.

"CSB's report identified low salaries as a barrier to fill in vacant

positions. Due to low salaries, one in five positions has been vacant for three years. It would be helpful if CSB could assess and make specific recommendations regarding appropriate levels of staffing, options for funding sources, such as increasing fees, and the need for adequate salaries to attract and retain qualified engineers.

"The cornerstone of the Safety

Case is the authority for regulators to

require operators to raise the bar on safety

performance as new technology, scientific

findings and management systems are developed.

"CSB identified a weakness in the County hazards materials program which limits its compliance reviews to the regulations and does not generally go beyond these, even when there's well established data that shows that the risk can be feasibly reduced.

"It would be helpful if CSB could provide recommendations that would strengthen the ISO by authorizing the hazardous materials

program officials to require refineries to adopt best industry practices or standards as part of its toolkit.

"In conclusion, I want to thank
CSB for coming back to Richmond, sharing its
expertise and ideas for reforms. I believe
the Safety Case merits consideration by the
state. And I'm pleased that the Governor's
Refinery Task Force will be studying it
carefully.

"At the same time, I would ask
that the CSB strengthen the recommendations in
this draft regulatory report by making
findings and recommendations to require timely
abatement as part of the California labor code
and to improve the Industrial Safety
Ordinance.

"These added measures, if adopted, would provide near-term protections that workers and residents need and deserve.

Sincerely, George Miller, Member of Congress."

Thank you very much for your time.

(Applause)

CHAIRPERSON MOURE-ERASO: The next
elected official is a representative of
Supervisor, John Gioia, Mr. Terrance Cheung.

MR. CHEUNG: Good evening,

Supervisor Gioia regrets he cannot be here this evening. He's in Sacramento attending to some county matters.

"Dear Chairman Moure-Eraso and
Members Griffon and Rosenberg, I want to thank
the U.S. Chemical Safety Board for its
thorough investigation and interim
recommendations regarding the August 2013
Chevron fire.

"The protection of residents and workers around refineries can be improved and more needs to be done to stop major fires, accidents and releases. Our community deserves nothing less than the safest facilities possible.

"As a member of the California Air Resources Board, the Bay Area Air Quality

Management District and the Contra Costa

County Board of Supervisors, I appreciate the

proactive role taken by the CSB to make

recommendations to improve our local

regulations with a goal of improving safety.

"Let me assure you that the March 2013 interim report's recommendations to strengthen our local industry Industrial Safety Ordinance to require the use of inherently safer systems have been taken seriously.

"A joint committee of city and county officials has worked to draft amendments to the ISO to implement your recommendations. And I expect that those amendments will go before the Board of Supervisors and City Council in the next months for adoption.

"The December 2013 draft final report discussion on whether a better regulatory model, such as a Safety Case regime, could improve refinery safety

performance is important and should be considered.

"The frequency of major refinery accidents in the U.S., including here in California, makes it timely to re-examine whether there are more effective regulatory models.

"However, there are some other immediate opportunities to improve our local Industrial Safety Ordinance that you may want to consider in your recommendations.

"Many refinery safety experts, including your own CSB staff, believe that Contra Costa County has the most effective Industrial Safety Ordinance in the United States.

"CSB staff has identified other areas that could be strengthened in our local Industrial Safety Ordinance but are not included in your draft report. I believe your report should consider further discussion and recommendations regarding these issues.

"First, the most effective enforcement would be accomplished if Contra Costa County Health Services had direct enforcement authority under the ISO.

"Currently, enforcement of the ISO is referred to the district attorney who has the discretion to bring enforcement actions in Court. Under the existing provisions of the ISO, violations discovered by inspectors are generally addressed through recommendations.

"Contra Costa Health Services does have direct authority to enforce the California Accidental Release Program regulations, Calarp. It would make sense to expand the county's enforcement authority to include the ISO to correspond with its direct enforcement authority under Calarp.

"Second, additional resources are needed to assure comprehensive inspections, as the County Hazardous Materials Program officials can only inspect a fraction of the operating units in refineries.

"The existing \$1.2 million

Hazardous Materials Program budget only supports five professional staff to conduct inspections of the nine major facilities covered under the ISO and the other 36 facilities covered under the California Accidental Release Prevention Program.

"CSB staff has identified low salaries as a barrier to filling the long vacant positions and the need for individuals with sufficient expertise.

"Having CSB make specific recommendations regarding the need for additional resources and appropriate levels of staffing and salaries would help support local action to raise the fees needed to properly fund the vital program.

"Third, potential expansion of the ISO to authorize improvements which go beyond the regulations. The existing Industrial Safety Ordinance limits its compliance review to the regulations.

"I would ask that the CSB further analyze and consider recommendations to strengthen the ISO by authorizing Contra Costa Health Services to require refineries to adopt the best industry practices or standards as opposed to simply asking such facilities to consider such improvements.

"Let me briefly address the

Governor's work group on refinery safety. To

his credit, Governor Brown has established a

work group to look at refinery safety. The

work group issued a draft report in July of

2013 that included many recommendations to

address refinery safety and responding to

refinery accidents.

"A task force composed of federal, state, local agencies has been formed to address the findings of the report. The task force will be making changes to the regulations that will include addressing the findings from the CSB's interim report on the August 2012 Chevron fire investigation. The

task force will also be investigating the implementation of the Safety Case regime for California.

"I thank the CSB for supporting the effort of the task force by loaning a CSB employee to assist the task force.

"In conclusion, I want to thank
you for all your efforts to improve the safety
of workers and community and sharing your
staff, and expertise and thoughts.

"I encourage the Chemical Safety
Board to build upon the foundations set forth
in your August 2013 draft report by making
additional recommendations where the ISO can
be strengthened immediately.

"The issuance of your final report presents an immediate opportunity to make further recommendations to improve the current regulatory structure to achieve near-term improvements in safety.

Yours very truly, Supervisor John Gioia, Contra Costa County." Thank you.

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(Applause)

2 MR. CHEUNG: An electronic copy of 3 this was sent to Hillary early this afternoon.

CHAIRPERSON MOURE-ERASO: Thank you. Thank you to Mr. Gioia and to you, Mr. Cheung. I appreciate your presentation.

And the last person from elected officials that I have here is an old friend from CSB, Mr. Jim Rogers. And he has a question.

(Off microphone discussion)

MR. ROGERS: Thank you. My name is Jim Rogers. I'm a member of the Richmond City Council, also a member of the joint city/county committee that is charged with developing recommendations to improve our current county ISO.

I want to comment on, there are a number of very thoughtful comments that I heard, but one of them I just want to emphasize. It's really worth repeating.

One of the comments we heard

tonight was that regardless of the plan, if
there's not people keeping after it,
enforcing, bird-dogging, whatever, it's not
going to work very well. I don't care whether
it's process safety management, whether it's
Safety Case, whatever it is, it's not going to
work well.

And the reality is that the political system with refineries is that we have an explosion, people pay attention. And it's really important, I think, not just to pay attention in the year or two after we have the explosions, and the fires and the releases, but to pay attention every year.

Because these things are a time bomb ticking. And it's important that we don't forget about it. You know, maybe we go two, or three, or four years, five years, whatever, with no incident. Well, it's still a problem. And we still need to be vigilant.

So I'm proud that our community's here, and there is concern about this. There

is a lot of thought going into it. And it's a topic that needs a lot of thought.

And I think we're here tonight, we have people who are clearly only interested in safety. And there's different opinions about the Safety Case idea as far as whether it's actually ready for prime time or that it needs to be looked at, et cetera, et cetera.

We have a very good ordinance in the ISO. As a county supervisor many years ago, as the author of the precursor which was the Good Neighbor Ordinance that was replaced by the ISO, and I think that even though it is a good ordinance, compared to other parts of this Country, it obviously didn't get the job done on August 6th.

So we need to make changes. We have made progress in the committee. We have adopted many of the recommendations that we've heard so far from the CSB. I at least am hearing some tonight that I wasn't aware of.

And I will be taking those back to the

1 committee for looking at including them.

A couple of those would be getting a better way to ensure that we do have adequate enforcement. And to me it's pretty simple. Chevron simply needs to pay for it.

And that's just the end of the story.

If there's regulation, whether
it's a question of more bodies or better paid,
more highly qualified bodies, whatever it is,
Chevron needs to pay for it.

And the CSB is right on target that you should have people who have the same level of professionalism and training as the people in the industry side that they're dealing with. I think that's a great recommendation and one that we should be supporting.

The timely abatement issue is one which we need to look at. I believe we have the authority to do that as part of our police power here. And I will certainly be recommending that to the committee.

The direct enforcement by County staff is another good idea. Again, I will be bringing it up to the committee as a suggestion for something that we should pursue.

When we are looking at these issues, I think it's important to remember (phonetic) that are a lot of very complicated details.

And we've heard tonight that there are people like Congressman Miller, some of the union leaders who were mentioned earlier, your Board has some different ideas about a very complicated question about whether the Safety Case regime is ready to be rolled out. And I certainly respect those differences.

I think that if we're going to try and move forward with this, I think that it's important that we move forward in a united front.

I think if we move forward in a situation where some people are saying, yes,

we're ready for Safety Case and then a majority of your Board says, no, you're not quite ready, Congressman Miller doesn't think we're ready, I frankly don't think that's going to go very well.

And so my suggestion would be to really do a full court press, try to work through these issues, try to deal with some of the flaws that were seen in the report, provide perhaps some of the safeguards so that the Safety Case doesn't become just another paper shuffle as is what obviously happened prior to August 6th.

There was lots of documentation
that things that should have been
investigated, should have been looked at under
our ordinance, in fact weren't.

And it wasn't a problem with the ordinance. The ordinance said they were supposed to be looked at and analyzed in a lot of detail. And they weren't. They got a one line, quick run over.

So I'm in favor of us moving forward together. I think at the end of the day that the Safety Case regime is a more promising way to go. And I think that we should be moving towards that.

At the same time, as Supervisor

Gioia indicated in his statement, that doesn't

mean that we can't move forward immediately

with the short term changes to our ISO to

improve that.

appreciate your effort. And I will be looking forward to moving forward with the committee and bringing recommendations back to the city and the county to strengthen our ISO as much as possible in the short term and hopefully to have a united front where we can move forward with the state and implement the Safety Case regime.

CHAIRPERSON MOURE-ERASO: Thank you very much.

(Applause)

CHAIRPERSON MOURE-ERASO: The next part of the agenda is we are going to at last hear from the horse's mouths, the people that have been working for two years to put this together and have done a tremendous job in presenting us with two rule reports and have a third on in preparation on the explosion of August 2012. It is the investigative team of the Chevron incident.

I would like to introduce our director of the western office of the CSB that had the investigative team under his responsibility. And his name is -- a lot of you have interacted with him -- is Mr. Don Holmstrom.

And I would like to ask him to introduce the members of the investigative staff and to proceed with their presentation of the report. So, Mr. Holmstrom?

MR. HOLMSTROM: Thank you,
Chairman Moure-Eraso. Good evening, thank you
for attending tonight's presentation on CSB

staff's presentation on the Richmond Refinery accident.

My name is Don Holmstrom. I'm the U.S. Regional Office Director. Our offices are in Denver, Colorado.

Joining us here tonight is the lead investigator, Dan Tillema, and also Investigator Amanda Johnson. We will be presenting findings and conclusions from our draft regulatory report.

The report discusses the regulatory gaps that exist relating to the oversight of petroleum refineries in the U.S. and in California. And it proposes the Safety Case regime as a regulatory alternative to control major hazards and reduce risk.

We would like to thank everyone who submitted comments on the draft report to the CSB. We carefully reviewed all the comments and implemented changes accordingly which are reflected in the report being voted on by the Board this evening. And I believe

there's copies of those comments as well as the staff response that were available on the tables outside.

In tonight's presentation, members of our investigation team will present our key investigative findings followed by our proposed recommendations.

The Board will have the opportunity to ask the investigation team questions. We will then hear statements by the public. Finally, the Board will vote on whether to adopt the draft Chevron Regulatory Report and propose recommendations.

The need for regulatory change was prompted by the August 6th, 2012, Chevron incident. The seemingly small controllable leak in the crude units for (inaudible) pipe resulted in a very large fire at the Chevron Richmond Refinery that burned for hours.

The pipe that was leaking was actually extremely thin due to sulfidation corrosion. This was not known to the

operations and emergency response personnel who initially responded to the leak.

The severe thinning occurred because the leaking pipe component had a very low silicon content which greatly increased the sulfidation corrosion rate of the steel.

This incident endangered the lives of 19 Chevron fire fighters and operators. It also impacted this community, causing over 15,000 residents to seek medical attention.

Over the last decade, there have been considerable problems and significant deadly incidents at petroleum refineries. In 2012 alone, the CSB has tracked 125 significant process safety incidents at U.S. petroleum refineries. Seventeen of these major incidents occurred in California.

The United States is experiencing significantly more incidents at its refineries in comparison with other countries.

Specifically, the U.S. has experienced financial losses from refinery incidents that

are at least three times that of industry counterparts in other countries.

The CSB has investigated some of these major refinery incidents. CSB investigated incidents that resulted in multiple fatalities including the 1999 Tosco Avon Refinery that resulted in four fatalities -- that was in this County, Contra Costa County, California -- the 2005 BP Texas City Refinery incident that resulted in 15 fatalities, a 2005 Valero incident that resulted in two fatalities, the 2010 Tesoro Anacortes Refinery incident that resulted in seven fatalities.

These are just a small fraction of the refinery incidents that have occurred over the last 15 years.

I will now turn over the presentation to Investigator Dan Tillema to discuss the key findings and conclusions of the CSB's draft Chevron Regulatory Report.

22 Dan?

INVESTIGATOR TILLEMA: Thank you,

Don. CSB identified, in its Chevron

investigations, many causal findings that

allowed the core SICA (phonetic) piping at

the Chevron Richmond Refinery to rupture.

These findings highlight
regulatory gaps in the U.S. and California.
First, Chevron did not perform damage
mechanism hazard review to fully evaluate all
damage mechanisms in the refinery.

Second, the numerous recommendations made over the years to replace or inspect the Coresight(phonetic) deadlines were never implemented. It just points to organizational failures within Chevron.

Chevron also did not thoroughly evaluate its process safeguards, such as equipment material construction, to ensure that they were effective.

Inherently safer design was never employed prior to the incident to reduce the risk from sulfidation corrosion, despite the

1 company's expertise in this area.

Finally, Chevron's corrective
actions developed from MOCs in incident
investigations did not effectively identify
and control process hazards.

In our presentation, we will show how these process safety gaps causal to the Chevron incident reflect California regulatory weaknesses that could be best addressed through the transition to a more rigorous, performance based, regulatory approach already in place around the world and in some U.S. industries.

During the course of the Chevron investigation, the CSB has found that the U.S and California process safety regulatory systems are ineffective which allowed Chevron's process safety failures to occur.

The following slides identify the CSB's key regulatory findings and conclusions.

Key Finding 1, the existing U.S. and

California process safety regimes rely on a

safety and environmental management system framework that is primarily activity based rather than goal based, risk reduction to as low as reasonably practicable, CalARP or equivalent.

The PSM standard does not effectively establish goals to prevent accidents or reduce risk. Only two of the 14 elements of the PSM standard, process hazard analysis and mechanical integrity, contain some goal setting components.

Key Finding 2, the existing regulatory regimes for petroleum refineries in the United States and California are static.

They're unable to adapt to innovation, newly defined hazards and technical advancement.

Throughout the existence of the Chemical Safety Board, the CSB has made a number of process safety related recommendations to both Federal OSHA and the EPA.

However, none of these

recommendations have been implemented by these agencies. In fact, there have been no substantive changes made to the PSM or RMP regulations in the past 20 years.

Key Finding 3, the existing regulatory regimes for petroleum refineries in the U.S. and California do not ensure continuous improvement by effectively incorporating lessons learned from major accidents, nor do they have the authority to require companies to address newly identified safety issues as a result of such incidents.

In addition, these regimes do not effectively bless or promote industry use of major accident performance indicators to drive industry to reduce risk or measure progress.

Key Finding 4, the existing U.S. and California regimes do not require the use or implementation of inherently safer systems or the hierarchy of control.

Under both the PSM and RMP regulations, an employer must control hazards

when conducting a process hazard analysis for PHA of a covered process. However, there is no requirement to address the effectiveness of the controls or the hierarchy of control.

These are important concepts when focusing on preventing hazards. Thus, a PHA that meets the regulatory requirement may inadequately identify or mitigate major hazard risk.

Key Finding 5, the existing U.S. and California regimes do not effectively involve the workforce in hazard analyses and prevention of major accidents.

For example, the CSB has found that staff who were aware of sulfidation corrosion impact, and others who were highly knowledgeable and experienced in sulfidation damage mechanism causes and hazards, were not involved in the most recent crude unit PHA and did not affect decisions concerning control of sulfidaton corrosion during the turnaround process.

1 Key Finding 6, the existing U.S.

and California regimes do not grant the regulator the authority to accept or reject a company's hazard analysis, risk assessment or proposed safe guards prior to permission being granted to the company who operates, which is key for prevention.

Under the current system, the regulator typically verifies compliance with regulations reactively, that is following a complaint or accident.

There is no requirement under the current systems to submit PHAs to the regulator. And the regulator is not responsible for accepting the quality of the PHA or the effectiveness of the proposed safeguards.

And finally, Key Finding 7, the existing U.S. and California regimes do not employ the requisite number of staff with the technical field knowledge and industry experience to provide sufficient direct safety

oversight of petroleum refineries. CSB found that there is a significant discrepancy in the compensation between California regulators and the Chevron Richmond Refinery personnel that they interact with.

The CSB has addressed this issue in our reports and is encouraged that the California State Legislature has approved funding for at least 15 new positions at Cal/OSHAS's process safety unit.

The CSB's attempt to improve the current PSM standards have been unsuccessful. The regulation creation and regulation updating process is too slow and burdensome to be able to adequately respond to new technical hazards and findings in the petroleum refining industry.

The Safety Case regime requires continuous risk reduction and is therefore a better approach to preventing major accidents at petroleum refineries.

The alternative, the occurrence of

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a potentially catastrophic incident, is just not an acceptable outcome for society.

In addition, the Safety Case regulatory approach is already used to regulate major hazards in the United States.

Both the nuclear industry and NASA use Safety Case-like regulatory approaches. These approaches require risk reduction with specific targets similar to as low as reasonably practicable.

I will now turn the presentation over to Investigator Amanda Johnson to discuss the Safety Case regime.

INSPECTOR JOHNSON: Thank you,

Dan. Noted process safety expert, Andrew

Hopkins, defines the Safety Case as a

verifiable case that the company makes to the

regulator.

The Safety Case includes
identification of hazards and their control,
demonstration by the company to the regulator
that its process safety strategy properly

manages risk and adoption of industry best practices by the company.

The CSB has identified several key features of the Safety Case regime shown in this graphic. The first key feature we will discuss is duty holder safety responsibility.

The duty holder must prepare a written case for safety, known as the Safety Case report, that identifies the hazards, and risks and describes how they will be reduced to as low as reasonably practicable, or ALARP.

The Safety Case report must demonstrate how inherently safer design concepts have been applied in the design decision statement.

Safety Case reports are meant to be evergreen documents that request continuous improvement in risk reduction. Regulators review the Safety Case report and must accept them for the facility to operate.

In the United Kingdom, the regulator reviews the Safety Case report at

least once every five years or sooner as significant changes are made to a facility.

The second key feature is continuous risk reduction to as low as reasonably practicable or ALARP. The owners and operators of covered facilities must reduce risks to ALARP and demonstrate to the regulator how they have done so in the Safety Case report.

Typically, the definition of ALARP is determined by best practice. So ultimately, the regulator can require the company to go above best practice to achieve ALARP. This can occur when the industry best practices are overly permissive and lack minimum requirements to prevent hazards.

The third key feature of the Safety Case regime is adaptability and continuous improvement. This allows the regulator to go above and beyond current industry standards without requiring rule making.

The adoption of the Safety Case regulatory regime in California would allow regulators to require inherently safer material construction. For example, regulators could require that carbon steel systems and sulfidation corrosion environments be upgraded to control damage mechanism hazards, all without required rule making.

The fourth key feature of the Safety Case regulatory regime is active workforce participation. The Safety Case regime provides for the election of safety representatives and creation of safety committees.

It also uses a triparthied approach with active and equal participation from the regulator, industry and labor. This ensures that all factors of the workforce are involved in continuous risk reduction.

This needs to be noted in the Chevron interim report, the important role transparency plays between industry and the

public in improving health and safety for the facility and the surrounding communities.

The CSB recommended that

California establish a multi-agency process

safety regulatory program for all California

petroleum refineries to further include public

accountability and transparency.

Under the current system, key
records and corrective actions related to
refinery mechanical integrity inspection and
repair work arising from PHAs, turnarounds and
maintenance related shutdowns are not
currently made available to the public.

The CSB has found the public is largely in the dark under the current case.

Under the Safety Case, many regimes collect and require indicating data and companies are required to make Safety Case report summaries publicly available.

These are high level documents
that are published online and summarize safety
assessments, hazardous materials, hazards and

control measures, potential major incidents, emergency response and safety management systems.

The fifth key feature of the
Safety Case regime is the use of process
safety indicators. Currently, OSHA primarily
relies on recordable injury and illness rates.
These are personal safety measurements that
are not sufficient to measure the potential of
a major process safety incident.

The Safety Case regime allows regulators to collect and analyze computer data, release the data to the public, use the data to target inspections and drive continuous improvement.

The sixth key feature of the Safety Case regime is regulatory assessment, verification and intervention. The Safety Case authorizes regulators to review and accept or reject Safety Case reports.

The regulator can place a great emphasis on inherently safer design and a

hierarchy of control when deciding to accept or reject a Safety Case report.

The regulator also has the power to reject a Safety Case report if a company has not reduced risk to ALARP or as low as reasonably practicable.

And finally, the regulator can conduct (inaudible) and inspections to ensure that a company is following the Safety Case report.

The final key feature of the
Safety Case regime is ensuring a well funded
and qualified regulator is in place with skill
sets such as chemical engineering,
metallurgical and corrosion expertise, and
human factors, among others. This is
essential to having a highly functioning
Safety Case regime.

The regulator must be able to interact with equal technical company management. The regulator must also be able

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to independently and sufficiently evaluate risks identified by the company. To do this, the regulator must retain technically competent, experienced and well-trained staff to correctly evaluate Safety Case reports.

regime in California will take some time and will not be an easy process. To ensure effective implementation on the Safety Case regime, major stakeholders must be committed to the project.

The Safety Case report must be treated as an evergreen document that accurately reflects the new process hazards and risks. And the Safety Case report must not be treated as a check the box activity by companies.

The transition to a Safety Case regime must also be carefully planned and managed. It may take several years to effectively implement.

That concludes our investigation

presentation. Donald Holmstrom will now read the team's proposed recommendations.

MR. HOLMSTROM: Thanks, Amanda.

The team proposes to the Board the following recommendations.

Recommendation Number 1 to the

California State Legislature, the Governor of

California, develop and implement a step-by
step plan to establish a more rigorous safety

management, regulatory framework for petroleum

refineries in the State of California based on

the principles of the Safety Case framework in

use in regulatory regimes such as those of the

United Kingdom, Australia and Norway, and as

described in this report and with the

following minimum components.

A, a case for safety written by
the duty holder or the employer, if you will,
that includes a systematic analysis and
documentation of all major hazards and
effective control methods implemented to
reduce those risks to as low as reasonably

1 practicable, or ALARP.

B, a thorough view of the Safety

Case report by technically competent

regulatory personnel that requires

modifications and improvements to the document

as necessary prior to acceptance.

C, audits and preventative inspections by the regulators to verify effective implementation of the Safety Case elements.

D, a risk management approach that requires analysis and effective implementation of safeguards using the hierarchy of controls to protect people and the environment from major accident hazards. The effectiveness of the safeguards will be demonstrated through the use of leading and lagging process safety indicators.

E, ability to adapt and implement safety requirements in response to newly identified hazards, advances in technology, lessons learned from major accidents and

improved safety codes without the need for new rule making.

F, determines when new or improved industry strengths, standards and practices are needed and initiates programs and other activities such as forums to develop the timely development and implementation of such standards and practices.

G, used as a triparthied type model where the regulator, the company, and the workers and their representatives play an equal and essential role in the direction of preventing major accidents.

H, a regulatory model and accompanying guidance based on the U.K.'s Safety Committee regulations, 1977, and the Health and Safety Consultation Employees regulations, 1996, which set out the legal framework for the rights and responsibilities of workers and their representatives on health and safety related matters, and the establishment of safety representatives and

the establishment of safety committees to serve health and safety related functions.

The elected representative should have a legally recognized role that goes beyond consultation and activities such as the development of the Safety Case report, process hazard analysis, management of change, incident investigation, audits and the identification and effective control of hazards.

The representative should also have the authority to stop work that is perceived to be unsafe or that presents a serious hazard until the regulator intervenes to address the safety concern.

Workforce participation and practices should be documented by the duty holder and submitted to the regulator.

I, requires the reporting of information to the public to the greatest extent feasible, such as a summary of a Safety Case report, a process hazard analysis, a list

of safeguards implemented and standards
utilized to reduce risk and process safety
indicators that demonstrate the effectiveness
of the safeguards in the management systems.

J, an independent, well funded, well staffed, technically competent regulator.

K, a compensation system to ensure the Safety Case regulator has the ability to attract and retain a sufficient number of employees with the necessary skills and experience to ensure regulator or technical competency, periodically conducting market analysis and bench marking review to ensure the comparison system remains competitive with the California petroleum refineries.

Recommendation Number 2 to the
California State Legislature and the Governor
of California. Work with a regulator,
petroleum refining industry, labor and other
relevant stakeholders in the State of
California to develop and implement a system
that collects, tracks and analyzes process

safety leading and lagging indicators from operators and contractors to promote continuous safety improvement.

At a minimum this program shall,

A, require the use of leading and lagging

process safety indicators that actively

monitor the effectiveness of process safety

management systems and safeguards for major

accident prevention, including leading and

lagging indicators that are measurable,

actionable and standardized.

Require that the reported data be used for continuous process safety improvement and accident prevention.

B, analyze the data to identify trends and poor performers and publish annual reports with the data at the facility and corporate level.

C, require companies to publicly report required indicators annually at the facility and corporate level.

D, use process safety indicators,

one, to drive continuous improvement for major accident prevention by using the data to identify industry and facility safety trends and deficiencies. And two, to determine appropriate allocation of regulatory resources and inspections.

And E, be periodically updated to incorporate new learnings from worldwide industry improvements in order to drive continuous major accident safety improvements in California.

Recommendation Number 3, to the Federal Chemical Facility Safety and Security Working Group and to the Occupational Safety and Health Administration.

This report highlights significant advantages of the Safety Case regime over the existing process safety management standard to prevent potentially catastrophic chemical accidents that are relevant to OSHA's response to Executive Order 13650.

In the development of OSHA EO

response, incorporate a written plan that includes the evaluation of the issues raised in the findings, conclusions and recommendations in this report concerning Safety Case regime.

The CSB notes that the Safety Case has now been listed by the Federal Working

Group as one of the options for reform under the Executive Order and that they are currently seeking public input.

That concludes our investigation presentation. We would now like to take any questions from the Board. Thank you.

CHAIRPERSON MOURE-ERASO: Thank you.

(Applause)

CHAIRPERSON MOURE-ERASO: As it is our custom, and after the presentation of the staff, the Board members ask questions of the staff about the report. So I would like to start with Board Member Griffon if you have any questions for them.

MEMBER GRIFFON: I'll keep it

brief, because I think we probably have quite

a few people that want to make public

comments.

I was looking at your slide. I wish I had the slide number, talking about publicly reported process safety indicators data. And I wondered what do we know about the performance of, did we look at any of these metrics with regard to refineries?

I know there's some stuff in here on the offshore experiments. But if it's detailed indicator data, did we look at this for refineries? And what did it show, or should we include it in the report?

MR. HOLMSTROM: The report looks at the different countries and the indicators or reports on it, for Norway, for example, it reports that Norway has noted a significant decrease in hydrocarbon releases offshore.

The PSAs, the regulatory agency that manages safety both onshore and offshore

in Norway also has some preliminary numbers from onshore that look favorable. But they have not released those.

In conversation with them, they said that they believe the regime is headed in the right direction. But they do not have their, system for implementing those indicators has not been in place long enough for them to publish definite numbers in that regard.

In the United Kingdom, they have a much more lengthy period of using indicators offshore. They have, for example, tracked hydrocarbon releases which would be an issue that would be both an issue for offshore oil and gas production and onshore processing.

And they found offshore that
they've noted a decline in the number of
hydrocarbon releases that's fairly significant
over a number of years. Onshore, the COMAH
has put into, which is the onshore program for
major accident prevention, they put in place

an indicator program that's being implemented over time.

The first phase of that program is to require that the onshore duty holders or employers collect data internally that will be revealed to COMAH when they visit the facility or if there's an intervention or inspection.

And they plan by, I think, 2015 to have a program in place where they'll report that data to the regulator which currently isn't in effect.

So the offshore program's much more developed. I think one of the major underpinnings that has been raised earlier was that there's some significant difference between onshore and offshore safety.

Particularly it involves production systems, offshore versus refining offshore.

A lot of the same equipment,
there's separation that's occurring, there's
exchangers, there's valves, there's pressure

vessels, control valves, et cetera. So
releases offshore of hydrocarbons on a
production platform would have some of the
similar process safety issues as you would
have in a process plant. And so we think that
those sorts of examinations are issues
offshore.

Certainly, all those countries we just named believe the Safety Case is an appropriate regime onshore or offshore and has implemented it in both areas, sometimes in steps over time.

But certainly, as it exists now, the system is fairly widespread throughout the world, we would note, including recently the Presidential Oil Spill Commission which was a bipartisan commission recommending the Safety Case for offshore production in the United States.

MEMBER GRIFFON: And just a follow-up, Don. Is there any reason why the refinery sector seems to be lagging the

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offshore in reporting stuff currently, or were there programs put in place --

MR. HOLMSTROM: I think the programs were put in place later, as we understand it. And we can, you know, we can certainly provide you with that data. We have an actual document related to the implementation of the COMAH program.

And the other issue is COMAH

typically, I'm sure if you submitted an
inquiry to them they could provide that data.

But they have actually much broader coverage
under the COMAH program than just oil
refineries, not only chemical plants but
beyond even what's covered under the process
safety management program in the United
States.

For example, they cover chemical storage facilities, storage tanks, large storage tanks. We're obviously investigating one of those right now in West Virginia.

They also cover power plants. We

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investigated the Clean Energy incident. So it's a much broader coverage of what they consider to be higher hazard facilities than is covered under, currently on our PSM and RMP in the United States.

MEMBER GRIFFON: And my last question is did we, I know this is difficult given the locations of these regimes, but in preparation for this meeting I was attempting to review a full Safety Case report. And I think I stumbled upon one that I could get my hands on.

Most of them, as you said in your presentation, the summary reports are publicly available, but the full reports aren't. I found one for offshore.

I was just curious if it's

(inaudible), and I understand it's

international travel. But did we get an

opportunity to review any Safety Cases for

refineries or actually get, you know, on scene

and see how they're actually implemented?

You know, as I went through this offshore one, it strikes me also, it makes me wonder about the worker involvement component. There's some very high level analysis in a lot of these documents. And it strikes me that, you know, how are the workers really going to be "involved" in blessing these things, so to speak?

So I'm not sure. I think maybe in these regimes the worker involvement component is a bit overstated. And it might be an improvement, but I just wonder about that, if you've have visited any of these facilities yet?

MR. HOLMSTROM: Okay. I'm glad you brought up both of those points. Because I think, while there may be different views on these issues, I think the recommendations address them explicitly.

So let me first say that, in terms of the question of the Safety Case, we have received, I think, a good part of, there's a

couple of Safety Cases from one of our contractors who works in Australia. And we have reviewed a couple of those.

But you're right, the Safety Cases are not typically, as a whole, made public.

And one of the issues is Safety Case reports can have confidential business information and trade secrets in them. So that's one issue.

And there are Safety Case summaries that are published online.

The second issue is the involvement of the workforce. We've had extensive, as you might imagine, conversations with a number of unions in Australia, Norway and the United Kingdom.

And it's very clear that they're involved in a number of activities that lead up to the development of the Safety Case. And it's also clear that they're very supportive of the Safety Case.

I know there was some commentary earlier about possible concerns about the case

from unions, but if they interviewed, for example, leaders of the RMP Union and Unites in the United Kingdom, they clearly are supportive.

In fact, one of the concerns that those unions had was that, in a recent UE initiative to implement a version of the Safety Case, they defended their regime, as did the industry, as being highly effective.

And the trade association, Oil and Gas UK in the United Kingdom, defended the regime as being very effective as well as both of the unions I mentioned. So, in all conversations, they're supportive. And actually, in a CSB forum they've been very supportive.

In terms of the participation element and also the Safety Case transparency, we recognize that there may be differences there. But we have made it very clear in the recommendations that there should be significant transparency.

In fact, the recommendations call for the involvement of the workforce in the development of the safety case.

If there's any ambiguity or differences there, clearly the recommendations are calling for that, as well as a number of the other elements that would lead up to the development of the Safety Case.

The second question is about transparency. We believe there is a significant degree of transparency. But if there may be disagreement to the extent or how deep that is, we have made it very clear on the recommendations that there should be transparency to the public to the greatest extent feasible.

So one of the things that's true about the Safety Case is there's a number of elements that one could take out of the Safety Case and implement in another regime.

Transparency could be one. It's not necessarily inherent to the Safety Case.

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Worker participation and real empowerment's not inherent, necessarily, to just the Safety Case.

But the Safety Case as a whole brings up all these strands together and I think creates a stronger binding, if you will, for an overall regime.

And clearly, in our recommendations we're making it very clear that we believe that transparency should be to the greatest extent feasible.

What has always been the issue with transparency -- and we deal with it all the time in the CSB, because we receive all kinds of documents, we like to make a number of them public -- is questions about confidentiality, confidential business information and trade secrets.

And so like, for example, in our BP Texas City investigation, we made public about 150 documents, somewhere around there.

And we went through a CBI process. So we know

1 these documents can be released.

But sometimes it's more time consuming, because you have to go through a process to review any confidential business information which, at least in our view under typical legal analysis, it's a fairly narrow analysis. And sometimes it becomes more expansive when it becomes a back and forth over what that is.

limitations. So that's the intention of the recommendations, is not to have any limitations. And I think our recommendations make it very clear that the workforce in this triparthied and their representatives, the union, should be involved in the development of the case as well as all the supporting documents.

And including, which we think is even more critical and which is identified by the unions in the United Kingdom, Australia and Norway is very critical, is participation

I believe that the single most important criterion for a safe workplace is

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the voice of labor. And I would like to know from you why you think that a Safety Case regime will give workers more power in this country than they have now, the fear of retaliation will be less.

MR. HOLMSTROM: Sure. I think some of us who, you know, participated in the development of the concept of the Safety Case on the staff level, worked in plants and are very familiar with the world of worker participation.

I think that what we hear from unions such as the Steelworkers and others, is that current regime has the word developing procedures for participation. But it's not real empowerment. And it doesn't provide workers with the ability to actively affect safety.

What we noted in this investigation is that workers and union representatives pointed out in previous incidents that there were problems with

sulfidation corrosion, and those issues weren't addressed.

Clearly, under the Safety Case, elected worker representatives would have the power not only to raise that to the company, they would have a regulatory recognized power to raise that to the regulator.

And they would also have the power to shutdown on safe work until the regulator intervened. That is a much greater power than exists.

Currently, the power that exists in the United States is largely a result of the strength of the group within the plant as well as the, you know, regulatory mechanisms that exist and in collective bargaining agreements.

And those are certainly important mechanisms for worker participation. But we think, and we certainly heard, and we had extensive conversations with workers in Norway, United Kingdom, Australia and other

countries, that these elected representatives was the key element for them and the safety committees.

They've also established broader groups. Within the United Kingdom, for example, there's an organization called Step Change for Safety which is, it's a triparthied group consisting of the regulator, affected companies and the trade unions and worker representatives, a bunch of worker representatives.

They've produced a lot of guidance. They have a number of training sessions for worker representatives. And they have also written guidance, I think, which we have circulated internally that's under the sponsorship of the HSE of how to improve worker representation and worker empowerment.

I don't think we've seen anything like that in the United States that's comparable, where actual workers are writing documents under the auspices of OSHA, or EPA

or any other regulatory agency where they're actually making recommendations and conducting advocacy on the behalf of workers. And they've spoken very eloquently to us about how critical that is and how it's stabilized.

MEMBER ROSENBERG: Thank you.

CHAIRPERSON MOURE-ERASO: Thank

you. I have one question also. I don't know

if it's a logical question, you know. I have

been aware watching, the two years worth of

this investigative group, this investigative

team at Chevron, the exhaustive effort to make

recommendations that the investigative team

feels are priorities based on the facts that

we're investigating.

They have been practice for organization, the CSB, to make recommendations based on investigated facts and findings.

Today, there has been a number of additional recommendations that, very interesting recommendations that have been presented by a number of the elected officials at this point.

And they have been suggested today at this meeting.

However, to my knowledge, they are not based on the specific findings that we're investigating in this report, since there is still a third pending report in Chevron.

Do you think, I'm asking the team, would it be possible to investigate those new recommendations that are presented here as something that we should consider that could inform, I mean, that we can investigate our findings that could inform the suggestions, recommendations that we are here in this long distance being discussed today?

MR. HOLMSTROM: Well, that's a good question. In every investigation we try to make a distinction between causal findings due to what actually occurred and what we might call audit findings and things that are problems or issues in the investigation.

And we try to focus on those things that are the most closely related to

causation. Certainly in the course of our investigation, there are things that have been presented to us that are issues that people have raised.

As a group of investigators who are scientifically minded, we try to steer tightly to those things that we think have some causal relation. And we have tools like logic trees, and Aximaps and cause and effect diagrams that help guide us in that area.

We certainly think that some of the issues tonight that have been raised are important. And in fact, some of them, as we stated in our interim report, we plan to address.

One of those was the issue of the history of using clamps in the facility. We stated in the interim report that we're concerned that that's a safety culture issue. It's also, obviously, a process safety issue.

And the investigation team, Dan and his team, are taking steps and have been

taking steps to collect information on that.

And we have set up interviews for February to find out information about that issue in terms of clamps.

And just so you're aware, we're looking, you know, putting a clamp on a piece of piping or equipment typically represents what we would believe is a process safety failure, a mechanical integrity failure.

And so it should be analyzed. Why did that happen, why did you have a release or a leak or anything that wasn't detected and fixed prior to being put on a clamp? And so that's also a cultural issue. Why were there so many clamps?

Well, they're looking not only at the clamps that had a due date and weren't replaced, which I think were the ones that OSHA looked at, but the broader issue is a larger number of clamps. And how does that issue impact a reflection of safety cultures?

So that's certainly something

we're going to look at. And certainly, as part of that, there'd be a question of the existing clamps that, you know, what is their status, not only from an abatement perspective but also a process safety perspective.

What is the plan for removing the clamps, fixing mechanical integrity issues, and what is the history there? And how does that relate to any potential recommendations, either related to process safety culture or other issues?

So certainly we're going to be examining that issue as a broader cultural issue. And how it connects to this incident is, when the initial small leak occurred, the first inclination of evidence we have was that people were considering placing a clamp on the leak.

So certainly, as a cultural issue, that leak, consider a clamp. With a clamp you remove insulation, and that's when the serious release occurred. So I don't know if that --

I'm going to ask this of all the commenters to please spell out your name for the court reporter, who is essentially transcribes this?

(Off microphone discussion)

MS. REYNOLDS: Good evening, Mr.

Chair and members of the Board. My name Alice
Reynolds. My last name is spelled R-E-Y-N-OL-D-S. I'm the Deputy Secretary for Law

Enforcement and Counsel at California

Environmental Protection Agency. I'm also a

member of a California interagency refinery

task force.

And first I wanted to thank you for the opportunity to speak with you today.

Refinery safety is something that is obviously very important to the state.

And the task force values the careful attention that the CSB staff gave to this investigation. And we have appreciated the opportunity to collaborate with staff over the past months.

In the aftermath of the August

6th, 2012, fire at the Chevron Refinery, like CSB, California also took action. We convened a working group on the primary safety led by the Governor's office.

The working group included participants from 13 agencies and departments. It met over a period of nine months with industry, labor, community, environmental, academic, local emergency response and other stakeholders.

And the group issued a draft report entitled Improving Public and Worker Safety at Oil Refineries in July of 2013. The Governor's working group expects to release the final report later this month.

The report states the findings of the working group, and it also does more than restate existing practices and problems. It includes goals that are not out of reach and not unrealistic.

There are real achievable ways to improve public and worker safety through

enhanced refinery oversight and also to strengthen emergency preparedness in anticipation of any major incident.

The working group findings
reflected significant concerns about ongoing
refinery practices and prevention of major
accidents.

All of the investigations of this incident have identified incomplete or inadequate policies and procedures at the Richmond Refinery and failure to evaluate pipe safety problems during the process hazard analysis and failure to act on internal reports about hazards.

The working group identified four main areas in need of improvement, a need for improved coordination between agencies, including improved data, and information sharing and improved oversight of refineries.

The second area is to strengthen emergency response and preparedness, including needed improvements in hazardous material area

1 plans and air monitoring.

The third area is the need for changes in safety prevention, including needed improvements to the Cal/OSHA Process Safety

Management Program and the California

Accidental Release Prevention Programs for risk management and program regulations as well the need for greater resources from enforcement of these regulations.

Fourth, the need for enhanced community education and alerts, including greater public and worker input into decision making.

These findings led to a series of recommendations. And to implement the recommendations, an interagency refinery task force was created at Cal/EPA. The first meeting of the task force was held in August 2013 with two additional meetings this fall and multiple meetings of work groups.

There are nine state agencies or departments represented along with partners

from U.S. EPA, seven local unified program agencies or (inaudible) and four air pollution control districts.

The task force has formed two work groups, one on emergency preparedness and response and one on safety and prevention.

These work groups have created work plans, and time lines and are working to revise existing regulations and guidelines.

And we're also planning for public meetings early this year in the Bay area of Southern California and Kern County.

Additionally, while the working group was completing its process, several enforcement actions were also proceeding following the July 2012 incident.

Approximately six months after the incident, on January 30th, 2013, Cal/OSHA issued 25 citations to Chevron, including 11 willful, serious citations and almost \$1 million in civil penalties.

On August 5th, 2013, the

California Attorney General and the District
Attorney for Contra Costa filed a criminal
action and plea agreement against Chevron
stemming from the August 6th incident.

In response to the complaint,

Chevron agreed to pay \$2 million in fines and
restitution and pleaded no contest to six

misdemeanor counts. The U.S. Environmental

Protection Agency also issued findings of
violation in December of 2013.

We look forward to continuing to work with the Chemical Safety Board as well as labor, business, environmental groups and the community to do our utmost to assure that California refineries take stronger action to eliminate fires or releases that threaten workers and communities. Thank you.

CHAIRPERSON MOURE-ERASO: Thank you.

DR. HOROWITZ: Thank you, Ms.

Reynolds. Next is Dr. Gina Solomon, also of

Cal/EPA. And do, please, spell your name for

1 the court reporter.

DR. SOLOMON: Absolutely. Good evening, Mr. Chairman, members of the Board. My name is Gina Solomon. My last name is spelled S-O-L-O-M-O-N. And I'm the Deputy Secretary for Science and Health at the California EPA. And I'm also one of the members of the interagency refinery task force.

And I wanted to talk a little bit about what we are doing concretely right now to try to fix our current system. I wanted to also mention, I heard in the initial comments there was this issue of where the burden for safety lies in the different systems.

And I want to emphasize that the burden for assuring safety, even in our current system, lies on the industry, as members of the Board well know. And, of course, the burden for trying to assure that that really happens is on the agencies.

And so we've identified a whole

series of things that we can implement now to fix the standards that we have while we look at other models that are out there.

And so the first steps that we're taking closely follow recommendations made by CSB in your interim report. So thank you very much for that guidance. We're moving forward with an effort to amend both the PSM and the Cal/ALARP regulations to require the conduct of root cause analysis following significant incidents or releases.

And root cause analysis needs to involve workers in the process and also be made publicly available so that community members can better understand the causes, the root causes of incidents if they do occur.

But the other pieces are even more focused on prevention, the issue of corrosion, obviously central to the Richmond fire. The Governor's working group identified the need to require damaged mechanism hazard reviews as a component of process safety.

So refineries would be required to more systematically assess and address issues like corrosion. And so we are moving forward with that recommendation.

We also are looking at human factors such as fatigue, for example -- not metal fatigue but people fatigue, both are important -- by requiring that management change procedures, look at management organizational change, staffing changes, reorganization, operations, maintenance, health and safety or emergency response.

And those issues will be incorporated as we move forward with our regs. In addition, we're incorporating some goal based continuous improvement approaches that really are very much consistent with those that we see in Safety Case regimes.

So we're going to go ahead with a proposal to put those into our existing regulatory framework. One of these is including a requirement for periodic safety

1 culture assessments.

So this involves both workers, so bottom up, and also management, top down, culture of safety within individual companies.

And there are tools that are out there to measure that. So we think we can do this.

Additionally, we're working on applying the concept of inherent safety as recommended by CSB to refineries. It's another distinctive component that's consistent with the Safety Case.

We're looking at terms such as
ALARP, as most reasonably practicable, and
other terms in situations where we, you know,
in the PSM regulations. And then we're also
looking at, in situations where inherent
safety cannot be achieved for good reasons,
then we're looking at regulatory requirements
like the hierarchy controls or layer
protection analysis that will assure that
we're moving toward this culture of continuous
improvement which we agree is exactly where we

1 need to be going.

The Governor's report identified the Safety Case regime along with some other issues as topics for future investigation.

And we are committed to doing that future investigation.

We are acting immediately to incorporate some elements of the Safety Case regime. But other pieces, the wholesale adoption of the Safety Case, would require a major shift in California law, obviously, and would also require some extensive additional resources for regulatory agencies that we're also working on. And that's what my colleague, Dr. Wilson, will be speaking about as well.

And so we also are going to be looking at whether the Safety Case can be implemented in a transparent way with appropriate worker involvement and appropriate public access.

So as we undertake this

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evaluation, we're very interested in continuing to work with CSB, to continue to consult with you as we share the common goal of moving towards safer design, safer technology and enhanced protection to prevent incidents like this from happening again in the future.

If we can possibly do anything then we'll do that. So thank you very much for your time this evening.

DR. HOROWITZ: Thank you, Dr.

Solomon. And next I think we'll have Dr.

Michael Wilson who is the chief scientist with
the Department of Industrial Relations. And
please do spell your name, even though it's

Wilson.

DR. WILSON: Thank you. It's Mike Wilson, W-I-L-S-O-N. Chairman Moure-Eraso, and members Rosenberg and Griffon and CSB staff, on behalf of the California Department of Industrial Relations and DIR Director Christine Baker, thank you for your leadership

in responding to the challenge of ensuring the safety and security of the Nation's process industries.

And thank you for your work here in California and your investigative work of the Richmond Chevron pipe rupture and fire.

We would also like to extend our appreciation for the support that you have offered California by deploying CSB process safety expert, Mr. Bill Hoyle, from Washington, D.C. to California. I cannot overstate how important Mr. Hoyle's expertise has been to California and our efforts to date. Thank you.

As you know, the Department of
Industrial Relations oversees state programs
that are charged with protecting the health
and safety of California's 18 million workers.
Worker health and safety is often, of course,
inextricably linked to that of the community.

DIR is home to Cal/OSHA where California's process safety management unit

resides, overseen by state-wide district manager, Clyde Trombettas.

The DIR office of the director together with our Cal/OSHA PSM unit is participating in the leadership of the Governor's interagency refinery task force which was convened by Governor Brown immediately following the incident at Chevron.

And as you've heard from the

Deputy Secretaries Solomon and Reynolds, the

task force consists of 13 state and local

agencies and departments and has basically

been charged by Governor Brown with

evaluating, and where necessary making changes

to the state's regulatory structure to ensure

that what happened here does not happen again

in California.

We appreciate that the resources of the Chemical Safety Board are limited. We know that it represents a significant commitment on the part of the Board to undertaken an investigation such as you've

done here. That is, one that uncovers not only what happened at Chevron technically but why.

Understanding the why of an event requires answering complicated questions about a plant's safety culture, its systems of values and priorities, its mechanisms for meaningful worker participation and for transparency and accountability with the community.

It requires understanding how a plant decides when, and where and how much to invest in maintenance and safety. The answers to these questions are extraordinarily valuable, because they are the factors that dictate the path that an industrial facility will follow.

That path can lead ultimately to a catastrophic incident as we've seen here and it can lead to the highest possible level of attention to protecting worker, community and environmental health.

I can assure you that the efforts of your team, led by Dan Tillema and Don Holmstrom, that you've taken to answer these kinds of questions and bring light to the underlying drivers of the Chevron fire are of great value to our work here in the State of California.

In responding to the Chevron incident in our work with the Governor's task force, the Department of Industrial Relations has focused on three priorities. And I'll mention each of those just briefly in the context of your recent report.

Our first priority following the incident was to take immediate action to investigate potentially eminent worker and community health and safety hazards at the Chevron facility and throughout the California refinery sector.

In early 2013, our Cal/OSHA PSM unit, under Mr. Trombettas' direction, inspected 2,000 pipe clamps in use at the

Chevron facility, launched a statewide leak/seal special emphasis program targeting the state's refineries and conducted 3,600 hours of inspections at nine refineries statewide.

This year, we're defending our 25 citations at Chevron and about a million dollars in civil penalties. And we're enforcing the terms of Chevron's three year probation pursuant to Contra Costa County's criminal misdemeanor settlement.

This includes reviewing corrosion reports for about 300 piping systems at Chevron with our partners at Contra Costa Health Services and U.S. EPA. We'll be conducting ultrasonic verification testing on a subset of piping to confirm the veracity of these reports.

Our second priority is that we're talking steps to increase funding to our PSM unit. We recognize that overseeing process safety requires resources.

Facilities that handle large quantities of hazardous materials, often under high temperature and pressure, employ hundreds and sometimes thousands of workers. They're often situated in close proximity to populated areas and they're extraordinarily complex, both technically and organizationally.

Major incidents are relatively infrequent. But when they do occur, we have seen time and again they have major consequences for worker and community health and safety. As your report describes, these facilities therefore require special regulatory oversight.

California is unique among U.S. states in that we've developed our own process safety management standard and have committed resources in our PSM unit implementing that standard.

California is the only state and the only OSHA program nationally with a dedicated PSM unit whose technical staff focus

exclusively on process safety. We're proud of that fact, and we also acknowledge the immense challenges our PSM staff are up against.

In answer to these challenges, the California State Legislature directed Cal/OSHA to adopt a means of assessing annual fees from refineries to support regulatory oversight.

Governor Brown included authority in his 2013 state budget for Cal/OSHA to assess these fees each year based on an individual refinery's crude oil input as a proportion of the state's goal of production.

We finalized emergency regulations to take this action last year, and we are now using these fees to increase the operational capacity of our PSM unit. This steady source of funding, supported by the industry itself, is critical to efforts to modernize process safety in California. And we believe the same could be said for the U.S. as a whole.

Funding is our third priority.

We recognize that the state's

process safety regulations are in need of modernization. As you've made abundantly clear, the process safety management standard is over 20 years old and much has changed in our understanding of process safety.

We're seeking to do two thing in our revisions, and you've heard earlier from Dr. Solomon. One is provide a framework within which the industry will continually improve its safety performance.

Second is to provide our PSM technical staff with the best possible tools and information they need to do their job in protecting worker and community health and safety.

As we've found, many of the PSM improvements we're contemplating have already been put in place by leading companies in the refinery sector.

And many of them have been informed by improvements in the Federal PSM standard that are under consideration by

Federal OSHA as part of President Obama's

Executive Order 13650 on improving chemical

facility safety and security written in the

wake of the West Texas disaster. We look

forward to working with the Obama

Administration in support of the Executive

Order.

As we work on regulatory changes, we appreciate the Board's calling attention to the Safety Case approach which has been implemented by refineries operating in the U.K., Australia and Norway.

Through the task force we are establishing a work group to collect and review data on the Safety Case regime and its potential applications in California.

And in the interim, as Board members Rosenberg and Griffon have noted, we're evaluating the ways in which our changes to the PSM standard can incorporate key elements of a Safety Case approach today.

In closing, I'll say that our

But bear with me. My voice may go away for a

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moment. Good evening. My name's Randy
Sawyer, S-A-W-Y-E-R. And thank you, Chairman
Moure-Eraso and members of the Board for
allowing me to speak this evening.

My job is the chief environmental health and hazardous materials officer for Contra Costa County. Contra Costa County is home for four petroleum refineries and several medium to small chemical facilities. Contra Costa hazardous materials staff implements the City of Richmond and the County's Industrial Safety Ordinances.

These ordinances go beyond the requirements of the California XRE's prevention program, OSHA, Cal/OSHA's process safety management and U.S. (inaudible) management.

The ordinance requires a regular facilities review from the (inaudible) system, expanse on human factors. It requires root cause analysis as part of an incident investigation. It requires facilities to

perform a safety culture assessment. And all the processes and processed unit within the refinery are subject to the ordinance.

The county adopted the ordinance in January of 1999, and the City of Richmond adopted the ordinance in January 2002. During the 1990s there wasn't any average of a high severity accident annually in Contra Costa County. Since the ordinance was adopted by the county, there's been only one high severity accident, the August 6th, 2012, Chevron fire.

There have been other less severe accidents, but there has been general decline in these accidents since 1999. I believe that you can compare the success in industrial safety favorably to the Safety Case being implemented by the United Kingdom's health and safety executive.

Even with this success, the August 6th, 2012, fire occurred. The Chemical Safety Board, in their interim report on the

investigation of the fire, made a number of recommendations to improve the Industrial Safety Ordinance.

The City of Richmond and the county staff have been working together and making the necessary changes to address the recommendations.

The Chemical Safety Board has been willing to review drafts of these changes to make sure that we are addressing their findings and recommendations. I think these changes will make the requirements of the ordinance stronger.

I also remember the State's refinery safety task force in which you've heard more details from earlier speakers this evening.

I thank the Board and their staff for raising the question is there a better way to prevent accidents such as the August 6th, 2012, fire and proposing a possible solution to this question.

I believe that this question needs to be addressed. I believe that all accidents are preventable. I also believe that the actions being taken by the city, county and state, when implemented, will improve the existing programs of the prevention of refinery accidents.

Is this enough to do? Where additional changes need to be made, such as the implementation of the Safety Case regime, will need to be determined.

It is my belief that, no matter what the regulatory requirements are, ultimately it comes down to the safety culture within the facility and how successful the facility will be in preventing such accidents.

If the facility has a good safety culture, it will not matter. The regulatory requirements of the facility would do, the facility would then do whatever it's required to do ending such accidents. I thank you this evening for allowing my comments.

that are not permanently repaired for years.

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Further, the industry's own insurers acknowledge an accident rate that is three times higher for U.S. refineries than those cited in other countries. Clearly, our current accident prevention programs here in the U.S. are not as effective as they are elsewhere.

The key findings in the Richmond incident, that the pipe ruptured due to sulfidation corrosion and that Chevron management was aware of this corrosive pipe, were also found to be true for the El Segundo Refinery.

The El Segundo Refinery is located at one end of a downtown business district and is within six blocks of the town's elementary and high schools. If this incident had occurred there, the impact on the workers and the local communities in El Segundo and the neighboring city of Manhattan Beach would have been very similar to that of Richmond. And that is the reason we are here today, that I

came up from Los Angeles.

So the CSB has recommended the Safety Case approach to reduce risks. And we feel there are three components that need to be included to be effective which have been raised here today. And we want to support them.

One is the active funding and resources including personnel for regulatory agencies. As a Safety Case system involves Government inspection teams to ensure industry compliance, sufficient resources must be provided. And one potential source of revenues could be these uncovered employers.

The second is the triparthied approach, you know, in which workers and their representatives are on equal footing with industry and regulators.

Workers have intimate knowledge of the plant in which they work and are the first ones to respond to and be potentially hurt by incidents or near misses. So a new regulatory

Petroleum Institute. API appreciates the

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opportunity to be here tonight to provide comments on the CSB draft regulatory report.

The API represents more than 550 companies involving all aspects of the oil and natural gas industry. API members are significantly affected by the efforts of the CSB and are regularly called upon to respond to and implement CSB's recommendations.

While API applauds CSB's continued efforts to fulfill its core mission by conducting investigations of accidental releases and timely sharing of its findings, API has a number of concerns about the CSB recommendation to California related to the establishment of the Safety Case approach.

The API believes the current OSHA process safety management regulations are effective and that an overhaul in PSM standard is unwarranted.

The PSM standard is a consistent and well understood framework that has been used by manufacturing facilities for over 20

years. Changing to Safety Case would add complexity and uncertainly with no demonstrated benefit.

Even now, Federal OSHA is working to enhance and improve the existing PSM standard. OSHA is requesting information from stakeholders regarding potential revisions to the PSM standard. These efforts to improve the PSM standard should be explored before the introduction of an entirely new and different regulatory approach.

To the extent CSB sees areas for improvement, API encourages CSB to continue its focus on enhancements to the current PSM standard.

One avenue to identify potential improvements for the PSM program effectiveness is for CSB to look at the NSTB/FAA model for lessons learned that can be applied to CSB's interactions with other Government agencies.

Concerning criticisms that the current PSM standard lacks adaptability and is

slow to respond to needed safety changes, we must note that, unlike other countries, such as Norway or the U.K., in the U.S. new regulations and regulatory revisions must go thorough notice and comment rule making which just takes time.

Of particular concern to API is the lack of meaningful data that demonstrates that the Safety Case approach produces better safety performance than the PSM standard.

In fact, CSB acknowledges that there have been few objective studies conducted on the impact of the Safety Case regulatory approach on safety performance, onshore and offshore.

The CSB draft report also recognizes that the existing data mainly relates to offshore operations which increases API's concern about applying Safety Case to refineries.

If Safety Case or other regulatory regimes are to be considered, all the relevant

U.S. regulatory bodies should first collect meaningful data that can be used to justify further consideration of regulatory alternatives.

A major difference that we should note in the two regulatory programs is the role of the regulator. For OSHA, the regulator performs more of an enforcement type role, whereas in the Safety Case approach, the regulator performs more of an acceptance or permissioning role where a site's case is accepted by the regulator.

The Safety Case approach would require a significant increase in the number of technically competent, well-resourced regulators to review the hazards identified in the site's case and to evaluate the effectiveness of the controls used to manage the risks.

This difference in the roles would be costly, very difficult to implement, without a clear and corresponding benefit.

But in either case, as has been stated several times today, it is the site operator that ultimately determines how to ensure safe operations.

So in conclusion, as CSB correctly notes, Safety Case is not perfect and no regulatory system will be perfect in its implementation.

In light of this acknowledgment,

API thinks the CSB should focus its limited
resources on incident investigations and
reports rather than expending resources
advocating for new regulatory programs.

API thinks the current PSM program is effective but can be made better and that the OSHA request for information needs to be carried out and the results analyzed which may lead to improvements in the PSM standard.

Additionally, API thinks there's lack of data at this point to support the adoption of a Safety Case in the U.S. Safety is a continuous improvement journey. And we

acknowledge more can be done to improve safety under the current PSM system.

The effectiveness of any safety
program is only as good as the commitment made
in its preparation, its implementation and its
execution. And the site operator is
ultimately responsible to ensure safe
operations. Thank you for your attention.

(Applause)

DR. HOROWITZ: Thank you, Mr.

Chittim. And I do want to remind our

listening audience, watching audience on KCRT

that you're welcome to submit your comments by

email as well. And you can send those to

csbmeeting@csb.gov or to public@csb.gov. And

we'll be happy to read those comments or

summarize them and provide them into the

record.

And we did receive one online comment from Mr. Rick Hind, the Legislative Director of Greenpeace in Washington, D.C. And he writes, "Thank you for holding this

1 meeting."

And he, to get right to his question, says that in the CSB's draft report you recommended that California implement new chemical facility rules to prevent these disasters by requiring them to use the safest chemical processes available.

The EPA has the authority under the Clean Air Act, Bhopal Amendment, 112R I believe he means, to require safer chemical processes at plants like Chevron, nationwide.

And he notes that EPA is currently considering rule making in this area.

And he asks, "Will you also recommend that the EPA implement new chemical facility rules to prevent future disasters by requiring them to use the safest chemical processes available as you recommended for California?"

And I wonder if I could ask the team, because it's an important question, how does the Safety Case system handle the issue

of inherently safer technologies? And perhaps how is it handled in the United Kingdom, for example?

MR. HOLMSTROM: Yes, the CSB has actually distributed to a number of people the assessment guidelines that are used by inspectors for onshore facilities within the United Kingdom.

And inherent safety is one of the basis of assessments for the Safety Case in the United Kingdom for high hazard facilities. In fact, in the United Kingdom, if you look at the specific guidelines they actually look at the design stage which is currently not under the purview across the safety management standard or through the existing plan.

So they engage in conversations about inherent safety when the plant is being designed which I think most people would recognize is the most effective time period to implement inherent safety before the plant is designed and built.

And they've looked at inherent safety throughout the life cycle of the plant including not only just inherent safety but a hierarchy of control. Inherent safety in the hierarchy of controls is the most preferred control mechanism. Because at its strongest, it substitutes or eliminates the hazard.

But there are a number of other controls that are effective for controlling hazards that are much more respected, for example, engineering or design rather than relying on administrative controls, such as following a procedure or responding to an alarm which the CSB has noted, in many investigations.

(Inaudible) control when things
have failed that operator accident or
responding to alarms is often identified in
PHAs as a control measure. For example, that
was true in the BP Texas City case in the high
level that occurred in the blowdown drum that
controls air.

The safeguards were listed as operator action and alarms which are the lowest and the least effective controls. And there's nothing in the current process safety management standard that would require strengthening those particular safeguards.

So we identified, on the other hand, on the Safety Case, that they actually, as part and parcel of how they accept their cases, we find inherent safety to be a key element.

DR. HOROWITZ: Okay, thank you.

And those of you who are watching on TV,

csbmeeting@csb.gov. Let's go back to our

audience here in the room.

And next is, I apologize in the pronunciation, Lipo Kentasa (phonetic), representing the Asian Pacific Environmental Network.

MR. KENTASA (phonetic): It's Lipo

Kentasa and --

DR. HOROWITZ: Okay.

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

Page 152 1 MR. KENTASA: (Inaudible). 2 Okay, thank you. DR. HOROWITZ: 3 Please go ahead, sir. Hello, all the 4 MR. KENTASA: I'm Camo (phonetic) and also the 5 Board. resident of Richmond. And my name is Lipo 6 7 Kentasa. And I'm a member of APEN. 8 I don't have anything to add 9 except just wanted to thank you for the Board 10 and the staff who do the investigation. 11 we support your recommendation all the way. 12 And this is something for us who 13 are resident here want to hear for many, many 14 year, long time ago. We want to see this 15 recommendation be. Not only want to see the 16 recommendation, we want to see the 17 implementation right now as what we want to 18 And we want to thank you. see. 19 CHAIRPERSON MOURE-ERASO: Thank 20 you. 21 (Applause) 22 DR. HOROWITZ: And next is Dr.

1 Henry Clark of the West County Toxics

2 Coalition. Nice to see you again, Dr. Clark.

DR. CLARK: Good evening, members

of the U.S. Chemical Safety Board. Welcome

5 to Richmond.

West County Toxics Coalition is one of the oldest environmental justice organizations in the country. We've been around for about 30 years. We've worked with communities not only here in Richmond but throughout the United States as well as our community in West Texas, okay.

First of all I want to say, in regard to this Safety Case model that you have presented to us, it sounds pretty decent. I will say that, most of the provisions.

I am concerned about the trade secret part of it, you know. This community here, especially in the environmental justice groups here that have been dealing with Chevron over the years, you know, we've

always had a problem with the refinery or regulatory agencies, how a trade secret that denied relevant information to us to make some determination as to the impacts of refinery expenses on our community.

So I don't see why we would choose to accept a trade secret aspect of this proposal. And we've always rejected it before. So I'm not convinced on that part.

The other issue of concern is this committee that you referred to with the workers and other people on it. And you've been focusing on the labor aspect of it, that labor may not have adequate resources to have a technical person there to evaluate this case.

Well, you know, as far as I'm concerned, the company should provide the resources for labor and anybody else that's part of that committee to have the appropriate technical people there to be able to assess that proposal. Otherwise, it's

1 nonsense, okay.

And you referred to a regulator.

I don't quite understand what you mean in that regard. We have a lot of regulatory agencies that do inspections there at Chevron.

You have the Bay Area Air Quality
Management District. From what I understand,
it has a permanent inspector there at the
refinery on a daily basis. You have Mr.
Randy Sawyer from the county that's doing
some inspections there.

Plus EPA, from what I understand, does a, I believe it may be every five years, but like an overhaul, overall inspection of refineries. And so when you refer to the regulator having some authority to do something, what do you mean? Are you meaning that all of those regulatory agencies individually or collectively are in some way, what are you actually talking about?

You know, and in terms of the

enforcement part of it over there, Council
member Jim Rogers indicated enforcement is
really important in this whole process.
Because we've seen this here a revolving door
syndrome of regulators working for some
regulatory agency today, and then tomorrow
they're working for Chevron or some other
company.

And we don't want that type of nonsense to continue to occur. We want some real enforcement. And I'm concerned, you know, the bottom line is that the buck stops with the local people, our decision makers that issue permits to Chevron and other companies to operate.

They definitely need to be in the process and decisions need to have the necessary resources to do whatever necessary evaluations that needs to be done to protect the public health and safety of residents in this city.

Now, the other point is this here,

you know. We're talking about trying to do some things to protect public health and safety through this here Safety Case model.

But there's the other point here that I think we're sort of overlooking. Even on a daily basis, even say Chevron or any other company came up with a plan, you know, with this committee and all of that. You know, this deal really doesn't get to the overall problem. Because there's such a thing as environmental justice, okay.

And under former President
Clinton's Executive Order 12898 on
environmental justice which the City of
Richmond has also adopted a similar
environmental justice order, as well as the
State of California. And most environmental
justice laws are based on President Clinton's
Executive Order which basically says that no
community or people should be
disproportionately impacted by environmental
policies, okay.

Well, the fact is that communities

here like North Richmond where I come from

and others here already are. We're already

disproportionately impacted. So in terms of

when Chevron got a big major modernization

environmental impact report's supposed to be out, I believe, next month. And the city and

project coming up, like right now the draft

9 Chevron is expecting the project to hopefully

10 be approved by July.

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Yet we're talking about, even if
this here safety model is adopted, you know,
years before it's implemented. So what does
that do for this major expansion or
modernization that is happening right now at
Chevron in our community, you know?

That in spite of the fact that all of these environmental justice laws that are on the books say that we should not be disproportionately impacted, yet, you know, they're trying to come around the corner through the back door and still increase the

disproportionate impact by some cap and trade pollution trading scheme which would allow them to increase greenhouse gas emissions and associated toxins that would create a hot spot, in spite of the fact that the City of Richmond here has adopted the precautionary principle and this environmental justice argument.

So that's just being nipped in the bud. That's why the local power here in our City Council should enforce the regulations and the laws that they have adopted.

And if you're for environmental justice and the arguments that you have adopted, then you should draw the line, period, and not allow the ongoing disproportionate impact on communities of color here in the city, like my community in North Richmond, period.

Otherwise, we just still up here talking and playing games and, you know, putting on the dog and pony show for the

cameras. And our people in our community continue to suffer and die from asthma and cancer.

So we want to see some real action. I wanted to see, you know, this precautionary principle enforced here in Richmond, the environmental justice laws on the book enforced here in Richmond and stop the ongoing pollution of our community, and our people and putting us at risk.

The other point that was mentioned is about these listening sessions that's going on around the country here under the Executive Order 13650 that President Obama just signed after the West Texas disaster here, you know.

So here again, that's all irrelevant to the refinery and other chemical companies here in our community. And so here again, we're going to be waiting for years before those recommendations are looked at and put into practice.

Also that here again, leaves us vulnerable and which, in my opinion, is where the city council should step in and enforce their laws on the environmental justice.

One other point on the enforcement for the other document, again, we'll mention that the district attorney has enforcement authority here in Contra Costa County which the District Attorney is an elected official and has been doing little or nothing to hold Chevron or companies accountable.

The July 26th, 1993, sulphuric acid disaster at General Chemical Company has sent over 20,000 people to local hospitals.

Now, the DA and the county was on the hot seat after that. They were threatening to file criminal charges against General Chemical Company.

But the company paid a \$5.5 million fine rather than face criminal charges. And money went to build the Center for Health in the North Richmond community.

I noticed that none of these hearings or anything, the DA or any representative is here, you know. And the community and the city, we need to put the DA also on the hot seat to enforce these criminal charges.

These people, you have all these residents already at the refinery. You mean to say that they didn't know that Chevron had all these patched up pipes and that was, you know, corroded. But, you know, they had the authority to do something then. But they didn't do nothing, period.

The bottom line is, is this here.

Far as the West County's Toxins Coalition is concerned, we want protection of our community. We ain't playing no softball, we're playing hardball. We're not going to accept no more disproportionate impact, putting our community and our people at risk, period.

If you and the city and these

clear, CBE has joined with the Refinery

Action Collaborative in supporting the report and the recommendations in writing. We still support that and urge your adoption tonight.

We see the strengthening recommended amendments, probably most specifically laid out by Congressman Miller and Supervisor Gioia as being consistent with, further to and maybe even prerequisite for fully implementing the Safety Case that we don't see.

And we understand the recommendation to be an advisory one that the State of California, Dr. Wilson and his colleagues, would be charged with actually fleshing out and developing with hopefully full participation of the public, community and the workers.

So on that basis, we do, Richard, still feel that it's appropriate to adopt tonight with those amendments and with the either/or if you want.

We also really appreciate, I

really appreciate the emphasis on the root of the problem being an imbalance of power. Oil corporations get to decide to cut corners.

Workers and communities who live there, where the bankers around the companies don't live, bear the brunt of it. That's what we need to fix.

And in that spirit, I would say
that the solution is very closely tied to the
most divisive argument that, to sort of quote
the way your staff put it on Page 104,
"There's no will in the U.S. to ensure that
regulators have the tools, resources and
competence to effectively regulate."

So I want to suggest that that's at the nub of some of the friendly debate we're having tonight and that there's an answer to that I'd like to suggest.

Where I come from, your father might come home dirty and shaking late one night and try to explain to his kids about the explosion at the plant that killed his

1 co-workers that day.

was about six years old. The workers are a part of the community, right. And before Chevron's higher sulphur crude slate accelerated the corrosion that burst the pipe that led to the disaster last August, CBE warned public officials about the higher sulphur crude increasing incident risk. So did workers. We're part of the same community.

Now, and you've heard some about this from other speakers, so I'll be brief,
Chevron proposes a project that could further increase the sulphur content of the crude,
the corrosiveness of the crude.

At the same, it's fighting to get a delay in fixing the corrosion clamps that are widespread problems and safety violations throughout the refinery.

CBE is following up on the court orders that we've won demanding that Chevron

be transparent and that there be a full review of the implications of that project.

That's our role.

The workers in the workers union, meanwhile, have joined into that appeal on the side of OSHA fighting Chevron in this case to try to make sure those clamps get replaced in that safety hazard.

Again, we sometimes have slightly different roles. We sometimes have friendly differences of opinion. Workers are part of the community. We're in this together.

And statewide, the combination of aging infrastructure that we agreed is a big part of it, and the shift to even more corrosive crude, is a ticking time bomb.

This is an urgent situation.

Communities are grappling with it in oil projects in multiple communities here in the Bay Area right now.

That's unfortunately not that unusual in this state where wholesale oil

switch is going on in this, as you know, somewhat broken regulatory system. We're grappling with it.

Here in the Bay Area the refineries' workers' union has joined us through the Refinery Action Collaborative to tell all of the local agencies that are reviewing these projects that are going forward that we want to see transparency, full disclosure of changes in the crude slate and their impacts.

That just happened last month formally. That's noteworthy for several reasons. But ultimately, it would not have happened except that workers are part of the community.

So the answer to this question, do we have the will, the 10,000 or so refinery workers in California are part of communities numbering in the millions. And together we have the will to protect our health, our safety, our lives and our children. Big oil

representing companies that explore for, produce, refine, transport and market petroleum, petroleum products, natural gas and other energy supplies in California, Arizona, Nevada, Oregon, Washington and Hawaii.

Our members operate the major refineries in California and are committed to safe and reliable operations and open to suggestions to enhance the safety of our industry, our workers and our neighbors.

Learning from incidents is an essential element of the process safety management framework. And the U.S. Chemical Safety Board reports have been important sources of lessons learned.

WSPA submitted written comments with the American Petroleum Institute on January 3rd. And I agree with the comments presented to you earlier tonight by Ron Chittim of API.

Today, I just wanted to make a

couple specific comments on your report's recommendations that California replace its current process safety management regulatory scheme with an alternative regulatory regimen known as the Safety Case.

In short, WSPA believes your recommendations concerning changes to regulatory oversight can be integrated into the existing PSM and risk management program regulatory framework.

By so doing, we can accomplish additional safety gains and continually foster better relationships with employees and communities without introducing any unintended consequences and burdens associated with a complete overhaul of the existing regulatory framework.

Changing the regulatory approach to the Safety Case without a better understanding of what one gains from the action will add complexity and uncertainty with no demonstrated benefit that is readily

1 understood.

This added complexity may even increase risk due to conflicting priorities created by potential overlay of new regulations. Efforts to improve the existing PSM regulatory program should be explored before pursuing the introduction of an entirely new and different regulatory approach.

For example, we believe that industry could better achieve the proposed benefits of the Safety Case from additional skilled regulators at the state level who can more actively participate in assuring effective implementation of existing PSM and RMP programs, secondly, by improving processes to effectively manage risk through assessment safeguards and mitigation.

Our members are actively working and cooperating with the Governor's task force. They are actively working and cooperating with the City of Richmond, with

the County of Contra Costa in improvements to the industry safety ordinance. And we believe that better integrating the PSM and RMP requirements will achieve the goals outlined in this report.

To the extent the CSB sees other areas for improvement, WSPA stands ready to dialogue. And we appreciate the meeting that we had with Don, Amanda, earlier this year to discuss the report. We appreciate the efforts the staff has taken to reach out to our industry to include us in the discussions and in the process.

WSPA would like to thank the CSB for coming out tonight, for hearing and taking input. And we look forward to working with you to improve the safety of our industry. Thank you very much.

DR. HOROWITZ: Thank you. And next we have a question email from Mr. John Morawetz. And he is the Health and Safety Director for the International Chemical

1 Workers Union.

And he welcomes the report. He says the presentation of the Safety Case deserves significant deliberation before acceptance. And he asks a question.

And he writes, "From tonight's presentation and initial reading of Andrew Hopkins, Australian Professor, a leading proponent of this model, one of the key elements is employee involvement which is a part of the CSB recommendation for triparthied review.

"How does the CSB believe the Safety Case will be effective in non-union facilities where it is unlikely there will be meaningful worker involvement or ability to raise suggestions that are not welcome by some of their supervisors or in direct opposition to stated supervisor positions?"

And I know we looked at this both from the standpoint of the unionization rate at the 15 California refineries as well as

how it might work in non-union facilities.

So I wonder if the team would like to answer

Mr. Morawetz's question?

MR. HOLMSTROM: Well, first of all, it's in our report that the unionization rate in California refineries is, I think, over 75 percent. And we know that the unionization rate in, I think, Norway is well over 50 percent. The U.K. is 20-some percent, Australia I think is similar.

And so there is already, I think, a basis for workers who are represented to use that representation in the course of participating in a more rigorous safety management regime.

The other thing I would add to that is that the Safety Case applies worker empowering and participation elements that would apply to facilities where workers were not represented.

And what we heard actually from the union representatives in the U.K. and in

Norway, although offshore Norway is mostly, I think, almost entirely unionized, is that even in those facilities, because they interact, workers and representatives get together in groups like Step Change for Safety. They interact, and they feel that they have important exchanges with them, and develop better relations and understand some of the advantages and disadvantages of their various positions.

And they feel they can work together to improve safety. So they think overall it is a positive reform, because it empowers workers in both union and non-union locations.

That's what we hear from unions in the United Kingdom and Norway. Obviously they would feel, when they expressed to us that they have more significance, more say and more influence when they're represented. Because they have the power of their membership behind them.

DR. HOROWITZ: Thanks. Next is

Kim Nibarger of the United Steelworkers.

MR. NIBARGER: My name's Kim

Nibarger, N-I-B-A-R-G-E-R. Good evening, Mr.

Chairman, fellow Board Members.

I'm a health and safety specialist for the United Steelworkers International
Union. We're the union that represents the operators and proprietary maintenance employees at the Chevron Richmond Refinery.

Our members are responsible for approximately two-thirds of domestic oil production in this country in over 70 refineries. We also represent many more workers in highly hazardous chemical plants which fall under many of the same safety regulations.

A Safety Case requires, as does the OSHA process safety management PSM standard, a written plan that the company is required to comply with. As proposed by the CSB, the Safety Case requires that the

company manage identified risks, keep as low as reasonably practicable or ALARP.

PSM requires companies to follow practices that are recognized and generally accepted good engineering practices, RAGAGEP.

And so the union reviewed a number of accidents in the petroleum industry dating back to the early days of PSM. We noted one commonality. Companies had a failure to execute. They did not follow their written plans.

It's the obligation of the company to operate in a responsible manner. With that in mind, the International Union had some comments about the implementation and workability of the recommendations contained in this report.

The advent of the implementation of the process safety management standard gave all of us in the refining business great hope of improving safety in the industry.

202-234-4433

For a few years, accidents seemed

to be on the decline, having just experienced the terrible accidents in the U.S. at Phillips Chemical complex and the ARCO Channelview Refinery.

Refiners seemed intent on developing plans to meet the intent of the performance based PSM standard. The early OSHA inspections at PSM regulated facilities seemed to follow a more prescriptive format, that which the compliance officers were used to performing.

That seemed to push the refiners to obtaining documentation to support the elements of the standard. For example, training used to be pretty effective handson, face to face. And that was turned into computer based training.

It was easier to generate a signin list by completing a trackable computer program that to be sure every individual got their name on a physical piece of paper.

Management of changes were easier

to pull up for the regulator if it was a check the box activity on the computer rather than a rigorous exercise performed in the field with operators and engineers on what will the potential downfall be if we make this change and how can it be remedied.

Process hazard analyses were in the review cycle and too often, when reviewing potential hazards, the consensus was, well, that doesn't happen here. It hasn't happened here, so it was dismissed as not being able to happen.

That same attitude is taking place with risk analysis. Because it had not happened in the facility, the risk was assumed to be acceptable, even though research would have told you it had happened at several other refineries.

Managing risk has turned into taking a risk. The companies have written plans on how they are to meet the elements of the PSM standard. A Safety Case would

require a written plan by the company on how they would manage risk to as low as practicable.

If refiners are not following their current written plans, what makes you think they will follow the written Safety Case?

There are some good elements in the PSM standard, and there are good elements in the Safety Case. The Safety Case should certainly be explored and considered. But there may be more immediate benefit in trying to beef up the elements of the PSM standard that are weak.

And we have a list of some of the things that we think need to be beefed up.

In the meantime, we cannot let the perfect be the enemy of the good or forego useful incremental changes in the search for a more major change.

There are many things that Federal OSHA, Cal/OSHA and currently through the

county Industrial Safety Ordinance could do
to improve the regulation of oil refineries
and other high hazard plants short of
adopting a full Safety Case framework.

It may be easier improving what is in place, considering the litigious environment we now face with nearly every OSHA citation going to a solicitor under contest and sometimes waiting years for a trial date.

Meanwhile, the workers are exposed to the hazards the company was cited for while they fight over a legal interpretation.

More focus needs to be put on including the workforce in helping the company make improvements to safety for the workers and the community.

The Safety Case language we have reviewed from the U.K. has the same weak consult language as does the PSM standard.

The USW would recommend convening an expert panel to review the first recommendation and

explore the advantages and drawbacks of implementing the Safety Case or adding some clarity to and expanding the current PSM standard to include some form of the Safety Case.

We fully support the second recommendation in this report on leading and lagging indicators and have expressed our willingness to work with the industry on that matter so long as the process is fair and gives us and other stakeholders a significant voice.

As for the third recommendation, the International Union is fully engaged in responses to the request for information for Executive Order 13650 and would like to see the kind of improvements we are seeking in OSHA's PSM standards to be rapidly incorporated and embraced.

We look forward to working with the CSB, the State of California and the refiners nationwide to make this industry as

1 safe as it can be. Thank you.

(Applause)

DR. HOROWITZ: Thank you, Mr.

Nibarger. And Lionel Trepanier, I believe it is, emails. And he's been very persistent in getting his email through from the Utah Tar Sands Resistance in a lengthy email, Mr.

Chairman.

So I think, with your permission, we'll include it in the record. And I'll just summarize his comment which is that they generally agree with and support the CSB's recommendations for substantial changes to the way oil refiners are regulated.

But they must "vigorously protest," their words, that the CSB is not making similar recommendation in Utah. And he notes Chevron's sulfidation incident in Utah as well as other refinery incidents that have occurred there and notes that Utah has only six compliance inspectors in process safety management.

And they support the CSB's recommendation, and they ask for it to be extended to the Government of Utah.

Next is Sandy Saeteurn from the Asian Pacific Environmental Network. Thank you. Could you spell your name please?

MS. SAETEURN: Yes. First name is Sandy, last name is Saeteurn, S-A-E-T-E-U-R-N, and Sandy Saeteurn, Richmond resident and community organizer for the Asian Pacific Environmental Network, APEN.

For those of you who aren't familiar with APEN, we're an organization that's 20 years old. Our mission is to organize low income immigrant and refugee communities here in Richmond, Oakland, as well as across the State of California on environmental justice issues.

And first off, APEN would like to thank the CSB for conducting a thorough investigation and providing real solutions and recommendations that the community can

1 rally behind.

And today, we're here not only
with our Richmond fellow residents and the
community here, but we have our brothers and
sisters from our neighboring refinery cities.

we want the same thing. We want
environmental protections. We want justice.
And so we're all scared, of course. I know
I'm scared. I grew up here in Richmond,
lived right across the street from the
refinery, had to deal with a lot of incidents
that, you know, me as a kid growing up here
shouldn't have to be dealing with.

I had tons of health issues
growing up. And now I'm raising a family
here. So I definitely am concerned. I know
all of our community members are as well.
And we look to all of you, the regulatory
agencies, our elected officials and the
Government to do your job and protect us.

So tonight, as a Richmond resident

Would anyone like to address that question, as to how do you achieve the triparthied system?

MR. HOLMSTROM: Well, I mean, we think that, as we say in our report, that the elements are already there. That in California you have, I mean, you've heard from, I think, the two major locals, both in the comment period and also here tonight, engage very eloquently about issues they're facing that the two unions have.

So I think that that element is certainly strong and very committed to improving the system.

I think we've heard from the regulators here tonight that they're also committed to improving the system. And I think the comment that I heard earlier about having the will to change is an important one.

And I think there's always a lot of reasons to not take action. But I think

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what I observe from the various parties here in California ever since we engaged out here last August was a strong will to change, and improve and prevent these incidents from occurring from a number of different stakeholders.

And we've heard that from industry as well. We've heard a strong desire from industry that these incidents are not acceptable from their perspective. And they're going to do everything they can to prevent them.

So I think that, from the will standpoint, I think it's off the charts from what we've seen. And that's been our experience. And I think, as one speaker said earlier, it's at the execution stage. And I think that's where we're at right now. And that's obviously always a critical stage, when people (inaudible).

DR. HOROWITZ: Thank you. And we'll go back to the room. Next is Nicole

I'd like to begin by thanking the

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CSB members, and Chair and the staff for coming out to the community, and not only for that but for the work that you do and for your work to really get through these investigations, to find the root causes of incidents but also for your consideration of some new perspectives and approaches to prevention.

Overall, while I think the Safety
Case approach is appealing, I actually agree
with several of the written comments on the
Website that point out that there are some
important underlying conditions that must be
in place before we can move away from the PSM
standard and embrace more of the Safety Case
approach, in particular, Steve Gill of the
U.K., and Naj Meshkati and many of the
comments made by Ms. Rosenberg.

I think at best it's a very long term goal. And given the current state of Cal/OSHA I think we're far from ready, although I certainly appreciate the steps

outlined by Mike Wilson earlier. I think we need to take a real assessment of where we are right now.

But there are some short term immediate recommendations that, if enacted, could lay the foundation for, down the road, integrating more of a Safety Case approach.

And a couple of these are, first, to recommend to the Governor that California reform its labor code to require the timely abatement of serious violations. This was raised by Congressman Miller.

This is a law that exists in

Oregon, and Washington and really throughout
the country through the IMAGE (phonetic)
program. And it's working very well at all
three locations. And we know this because we
have, through our office, interviewed the top
officers of all three of those programs.

So it really helps a great deal to have that kind of recommendation coming from the CSB to the Governor.

A second related point is that CSB
had a recommendation that Chevron make
certain changes in all of their (inaudible)
facilities. Now, I understand this is fairly
typical recommendation you make. It's
important to note that in California we still
do not ever have a repeat citation policy
which really ties the hands of the agency
when it finds similar violations at other
facilities in California, such as the people

who came up here from Los Angeles.

So having a repeat policy that's at least as effective as Federal OSHA, with Cal/OSHA's enforcement agency much more teeth right away, not only across the refineries but across the chemical plants and all the facilities in California. Federal OSHA's repeatedly raised this with Cal/OSHA through its annual FAME audits.

We have had a lot of talk about different regulatory regimes. But they will really only work with effective enforcement

1 and adequate staffing.

And it's important to mention that Cal/OSHA does have a couple of very special strong tools. One is it actually does have authority under its PSM to address inadequate process hazard analyses and to cite the companies for these. And they have done that on some occasions. So that authority exists.

what we call orders prohibiting use, OP use (phonetic). And as you know, that was used in the Chevron Refinery to shutdown a unit for eight months. So there're some really great tools we have.

But what we really need is more adequate staffing. And I think that we need more than just more inspectors in this isolated PSM unit but also throughout the agency for when the citations get appealed. Then you need to have the legal unit and other experts come in and defend. So it just can't be the PSM unit itself.

So if you look at what Federal OSHA thinks we should have on benchmarks for Cal/OSHA for inspectors it's 805. If you look at what we should have if we had the equivalent of what Oregon or Washington has, we'd have close to 900.

But what do we have, in fact, 165, and no real plan to change that except for the latest budget which has 12 new safety engineers, which I assume are going to the PSM unit.

So we really need specific instructions from you of what would be adequate staffing if we're going to look for the more aggressive safety regime approach.

recommendation to move for the more
triparthied model. But again, we agree with
some of the comments by Naj Meshkati about
the importance. In order to have true
employee involvement, that above that you
have to have genuine management commitment

1 and a safety culture.

And that means not just have the operating plants here in California, but at the parent company at the international level where the major financial decisions are made about investments in maintenance and operations.

Employees may be participating on some of these teams to do PHAs and some of the follow-up recommendations so it can look like there's employee involvement. But as the interim CSB report showed, upper management at Chevron often ignored internal recommendations.

Years ago when I was working for OCAW, I learned from workers at the Richmond Refinery about how draft PHA reports were always far more detailed with all kinds of specific findings and recommendations.

But when the final PHAs were reviewed and issued, as they generally do by the legal department, they were much more

general and much less useful in terms of pinpointing what the actual problems were.

So the problem was not employee involvement but management commitment to addressing hazards in a serious way.

Finally, I support the concept of leading and lagging indicators. It's a great idea that can be done immediately. It can provide a more comprehensive set of factors to consider when targeting inspections. And Cal/OSHA already has the discretion in their mandate to do that.

So finally, I just wanted to say, and I think Henry mentioned it too about the General Chemical spill, if anyone was around here for that, California should expand this initiative not only to protect people living near refineries but also chemical plants that kind of alter the whole jurisdiction of PSM.

And again, I want to thank you for coming out tonight to Richmond to hear from the community.

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regulatory system that is managed by a strong industry, a weak labor force and a weak Government representation.

We see the strength of the oil industry and the influence they wield in public opinion and policy with their lobbiers and their advertising. We see their strength in the millions of dollars they spend on local elections.

We see the weakness in unions when industry is able to ignore their efforts and their recommendations. We see the weakness of unions when Government interferes with their efforts to exert their power.

We see the weakness of our

Government when our legislators are unable to
hold the industry accountable, when our

Government can only fine Chevron less than
what they spend in a local election for
criminal actions for the fire created by
negligence.

So Richmond is in a special place

in that the city issues permits to Chevron projects. Under the current system, these permits have been approved on the words of Chevron representation. But that must end.

Chevron must finance independent regulators chosen by the city with guidance of unions and local environmental groups.

And if Chevron does not meet the Safety Case requirements, the regulators should have the power to stop any processing in the sections that fail the inspections.

Concern was voiced over a weak
Safety Case regime, but the flexibility of
the Safety Case regime would enable changes
which is not the case now.

The Contra Costa community has awakened. We will make sure that we have a strong Safety Case regime by pushing our Government to do the right things necessary for safety and by supporting our unions.

The unions are our first line in defense against the excesses of industry. As

Good evening, Chairman MoureEraso, and Board members and staff. My name
is Diane Bailey. I'm a scientist with the
Natural Resources Defense Council. And we're
also members of the Bay Area Refinery Action
Collaborative.

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I'm here today in strong support of the CSB recommendations, including the Safety Case. We're very grateful that you came here to this community tonight and that you're making a very serious effort to address and improve refinery safety.

I want to echo and highlight just

briefly some of the comments that you've already heard tonight. First, I'll note Board member Griffon's comments about how it's really not an either/or choice between the Safety Case and regulation. We need both. And we agree.

We support the staff's recommendations on the Safety Case with many of the strengthening recommendations that you've heard here tonight, particularly from the representatives of Congressman Miller and Supervisor Gioia's office.

These were things like improved enforcement, for example, giving the Contra Costa County more authority for direct enforcement, providing sufficient resources for more qualified inspections and inspectors, requiring the refineries to adopt best practices and also timely abatement.

These are just some of the strengthening provisions that I think that you've heard a lot tonight. We really need a

proactive approach to refinery safety to replace the current reactive approach.

Chevron, in its comments, says that the current safety measures are working just fine, and they support the status quo.

However, as your staff noted, in 2012 we saw 125 refinery safety incidents, 17 of which were in California, including the August 6th, 2012, fire at Chevron Richmond. And that sent 15,000 residents to the hospitals as we've heard so much. And that's the status quo, and the status quo must go.

As California faces the import of ever dirtier, and more corrosive and more dangerous crude oils, it is now more important than ever that refinery safety be improved.

I'll note that we strongly support the many comments that the steelworkers have made. We think that the voice of the workers at refineries is really essential to informing this process and

Page 204 1 continuing to improve safety measures. It's essential that the oil 2 3 industry be held accountable. We cannot let 4 the incident of August 6th, 2012, ever, ever happen again. This is what the community 5 6 Thank you. deserves. 7 (Applause) 8 DR. HOROWITZ: Thank you, Ms. 9 Bailey. And next we go to Ross Nakasone, I 10 believe it is, of the BlueGreen Alliance. 11 Did I say that correctly, sir? 12 MR. NAKASONE: The BlueGreen 13 Alliance, yes. 14 (Laughter) 15 MR. NAKASONE: Ross Nakasone with 16 the BlueGreen Alliance, N-A-K-A-S-O-N-E.

17 DR. HOROWITZ: Yes, thank you.

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MR. NAKASONE: Good evening. I'm the California policy organizer with the BlueGreen Alliance. The BlueGreen Alliance (inaudible) via email is a national nonprofit that unites ten of the largest unions

here in the United States as well as four of the larger environmental groups as well, including NRDC and the Sierra Club.

We also are a partner in the Refinery Action Collaborative of the Bay Area. And we support the analysis and direction of the CSB report on the Chevron incident.

And specifically we commend the report for accurately recognizing that Chevron management repeatedly neglected to respond to warnings, concerns and recommendations issued by workers and technical staff at the Richmond facility.

Even though Richmond Chevron workers recommended employing inherently safer systems due to management of change process, Chevron management ignored those recommendations.

We also commend the report's acknowledgment that the California process safety management standard needs to be

strengthened in order to prevent such
disasters from occurring again. (Inaudible)
referencing sulfidation corrosion as has been
discussed before.

And we also agree with the report in recognizing that Cal/OSHA's ability to sufficiently inspect the facilities and report regulations is hampered by severe under-staffing and under-funding of the agency.

And so in accord with all of that,

I'd like to highlight the three

recommendations that would make an effective

system, and you've heard them before.

But I think they're worth

mentioning again, adequate financial and

personnel resources for Government agencies

to ensure more robust enforcement and

oversight and strong enforceable

requirements, including job protection, to

ensure meaningful worker involvement in

directing or preventing future accidents and

to clear focus and outcomes that are measured
by group safety rather than box checking.

Again, thank you so much for all your work and the staff's work. It's really quite a tremendous effort. And thank you for your leadership.

7 DR. HOROWITZ: Thank you very 8 much.

(Applause)

DR. HOROWITZ: Next we'll go to
Andres Soto of Communities for a Better
Environment and the Richmond Progressive
Alliance. Mr. Soto, are you here? Oh, there
you are.

MR. SOTO: Good evening, Mr. Chair and members of the Board, for coming here to Richmond. I would like to thank you very much, as well as for the work of your staff, the diligent work that they've been doing to examine really the causes of this.

And essentially it validates what we in the community have been saying for

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years, that Chevron and, by extension, the industry in general, the WSPA folks and API folks, that they put profits ahead of health and safety.

They put profits ahead of the health and safety of the community members, of the labor force, and they squeeze every penny that they can to enrich their shareholders.

I had the benefit of attending the Chevron shareholders meeting in 2013 in San Ramon at their headquarters, their corporate headquarters. I had to pass through a phalanx of security, metal detectors, all sorts of things.

And then once I got inside there, it was really a parallel universe. Their world is not the same as our world. And those of us who are in the community and have lived here in the shadow of these refineries, have endured the flaring, endured the consistent pollution, not just the episodic

pollution but also the persistent pollution that has injured our community, not only through cancers and asthma and all other sorts of autoimmune diseases, but also the way they have injured our democracy.

And particularly, this gets to the question of the political will to actually enforce some of these changes, make these changes and make them enforceable as your staff has recommended.

We, here in Richmond, just in the last election, Chevron spent \$1.2 million which is more than the record fines they paid for this incident. And that's in a local city council election. Imagine what they're spending in Sacramento, not to mention Washington and all the other state capitals.

So that's the challenge that you guys have presented to us and that we are going to take on. And that's the challenge that we are going to have to present to our elected officials, you know.

We need the transparency of this regulatory scheme, not just for the workers but for the community. This issue, this hiding behind the skirt of trade secrets is really not a system that is going to impact our community in a positive way.

And we have to strip that away.

Because these guys trade this stuff back and forth. They're a cartel. We know that because of the way they're planning their bringing in of the North Dakota Bakken and the tar sands into the Bay Area via rail, the rolling pipelines, and the dangers that presents.

That's not your bailiwick right now. I guess that would be the NTSB, your counterparts. But, you know, that makes our lives complicated here.

But here in the Bay Area, we're very lucky, because we have a long history of experience in learning about this stuff. The information presented in these reports has

been tremendously educational to our community and to this region in general.

and so I want to thank you. I urge you to adopt the recommendations of your staff. If you need to take these necessary recommendations or amendments that seem to really reinforce what everybody is saying, then go ahead and do that.

But I think we want to begin implementing the Safety Case right here in Richmond, right now. We want to do it through our Industrial Safety Ordinance in Richmond and Contra Costa County.

We need to have one in Pittsburgh, because of the WesPac project and then, ultimately, in Solano County because of Venetia and, of course, our counterparts in Southern California.

So I'll leave it at that. But because of your great work, we want to present you guys with some plaques of our thank you for your great work.

1 safer to be here at the --

2 (Laughter)

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DR. HOROWITZ: It does indeed.

MR. BRESLAND: I don't have any
plaques for you. Maybe I brought a message
that they don't quite appreciate us as much

as the one that can (phonetic).

Good evening, my name is John
Bresland, spelled B-R-E-S-L-A-N-D. I'm a
former chairperson and Board member of the
Chemical Safety Board. I had the pleasure of
serving the CSB for ten years.

I appreciate this opportunity to make a statement regarding the CSB's recommendation that California implement what is known as the Safety Case.

I have over 40 years experience with process safety, both in industry and with the U.S. Government. Throughout my career, including my tenure at the CSB, I've focused on effective ways to prevent or minimize the consequences of process safety

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accidents such as fires, explosions and toxic releases.

I know that incidents like these hit close to home. As a CSB Board member I met with families whose lives were forever changed because of catastrophic accidents.

I understand the fear, the anger and the uncertainty that grips the workforce and the surrounding community following these types of events.

I share the common desire of workers, employers, elected officials and communities to ensure that the facilities operate safely. And most importantly, I recognize that changes are required to prevent process safety accidents from occurring.

Calls for regulatory changes are appropriate. It is important, however, to ensure that we do not make decisions in haste or simply for the purpose of change. To be credible, findings and recommendations

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arising from incident investigations must be grounded in rigorous scientific and engineering principles.

Arguments used to support them must be supported by data and evidence that has been subjected to rigorous technical scrutiny.

Only then can we be certain that we've identified the true root causes of an incident and have developed effective recommendations to prevent a recurrence.

Unfortunately, the CSB Safety Case recommendations fall far short in this regard. There is no empirical evidence that the Safety Case is more effective at preventing process safety incidents than other regulatory approaches, including California's process safety management standard.

The CSB admits as much when it states in the report that, "There have been few objective studies conducted on the impact

of the Safety Case regulatory approach on safety performance."

As a result, the CSB is left to promote the benefits of a regulatory regime unfamiliar to U.S. regulators and industry alike through what is little more than a limited survey of anecdotal reports and personal opinions.

I'm not alone in my concern. A number of highly regarded safety experts have urged the CSB not to approve this recommendation.

Dr. Nancy Leveson, for example, has worked in the area of system safety for 34 years. She is currently a professor of aeronautics and astronautics and a professor of engineering systems at the Massachusetts Institute of Technology.

In the area of public accident investigation, she served as a senior consultant for the Commission on Deep Water Horizon and as a member of the Baker Panel.

Dr. Leveson has written a letter, mentioned already this evening, has written a letter to the CSB which expresses her strong reservations about the Safety Case. And I have a copy of her letter for introduction into the record for this evening's meeting.

Dr. Leveson states that there is insufficient objective evidence that the Safety Case is superior to other regulatory approaches or that it more effectively promotes and improves process safety.

Careful evaluation in comparison of the efficacy of the available approaches, including the Safety Case, simply has not been done.

She adds, "Most papers addressing or promoting the use of the Safety Case regimes ignore the fundamental question of whether a Safety Case regime is effective, let alone more effective than other approaches.

Unfortunately, the draft

regulatory report suffers a similar deficiency in that CSB has offered little more than personal opinions regarding the effectiveness of the Safety Case regime supported by reference to other personal opinions.

A far more thorough empirical analysis is required before the CSB should recommend such a sweeping change. In fact, Dr. Leveson believes that, if anything, the weight of the available evidence indicates that the Safety Case offers no superior protection against process safety incidents.

She observes that (inaudible)

Safety Cases have been faulted in numerous

accident reports. For these reasons, Dr.

Leveson very recently confirmed to me her

belief that, "This idea of using Safety Cases
in the U.S. is a very odd one."

I'm also concerned that the CSB has not adequately considered or disclosed the burdens and potential consequences of the

fundamental change that it is proposing. The CSB report fails to consider the very real potential for diminished safety reforms during a transition to the Safety Case.

The Safety Case cannot be achieved by executive directive. It can only be implemented through legislative action. It will take years to implement and comes at a significant cost.

Every dollar spent by the State of California to implement the Safety Case approach is a dollar that is not spent on other efforts including the existing process safety programs.

Every hour spent by an inspector learning how to implement the Safety Case is an hour not spent on an on-site inspection.

Without clear empirical data showing a guaranteed benefit, these tradeoffs are not acceptable.

Dr. Leveson again shares my concerns. She is worried that the agency

does not fully appreciate the resources that the State of California would need to implement the Safety Case recommendation.

Dr. Leveson believes that the effective implementation of the Safety Case would require California to allocate millions of dollars to the hiring and training of a significant number of additional regulators and inspectors.

I believe that the CSB needs to first conduct a rigorous technical study of the different regulatory regimes so that it can develop a meaningful data on which it can then base a recommendation.

If there is a demonstrated benefit to the Safety Case, elected officials and regulators can then make an informed decision about whether its benefits outweigh the costs.

But the CSB is aware Federal OSHA is working to improve the PSM standard through a recently issued request for

1 information.

Furthermore, President Obama has signed an Executive Order establishing a federal multi-agency chemical facility and safety and security working group with a mandate to further improve chemical facility safety and security in coordination with owners and operators.

With these efforts underway, a better approach would be for CSB to study the Safety Case while exploring efforts to improve the existing process safety management program.

And for these reasons, I
respectfully oppose the CSB recommendation
directed to the State of California to
implement the Safety Case. Thank you for the
opportunity to speak here this evening.

DR. HOROWITZ: Thank you. Was there a --

21 (Applause)

DR. HOROWITZ: -- a letter that

1 you wanted to --

2 MR. BRESLAND: I'll get it for you.

DR. HOROWITZ: Okay. George R.

Monterrey, Mr. Monterrey?

MR. MONTERREY: Yes, my name is George Monterrey. And it's spelled M-O-N-T-E-R-R-E-Y. And thank you, CSB Board, for letting me speak here tonight.

I represent PEC, Pittsburgh Ethics
Council. And in Pittsburgh we are upset that
our city council would consider a dangerous
product like WesPac and not notifying us
about this project.

WesPac is trying to refurbish and build a huge storage and transfer terminal for crude oils brought in by rail and barge on an old and decrepit PG&E plant that has not been in service for two decades.

And, it being so close to our homes, schools, parks and churches, we stand in support of the Chemical Safety Board's

recommendation for Safety Case regime before any crude oil related project can start up.

If we have the Safety Case regime now, WesPac's dirty crude by rail could not go forward. So Pittsburgh would like you to adopt the Safety Case regime.

And in closing, the gentleman that spoke, all the gentleman that spoke for the petroleum industry, they're still for the crude.

(Applause)

DR. HOROWITZ: Thank you, Mr.

13 Monterrey. Next is Mr. Roger Lin of CBE.

14 Mr. Lin?

MR. LIN: Good evening, members of the Board. I'm Roger Lin, L-I-N. I'm an attorney with Communities for a Better Environment. Thank you again for coming to Richmond. I won't keep you long, just three really quick points.

First, your staff's thorough and extensive work correctly (phonetic) done by

the current refinery safety system is broken.
We need systems in place that would never
allow Chevron management to ignore the advice
of its own safety inspectors.

Second, the Safety Case regulatory regime properly shifts risk management responsibility to the company and its employees and requires continuous risk reduction. This community needs the Safety Case.

Most of all, and in all due respect to the prior chairperson of the CSB, it replaces the relatively insignificant fines that are basically like chump change to the refineries with an actionable license to operate. We need this.

Third and finally, to effectively implement this new regulatory regime, it's essential to obtain real and meaningful community and worker participation. These are the eyes and ears that will assist regulators to ensure effective

1 implementation.

And as the Board's highlighted tonight, the opinion of workers and community must be given the same participatory weight as industry and regulators.

If there are any doubts about the effectiveness of this participation, remember that this community, this community busted Chevron for trying to hide the company's switch to refining a lower quality oil feed supplement.

And the Court of Appeal agreed with us. We can get there without litigation. But first we have to have that equal weight participation.

Finally, this problem is real, urgent and just as big, if not bigger, than the required solution. Thank you again for your time. Please adopt your staff's recommendation. As I said, they're a great start.

(Applause)

DR. HOROWITZ: Thank you, Mr. Lin.

2 Melvin Willis, ACCE. Mr. Willis? Thank you.

MR. WILLIS: Good evening, members
of the Board and staff, Melvin Willis, W-I-L-

5 L-I-S.

The last time you guys were out here and came up with those great recommendations for modernizing refineries as nationwide recommendations, I sat here before you and told you that when those recommendations were made on the pipe that exploded in 2012, happened in actually 2002. I was 12 years old when those recommendations were made.

And then in 2012, ten years later, it was still left unattended, you know, pure negligence. And nothing was done at the age when I turned 22.

This is definitely something that is really needed. I've heard arguments saying that the current standards are okay today but clearly not, if under those same

standards 15,000 people went to the hospital and almost 19 workers have lost their lives under those standards.

So just, you know, I don't want to take any more of your time. You guys have heard it all.

But one thing that I would ask
that be put on these recommendations for your
consideration is that when you recommend
these to the cities, states and other
entities that you say that these
recommendations should be immediately
adopted. Thank you very much.

(Applause)

DR. HOROWITZ: Thank you, Mr. Willis. And next we will go to Mr. Andy
Katz. Mr. Katz, are you here?

MR. KATZ: Good evening, Board members. My name is Andy Katz. I'm a director at the East Bay Municipal Utility District, and I'm a Clean Air advocate for Breathe California, a public health

1 organization.

And we're here to support the community, and the workers and the Chemical Safety Board's recommendations. And I encourage you to adopt the report in front of you.

Your report is supported by your findings. And your findings are supported by the facts. Your report very well illustrates the failures in the current system, the failure of the facility to prevent the disaster on August 6th, 2012, a failure to perform adequate maintenance and the failure to implement inherently safer technology that would have prevented the sulphide corrosion that was a major cause of the refinery explosion.

The report goes into a number of excellent issues. It discusses the coordination between the agencies, transparency and the empowerment of workers through the triparthied system.

It's important to emphasize what you've talked about in terms of regulator competence and resources. But what's most important about the Safety Case is ensuring that there will be inherently safer technology as a core component of the Safety Case.

The demonstration to the regulator that there must be the safest standard achieved, that's a major improvement compared to the current system and will help keep the community safe, help keep the community healthy and protected from future disasters.

I fully encourage the authority to adopt the report in front of you to ensure that we have the community's health and safety protected.

I also encourage you to look at
the recommendations made by the elected
officials, Mayor McLaughlin, Vice-Mayor
Jovanka Beckles, Supervisor John Gioia and
Congressman Miller and follow through with

their recommendations in a subsequent report.

Because the issues have been raised, such as Cal/OSHA improvements, the ability for Cal/OSHA to be able to abate violations in a faster fashion, inter-agency roles, especially the ability of local agencies to be able to take enforcement actions, and many of those other suggestions documented in their written letters.

It's very important to follow-up on these issues. And I encourage those to be looked at in a forthcoming report following adoption of your current report tonight.

The follow through of the Chemical Safety Board would be much appreciated. All of your great work today, you fully deserve the plaques that you were given tonight and hopefully much more appreciation that those symbolize.

Your independent voice and your technical capacity has brought a real change to the conversation, a real call to action.

Therefore, what I'm saying is that the calls for delay by and large are calls

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for maintaining the status quo. And that's the one thing we cannot afford in the system.

So I urge adoption of what you have here and it's clearly safer. After all, it's only a recommendation. It just starts the process somewhere else. This isn't the final answer. All these things can be worked out as it goes through the process. And then we move on.

And we then move on to the kinds of issues that were raised by Ms. Rosenberg and Mr. Griffon, which is that any regulation will fail is there are not two things.

weak, they cannot protect the workers in those plants who have to be the people who are the onsite inspectors. And if they have to be the whistle blowers and if the unions cannot protect them as whistle blowers, we have no safety regime at all.

Because outside regulation can only go so far. There have to be people

onsite who know the process and are working with it. And they have to be protected.

Secondly, even if the regulators are trained and paid well, and I'm all for doing that, they will still be a revolving door with the industry, as we've seen with the banking industry and every other regulation that's taken place in this country, unless the political authority that is behind these regulators is concerned first with the needs of the people rather than the needs of the corporation.

When Chevron controls the

Government through its campaign

contributions, its lobbying activities and

various other ways of buying community

support, it doesn't really matter if we have

good trained regulators.

We still will get the same thing.

Namely, we'll get Chevron doing what it wants

to do in the name of higher profits.

So it would be good if the report

Page 234 would note that problem and put in there that 1 2 something has to be done about the 3 contributions and the political power that 4 Chevron and the oil industry have as a result 5 of their money. Only then, only when the public 6 7 understands that that really is their safety, 8 that they elect people who are willing to 9 represent the people rather than the 10 corporations, can we really make these kinds 11 of operations safe. Thank you. 12 FEMALE PARTICIPANT: 13 (Applause) 14 DR. HOROWITZ: Thank you, Mr. 15 Parker. And how about Tarnel Abbott, Mr. 16 Tarnel? Ms. Abbott? That's Tarnel 17 MS. ABBOTT: Yes. 18 Abbott, it's T-A-R-N-E-L A-B-B-O-T-T. 19 you very much for --20 DR. HOROWITZ: And representing 21 the Richmond Progressive Alliance also,

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ma'am?

1 MS. ABBOTT: Yes.

DR. HOROWITZ: Thank you.

MS. ABBOTT: But I'm also representing myself as a citizen of this city, resident, long-term resident. I do want to thank the CSB for coming to Richmond

and spending a lot of time on this issue.

I was pretty close when the fire happened. And I also sought medical attention. But because I did not go to an ER, I went the next day and saw my doctor, my visit was not recorded or counted.

I'm probably not the only one. So let me say that 15,000 people went to get medical help, it's at least 15,000 and maybe more.

The toxic load in Richmond is severe. It's from the Richmond Refinery, it's from the port, it's from other industrial sources. The people in this community have an over-burden, a health over-burden, an overload.

I worked for 22 years at the Richmond Public Library as a librarian. And I lost so many colleagues to cancer that it's absolutely heart breaking, young people. And it's continuing.

I do think Chevron is partly to blame for that. My son had asthma, and I can tell you now that he moved away, he doesn't have asthma anymore.

In terms of the trade secrets,

Chevron has used proprietary information to

basically not allow testimony in a public

courtroom. And so I would be very wary about

that.

In terms of enforcement, the prior speaker, Mr. Parker, said it beautifully, because Chevron spends so much money on the local elections it's very hard for the local body to be the objective regulator that they need to be.

They need to do the regulations, but somehow the real teeth have to be

separated from the corruption of the democratic process that happens when elections are bought. And they are bought.

It's utterly shocking and disingenuous when industry expresses fear that the Safety Case approach might even create more risk. That is just the most ludicrous thing I've heard.

As I see it, the Safety Case approach is something that strives towards prevention of accidents, and because it sends up the inclusion of the workforce into the recommendations.

And they are the ones on the front line who do know what's needed. I think these are very good recommendations, and I urge you to adopt it. Thank you very much.

(Applause)

DR. HOROWITZ: Thank you very
much. And next we'll go to Jeff Kilbreth,
Richmond Progressive Alliance. Mr. Kilbreth?
MS. ABBOTT: He's gone.

exploring for fossil fuels. We already have

five times the amount in service than we can

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1 safely burn. Thank you.

so regarding the Safety Case regime, so I mean, look at some of the stuff that's happened lately. We have the explosion a year and half ago. We've been seeing these bomb trains with Bakken shale oil, just can't stop exploding, back two the last couple of weeks.

We have this just absolutely ridiculous disaster in West Virginia. It's clear that there's a lot of industry that's just out of control and that, across the board, regulation is inadequate.

And I really hope that this can be part of a sea change of how society interacts with industry and really make the case. We need to absolutely change the way we look at things and have safety first.

And I think there's, you know,
this idea that somehow the Safety Case regime
would be more dangerous, it's ludicrous. And
I think there's one thing in there, if I

understand it correctly, that I think I see
why the corporations really don't like it,
which is to say that if things are unsafe the
regulators have the power to stop production.
That's what -- am I incorrect on that?

FEMALE PARTICIPANT: That's true, but they don't do it.

MR. MACKEREL: Of course they don't do it. So we're going to have to push them on that. But the power is there.

So, I mean, Chevron could just brush off a million dollar fine. Stopping production would actually hurt them, and actually they would have to stop with the rest of the issues.

But at any rate, I think, you know, we're in a crazy time right now. We're facing myriad really complex crises. And it's a time where we need, we need unlikely heroes.

And we have, for example, here in the Bay Area, the Bay Area Air Quality

report, the interview today. And I strongly urge the CSB to adopt this report.

And there are many reasons why adopting a Safety Case regime is critical to protect workers, and communities and environments. And I'd like to highlight one particular aspect of the CSB's recommendations that's essential, especially here in the Bay Area and across the United States.

The need for regulatory regime is adaptable and continuously improved. If regulations cannot keep up with a rapidly expanding and changing industry, cities like Richmond, Pittsburgh, Venetia, Rodeo, communities that all here in the Bay Area are facing proposals for expanded infrastructure, will be at much greater risk for repeats of the August 12th fire or worse.

We need regulations that can specifically address the rapid increase of unconventional, dirty and dangerous crude oil

being brought here into the Bay Area, including tar sands from Alberta, noting that the (inaudible) has a significantly higher sulphur content than traditionally applied crude. And it's been identified that sulfidation was a significant cause of corrosion to the pipes in the 2012 fire, and also oil coming from North Dakota's Bakken fields which is highly volatile and dangerous, as pointed out by a letter just released this past week by the Department of Transportation and evidenced by countless derailments and explosions, notably the Lac-Megantic explosion that leveled the small town and killed 47 people.

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It's an industry that's intent on maximizing profit at the expense of community and worker health and safety. And we need a strong regulatory regime to counter that.

We can't afford a reactive approach of refinery regulation if this approach is demonstrably ineffective. We

We must take bold action to protect the health and safety of workers and communities.

So I urge the CSB to approve this report. And I urge municipal and regional decision making bodies, particularly the Contra Costa County Board of Supervisors and the Bay Area Air and Quality Management District to withhold any permit, to withhold any oil expansion permit until Safety Case regime is effectively adopted and implemented. Thank you very much for your work.

(Applause)

DR. HOROWITZ: Thank you. And next is Stephanie Harvey, I believe,

Communities for a Better Environment. Ms.

Harvey? Is Ms. Harvey here?

(Off microphone discussion)

DR. HOROWITZ: Okay. And then we'll go to Katrina Ruk, Council of Industries. Ms. Ruk?

	Page 245
1	MS. RUK: Yes.
2	DR. HOROWITZ: Is it Rok or Ruk?
3	MS. RUK: It's Ruk.
4	DR. HOROWITZ: Oh, okay.
5	MS. RUK: Ruk, sorry. And it's
6	Katrinka, K-A
7	DR. HOROWITZ: Katrinka, I'm
8	sorry.
9	MS. RUK: Yes. I have a letter
10	I'll give you.
11	DR. HOROWITZ: Okay.
12	MS. RUK: I want to say good
13	evening and
14	DR. HOROWITZ: Could you just
15	spell it for the
16	MS. RUK: K-A-T-R-I-N-K-A.
17	DR. HOROWITZ: R-U-K?
18	MS. RUK: R-U-K.
19	DR. HOROWITZ: All right, thank
20	you.
21	MS. RUK: I want to thank you for
22	having the opportunity to speak today. I am

Executive Director of the Council of Industries.

We are based in Richmond, and we're a trade organization that represents members in the West County area, industrial facilities and other businesses. I also live in Richmond, for the past 25 years.

Calls for regulatory changes to improve industrial safety are appropriate as that scenario where continuous improvement is always warranted.

However, it's important that proposals for a change in the safety regime are considered and applied at the appropriate level of Government to ensure that we do not make decisions in haste or simply for the purpose of change.

It is not that the Safety Case is wrong or inherently flawed as a regulatory approach. But it does need to be applied to a broad level of industrial facilities to ensure the best outcome in improving

1 industrial safety.

The CSB's report addresses its recommendations to the State of California rather than local or regional jurisdictions, since the complexities of this issue are best suited to be assessed at the state and federal level.

It is unnecessary for the city to act on its own, given the role that the State is playing. Indications are that Cal/OSHA is already working with the CSB regarding these recommendations, and both the city and Contra Costa County should be considered as important stakeholders in the State's process.

For the city to take ownership of the complexity and cost of such a regulatory overhaul, and the ultimate administration of the safety regime that is unique to the City of Richmond, would result in additional layers of regulation with no guaranteed benefit.

This approach would also undermine the focus the city has on implementing the recommendations the CSB already made to Richmond in Contra Costa County to revise the Industrial Safety Ordinance.

Industrial safety is a complex and serious issue. Clearly by the amount of time you all have spent on this, it shows that it needs to be managed at the appropriate level of government.

The city does not currently have the capability, and it would be complicated for the city to develop the capability to manage a safety program that is not aligned and consistent with other Government safety oversight programs.

The Council of Industry believes the City of Richmond and Contra Costa County should participate in the Cal/OSHA process to consider the CSB's recommendation to adopt the Safety Case rather than pursuing local adoption. Thank you for allowing me time to

1 speak.

DR. HOROWITZ: Thank you, Ms. Ruk.

Next we go to Joseph Pillao (phonetic). Mr.

Pillao, are you here, sir?

MR. PILLAO: Joseph Pillao, I'm speaking for myself. I live in Richmond. I want to thank the CSB for all its hard work and voluminous information.

The Safety Case requires a five part process. And I believe a fatal flaw has been demonstrated tonight. We've heard from labor, we've heard from the community. Where is the 800 pound gorilla?

Chevron representatives are in this auditorium. They chose not, they chose not, they have not the character to come forward tonight and address the findings and recommendations of your report. What we'll get tomorrow is their usual pablum of (inaudible).

And there's a second problem, absence in this room. The CSB

Page 250 report acknowledges that the solution to the 1 2 safety problem is essentially political. Government at various levels will be required 3 4 to adopt and enforce new safety rules. 5 will be very difficult and is demonstrated by the absence. 6 7 In the audience tonight you don't 8 see Chevron's chief political apologists, 9 Councilman Nat Bates and Councilman Corky 10 Booze. And without the change in the 11 political regime, all of these recommendations will, when suggested, go to a 12 committee where all the issues die. 13 Thank 14 you. 15 (Applause) 16 DR. HOROWITZ: Thank you, Mr. Next we will go to Roberta 17 Pillao. 18 Sweckerman (phonetic) or Swickerman 19 (phonetic). Ms Sweckerman? Roberta 20 Sweckerman? 21 (No response) 22 All right. And how about Sylvia

1 Gray-White? Is there a Sylvia Gray-White.

MALE PARTICIPANT: She's here.

(Pause)

MS. WHITE: Good evening. My name is Sylvia Gray-White. I'm a member of CBE and the RPA. And I live in Richmond, California.

I wanted to first thank
the Chemical Safety Board for developing a
much needed way to increase our safety. And
I'm in total agreement with moving forward
with this procedure.

What is the real cost of Chevron to the City of Richmond, California? We've all heard numerous reports about how over 15,000 people sought medical treatment after the August 6th, 2012, fire.

But have you heard any reports that over 15,000 people received proper and adequate treatment? No, you didn't hear that. Because it didn't happen. How can they treat you if they don't know what

chemicals are in your body, even though the law requires that all companies that cause chemical emissions inform the medical community what the chemicals are and the possible health issues that may occur?

Chevron has not done this. Can you make them do this? If you ask for a test for chemical toxicity, your doctor will say he doesn't know what to test for. And he doesn't.

I had to go for treatment three days after the fire. The air was just that polluted. We had three Spare the Air dates after the fire.

The medical staff at Doctors

Hospital took my blood pressure which was

much higher than usual, they told me to take

an Ibuprofen and a cough drop. That was it.

They had no idea, and I had no idea what was in my body. Even the Bay Area Air Management District wouldn't tell us what is in our bodies. They only test the air one

day a week. Yet we breathe 24 hours a day, seven days a week.

The day of the fire was not one of the days that they monitored. They don't even test for chemicals like benzine which are emitted every day. My daughter has Hodgkin's Lymphoma. The multiple safety data sheet says specifically that benzine causes Hodgkin's Lymphoma.

She recently had a successful bone marrow transplant to get rid of the cancer.

She is still healing though, because of the effect of seven straight days of chemotherapy included in the bone marrow transplant procedure.

This challenge has been a part of her life and my life for the past eight years, just from breathing the air before the fire. Her illness developed before the August 6th, 2012, fire.

I had to retire from my job because of getting sick from breathing the

air in Richmond, before the fire also. I have many friends and relatives who are also suffering from the daily polluted air.

The current emission regulation standards are not strict enough. Please investigate this and remedy. There is no adequate monitoring of the rules that are in place.

It has also been reported that no deaths occurred as a result of the fire. How can you say that when there's no reference to the chemicals emitted and no one is monitoring them.

Before the fire, Richmond citizens have been getting sick and dying. Richmond is said to have the highest cancer rate in California.

I found out last year that Chevron has representatives on the Board of Directors for both Doctors Hospital and Kaiser
Hospital. They should be working together to reduce the physical challenges, but that is

not happening, because they don't want Chevron's name to be implicated.

No one is being tested for heavy metals emissions, not even employees of Chevron. Testing of heavy metals should be required for all refinery employees and should be provided for all Richmond citizens. Because even if the pipes inside are up to standard, we still have to breathe the air going in and coming out of the refinery.

I live way across town in East
Richmond Heights and took a heavy metals hair
analysis test last year which showed I have
lead, mercury and arsenic in my system in
spite of my daily detoxing, according to my
(inaudible) doctor. Reports with that, the
hair analysis test is good, because it does
record what is stored in your body cells.

I've lost over \$100,000 because of Chevron, because I couldn't get to work. I get sick driving to work, stop by Kaiser

Emergency a couple of hours and then go to

1 work around noon. I had to retire.

How much is Chevron costing other Richmond families? Richmond reportedly is underemployed. I believe that Chevron emissions play a major part in this.

Heavy metals exposure affects you physically and mentally. If it happened to me, it could happen to everybody else.

Chevron has violated our rights, our civil rights. We are all entitled to life, liberty and the pursuit of happiness.

Breathing air full of toxic chemicals has drastically reduced our quality of life, even in (inaudible). It's bound our liberty, consequently, there is no happiness.

We have had 27 Spare the Air days in the last few months. Citizens are prohibited from burning anything in their fireplaces on these days unless it is their only source of heat.

Yet, during the same period, there are no restrictions on Chevron. Smoke is

someone of the committee thought of giving

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you an award. You deserve it, not only for bearing with us, but also for educating the community.

And that's the point I wanted to get to which was brought up earlier about transparency. If you run against walls with government, and if it's even difficult for our Congresswoman, Ms. Miller, to establish changes, continue what you're doing with the community.

I hope you're impressed by the sheer presence of non-profit agencies, I had no idea. Continue involving social media.

Be transparent.

I did an experiment yesterday. I called EPA, Clean Air Board, I called all of the agencies who should know about Chevron by now. And I asked can you tell me which chemicals were released?

I have 25 phone numbers now. And one of the executive secretaries, after I told her that I would call the Governor's

Page 259

office, which I did, got behind and she called me back. And she said, yes, there's a lot of documents out there. It's at the bottom of a document.

If you manage to continue to educate the community, if you manage to continue to counsel the representatives of Richmond in how to proceed, you're going to have a lot of experts here.

And if you continue to work on transparency, if you continue to fight for what the Richmond residents want, what the general public is by law allowed to know, we can do what you can't do. And we will do what you can't do. And I hope that makes your work a lot easier.

Because, and I'll finish, because we are in an age where corporations are afraid of the general public. Because we can do what you can't do. So keep involving us and keep counseling. Thank you.

(Applause)

report. So to get to this voting, I would like to start.

I move that the Chemical Safety
Board vote to approve the Report Number
2012031 California and the following
recommendations included therein.

The first recommendation is
2012031CAR21 that refers to the Safety Case.
The second recommendation is 20120311CAR22
that refers to indicators of safety. And the
third one is 2012031 California R23 that
refers to a recommendation to OSHA to
consider the Safety Case in their
deliberations on the Executive Order in
chemical safety.

So in order for to have discussion on this, I need to have a second to this move.

MEMBER ROSENBERG: I second.

CHAIRPERSON MOURE-ERASO: Okay, we heard a second from Member Rosenberg. So do we have any discussion?

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MEMBER GRIFFON: Yes. I'd just

like to make a motion to postpone the vote on

this report until the CSB more fully

addresses some serious issues raised both in

the public comments submitted to the Agency

as well as the comments made tonight.

Specifically, this motion to postpone directs the staff, through the Chairman, to do the following.

The CSB staff shall be directed to investigate and make recommendations with respect to the effectiveness of oversight and enforcement by the State of California and the Contra Costa Health Services.

One, does Cal/OSHA have sufficient authority to require timely abatement of hazards associated with serious and willful violations?

Two, should Contra Costa County

Health Services have direct enforcement

authority under the Industrial Safety

Ordinance?

Three, does Contra Costa County

Health Services have sufficient resources to

conduct comprehensive inspections and retain

technically qualified personnel?

Four, does Contra County Health
Services have sufficient authority to require
facilities to undertake feasible risk
reduction measures such as best practices
which go beyond minimum regulatory
requirements?

Two, the staff shall convene a multi-disciplinary expert panel selected by the full Board, similar to the Baker panel established after the BP Texas City incident, to provide the Agency with an assessment of the following topics regarding regulatory process safety in refineries in California.

One, to address questions raised in the comments received by the CSB, the panel shall assess the available process safety performance data to evaluate the effectiveness of the Safety Case regulatory

1 model for refineries.

Two, assess the challenges of making Safety Case operational and effective with regard to the following topics. A, what is the role of transparency and community involvement under this regime?

B, how are workers empowered as part of the triparthied model? Have there been retaliatory actions taken against workers for their involvement and what protective measures are in place?

C, are safety committees mandatory or optional in non-union work places? How are safety committee members selected and under what authority?

D, is there a public database of incident and near-miss reporting? How are process safety performance indicators developed and used? Are these made public?

E, how are standards for minimum levels of risk set? ALARP goes into the risks beyond minimum levels.

1 F, what are the enforcement 2 methods used by regulators under the Safety Case? For example, what are the enforcement 3 4 tools beyond withdrawal of consent to 5 operate? G, What are the key transition 6 7 issues that were addressed facilities in 8 operation at the time Safety Case was adopted 9 abroad in other regimes? 10 Finally, the panel shall be established and complete its assessment 11 12 within 120 days. Such assessment shall be 13 considered by the CSB and incorporated in the 14 Chevron regulatory report as appropriate. 15 And that's my motion to postpone. 16 CHAIRPERSON MOURE-ERASO: But, you

CHAIRPERSON MOURE-ERASO: But, you know, there's a little problem here. We have a motion on the floor that has been moved appropriately and has been seconded.

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MEMBER GRIFFON: Right.

CHAIRPERSON MOURE-ERASO: And what you are saying is that we postpone the vote.

I mean, that doesn't, it's not directs on the motion's on the floor that has been seconded?

MEMBER GRIFFON: It's a procedural recommendation to postpone for a definite period of time, according to Robert's Rules.

CHAIRPERSON MOURE-ERASO: Well, I mean, how do you propose that the motion that has been seconded be addressed, that either you are approving it, or disapproving or how are we going to do it. You know what I'm saying? What we should do is to postpone action on this. That is --

MEMBER GRIFFON: That's right.

I'm sorry, could you say your opinion on the record, General Counsel?

MR. LOEB: You have two competing motions right now. You have the first motion, it was the motion that you moved and that was seconded by Member Rosenberg. You can take a vote on that.

And then you have a second motion.

And the second motion, we haven't had a

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second on that yet. So you have a second motion.

MEMBER GRIFFON: The first motion's the main motion, that's a procedural motion.

MR. LOEB: There're two competing motions here.

CHAIRPERSON MOURE-ERASO: Well,
you know, what do the Robert's Rules or Order
arguing here? What I would like to, let's
cut to the chase here.

We have a report that has been presented with two or three specific recommendations. There has been some suggestions, we included your suggestions here. But a lot of other things need to happen for having a vote on the specific issues of this investigation.

So what I would need to deal with this is, since this is the second part of a three part report, what I propose is that we vote this second recommendations of this

1 report as we have here.

And other recommendations that you are making here to do additional considerations, we consider in the third report. And we evaluate it the way that you want to evaluate it in the third report.

Because it seems to me that what we have here in front of us is the results of the specific investigation with non-specific results with three recommendations.

So if anything additional has to be considered, you have up here three pages of additional considerations that you want to happen.

Why don't we postpone that, as you suggest, to be considered in the third report that will be the final report of Chevron, with that for consideration.

MEMBER GRIFFON: You know, for the recommendations to Contra Costa and those other regulatory recommendations that may have some merit. But, I mean, the second

whole part of that is for further information to consider Safety Case.

There are questions on the Safety Case. And to move this report forward, with outstanding questions out there, I think, I just want to, I think Jim Rogers put it right. I want to be in a place where we can all come to agreement on this and get behind the report.

And I think a little more work may be not insignificant. But more work and a more balanced report will get us there.

CHAIRPERSON MOURE-ERASO: Well, if you feel so strongly about the difficulties with the report as it's written, you have the choice of voting no, you know. And then we can come to a head.

But, you know, you are proposing three pages of additional work that is going to go to the staff, personally, to be considered in this investigation. That is a list of things that could perfectly be

addressed on the third report that is not finished.

It seems to me that, I don't see any reason that if you feel like you cannot agree on what we are saying in this report and these recommendations here, if you vote no, I don't know what the other vote is going to be. And then move again into a proposal to consider the third report.

MEMBER GRIFFON: I mean, I don't want to get into the Robert's Rules too much either. But the motion to postpone does take precedence. And that should be, once that's on the table, if it's seconded, once that's on the table that's what's discussed.

But, you know, I think that the idea here is, I don't want to be in a position to vote no. I want to be in a position to vote to postpone for a definite time to address these specific things where I can come forward and be in a position for all of us to vote yes.

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1	CHAIRPERSON MOURE-ERASO: But you
2	are proposing this as an amendment to the
3	motion that I made?
4	MEMBER GRIFFON: It's not an
5	amendment. It's a procedural motion.
6	(Off microphone discussion)
7	CHAIRPERSON MOURE-ERASO: Yes.
8	But, I mean, do I have to accept the
9	procedural motion that he's proposing?
10	(Off microphone discussion)
11	CHAIRPERSON MOURE-ERASO: Well, do
12	you have a second?
13	MEMBER GRIFFON: I can't second my
14	own motion. But
15	MEMBER ROSENBERG: I second the
16	motion.
17	CHAIRPERSON MOURE-ERASO: Okay, so
18	we have a second. Okay, so we are going to
19	work within the procedures of the change that
20	you have recommended.
21	MEMBER GRIFFON: That's a, hold
22	on, a procedural motion that's seconded
22	on, a procedurar mocron chac a seconded

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CERTIFICATE

MATTER: Chevron Richmond Refinery

DATE: 01-15-14

I hereby certify that the attached transcription of pages 1 to 315 inclusive are to the best of my belief and ability a true, accurate, and complete record of the above referenced proceedings as contained on the provided audio recording.

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