

U.S. CHEMICAL SAFETY BOARD

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TESORO ANACORTES REFINERY

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PUBLIC MEETING

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THURSDAY,
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U.S. CHEMICAL SAFETY BOARD MEMBERS PRESENT:

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P R O C E E D I N G S

6:30 p.m.

MR. HOLMSTROM: Good evening.

Thank you for attending tonight's presentation on the Tesoro Anacortes Refinery incident investigation by the U.S. Chemical Safety Board.

My name is Don Holmstrom. I'm the Director of the Western Regional Office in Denver, Colorado.

The two events that are going to happen tonight is a presentation by the Professional Staff of the CSB, the Lead Investigator, Dan Tillema and myself, Don Holmstrom, and we're also going to show a video animation recreation of some of the media events around the incident, and we're going to have an opportunity after the presentation and the video, for public input, questions.

This is sort of the initial roll-out of our draft report, and we're going to

1 have a 45 day comment period on the report,
2 which is on the website. Certainly, there are
3 a number of copies of the report here.

4 So, we have a system in place that
5 those comments will be received by the
6 professional staff. We'll be transmitting
7 those to the Board, as well, and the staff
8 puts together a spreadsheet of how those
9 comments were resolved, and that's transmitted
10 to the -- to our Board.

11 So, that's the -- those are the
12 activities for this evening, and thank you
13 very much for the good turnout here. We
14 appreciate it.

15 On April 2, 2010, the Tesoro
16 Refinery here in Anacortes Washington
17 experienced a catastrophic failure of heat
18 exchanger with in the Naphtha hydro-treater
19 unit.

20 As a result of this incident,
21 seven employees were fatally injured. The CSB
22 found that the immediate cause of this

1 incident was a failure of a heat exchanger due
2 to high temperature hydrogen attack, a damage
3 mechanism that is well known in the refinery
4 industry.

5 A result of this incident, the
6 Tesoro Refinery was out of commission for over
7 seven months.

8 We have written a draft report,
9 describing this incident and our findings and
10 proposed recommendations to Tesoro, both the
11 Corporation and the plant here in Anacortes,
12 the American Petroleum Institute, the State of
13 Washington and the Environmental Protection
14 Agency. These are draft recommendations and
15 are only effective by a vote of our Board on
16 the report and on the recommendations.

17 These recommendations address the
18 need for inherently safer design, rigorous and
19 documented damage hazard mechanism reviews,
20 and a thorough analysis of process safeguards
21 and a more robust regulatory system to prevent
22 major process safety incidents.

1 Today, the CSB has released its
2 draft report on the April 2nd, 2010 incident
3 for a 45 day public comment period.

4 Tonight, we will be presenting the
5 findings from this investigation report, along
6 with the investigations team's proposed draft
7 recommendations.

8 We'd like to start out this
9 evening by discussing the duration of this
10 investigation.

11 We recognize that this
12 investigation has taken nearly four years to
13 complete and we know that this has been very
14 frustrating. It's unacceptable to all parties
15 concerned, and for that, we take complete
16 responsibility.

17 Tonight, myself and Lead
18 Investigator Dan Tillema will be presenting
19 the technical, organizational and regulatory
20 findings of the draft report on behalf of the
21 professional staff of the Chemical Safety
22 Board.

1 We will begin our presentation
2 this evening by showing an animation of the
3 April 2010 Tesoro incident.

4 We will then present our key
5 investigation findings, followed by our
6 proposed recommendations and then a public
7 comment period tonight.

8 I will now show a video depicting
9 the April 2nd Tesoro incident. Dan Tillema
10 will then discuss the technical and
11 organizational findings of the report.

12 {Video plays}

13 MR. TILLEMA: Hi. I'm Dan
14 Tillema, the Lead Investigator for the
15 incident.

16 We'll first discuss the technical
17 findings of our investigation into the Tesoro
18 heat exchanger rupture.

19 Here we see a simplified schematic
20 of the NAT unit heat exchangers.

21 The E-heat exchanger, the middle
22 exchanger on the right, failed on the night of

1 the incident. Its rupture location is shown
2 on the graphic.

3 The B-heat exchanger, the middle
4 exchanger on the left, was constructed of the
5 same materials and operated under the same
6 conditions as the E-heat exchanger, but it did
7 not fail on the night of the incident.

8 This heat exchanger served as an
9 exemplar heat exchanger during the
10 investigation and provided great insight into
11 the causes of the failure of the E-heat
12 exchanger.

13 This is a drawing of the failed E-
14 heat exchanger and the exemplar B-heat
15 exchanger.

16 Both exchangers were constructed
17 of carbon steel. The exchangers were made of
18 four segments or CANs, that were welded
19 together.

20 CAN 4 of both heat exchangers was
21 clad with a protective layer of stainless
22 steel. The purpose of this cladding was to

1 resist a different damage mechanism,
2 sulfidation corrosion, but it also provided
3 protection from HTHA.

4 We worked with metallurgists from
5 the National Institute of Standards and
6 Technology, or NIST, to determine the
7 metallurgical cause of the exchange rupture.

8 The NIST metallurgist found that
9 the rupture of the E-heat exchange was caused
10 by high temperature hydrogen attack or HTHA.
11 The B-heat exchanger was also severely
12 weakened by HTHA.

13 This image from the API-941
14 Standard used within industry for the
15 management of HTHA, shows fishers formed as
16 the result of HTHA linked together to form a
17 micro-crack.

18 This image also shows how de-
19 carbonized regions appear to be lighter in
20 color than the unaffected regions, due to the
21 absence of carbon.

22 This indications that the -- these

1 are indications that the metallurgists who
2 assisted us in the analysis looked for, to
3 determine in the NHT B & E heat exchangers
4 shells had been damaged by HTHA.

5 The NIST metallurgist identified
6 signs of HTHA in the high-residual stress
7 areas near the welds of the heat exchangers.
8 Tiny micro-cracks had linked together to form
9 large cracks that greatly weakened the shells
10 of both the B and E heat exchangers.

11 The API standards describe that
12 high-stress areas near welds can be
13 particularly susceptible to HTHA, and that is
14 what we saw with this investigation.

15 Here we see the locations where
16 the HTHA damage was identified in both of the
17 failed E and exemplar B heat exchangers.

18 On the B exchanger, there was a
19 48-inch one-third inch deep crack on the weld
20 connecting CAN 3 and CAN 4, right there.
21 There's also a 30-inch internal crack on the
22 CAN three horizontal weld. These are two

1 welds, along which the E heat exchanger
2 ruptured.

3 From this, we concluded that the E
4 heat exchanger likely also had large, existing
5 cracks at these locations. Likely, even more
6 advanced cracking that weakened the shell,
7 resulting in failure.

8 HTHA was not discovered in the B
9 and E heat exchangers prior to the incident.
10 We will now provide background as to why the
11 potential for HTHA damage in these exchangers
12 was not identified by Shell or Tesoro, prior
13 to the incident.

14 API-941 is the industry standard
15 that provides guidance on ways to predict and
16 manage HTHA. API-941 was initially published
17 in 1970 to communicate broadly, industry's
18 experience with HTHA, both HTHA occurrences
19 and conditions where HTHA was found.

20 API presents this information
21 through the use of Nelson Curves.

22 The Nelson Curves were originally

1 created in 1949, based upon observations of
2 HTHA occurrences and various construction
3 materials for refinery equipment.

4 They are the primary resource
5 refineries use when selecting materials for
6 equipment in high temperature/high hydrogen
7 service. There is no scientific or
8 mathematical model behind the locations of the
9 curves. They are purely based upon historical
10 industry experience and largely, a reflection
11 of equipment failures.

12 This slides shows the Nelson Curve
13 graph found in the API Standard 941. These
14 curves are based upon material of
15 construction, process temperature and the
16 hydrogen partial pressure, which is the amount
17 of pressure contributed by hydrogen gas in the
18 process.

19 On this graph, each curve
20 represents a different type of steel. The Y
21 axis is process temperature and the X axis is
22 hydrogen partial pressure.

1 Above each curve are conditions
2 where HTHA can occur for that material of
3 construction and below the curve, HTHA is not
4 predicted to occur.

5 The carbon steel Nelson Curve is
6 shown here in red. It's the lowest curve on
7 the Nelson Curve graph. This means that HTHA
8 can occur at lower temperatures for carbon
9 steel in comparison to all the other materials
10 of construction considered.

11 Carbon steel was the material of
12 construction for the Tesoro B and E heat
13 exchangers.

14 As the curves move upward, the
15 depicted steel requires a higher temperature
16 for HTHA to occur. These steels are therefore
17 inherently more protective than carbon steel,
18 when choosing materials of construction to
19 resist HTHA.

20 Choosing one of these inherently
21 safer materials of construction is a better
22 approach to prevent HTHA damage.

1 We're now looking at a zoomed-in
2 depiction of just the carbon steel Nelson
3 Curve. Carbon steel was chosen as the
4 material of construction for the shells of the
5 Tesoro B and E heat exchangers because their
6 design process conditions were below the
7 carbon steel Nelson Curve.

8 For nearly 40 years, these
9 conditions were relied on by Shell and Tesoro.
10 Neither Shell nor Tesoro had installed
11 temperature indicators between the exchangers
12 as shown on this schematic, and for folks who
13 don't look at this type of drawing very often,
14 that's a little bit confusing.

15 But if you remember the reactor or
16 the schematic of the unit, the reactor outlet
17 comes in as this green line and comes into the
18 exchangers at the top, and you'll note that
19 there is temperature indication here on the
20 reactor outlet. There no temperature
21 indication from the green, going between D and
22 E. So, that temperature is not monitored.

1 As shown in the video, these heat
2 exchangers fouled severely, which reduced the
3 heat transfer between the tube side and shell
4 side process fluid. The following reduced the
5 heat transfer between the shell side and tube
6 side, causing the shell side temperatures to
7 increase.

8 The impact that this severe
9 fouling had on the increased potential for
10 HTHA damage in the B and E heat exchanger
11 shells was never considered by Shell or
12 Tesoro.

13 The CSB performed a computer
14 reconstruction of the NHT heat exchanger bank
15 process conditions using sophisticated process
16 modeling software.

17 The model results estimate that
18 the stainless steel clad portion of the Tesoro
19 B and E heat exchangers, at times, operated
20 above the carbon steel Nelson Curve.

21 So, that's this region here, where
22 part of the grey area is shown to be above the

1 curves. So, that whole grey region would
2 represent the operating window that we
3 estimated and at times, part of the operation
4 would have been above the Nelson Curve.

5 So, the model results estimate
6 that the stainless steel clad portion, at
7 times, operated above the carbon steel Nelson
8 Curve. The full model operating range is that
9 grey area.

10 We call that the B and E heat
11 exchanger design, which is the blue dot, and
12 where it was located.

13 CSB modeling estimates that the
14 process design data relied upon by Tesoro was
15 not reflective of the entire envelope of
16 actual operating conditions.

17 Had Tesoro measured the actual
18 process conditions, internal company
19 procedures would have required that this
20 exchanger be inspected for HTHA damage,
21 because this portion of the heat exchanger at
22 times, is shown to have operated above the

1 Nelson Curve.

2 Had Tesoro measured or modeled the
3 temperatures between these heat exchangers,
4 the potential for HTHA could have been
5 identified and this incident could have been
6 prevented.

7 While Tesoro could have identified
8 that a portion of the carbon steel heat
9 exchanger likely operated above the carbon
10 steel Nelson Curve, the CSB modeling estimates
11 that the hottest region where HTHA was
12 identified likely operated just below the
13 carbon steel Nelson Curve, shown here.

14 To be the clear, the model results
15 found that the failure area of the exchanger
16 operated below the Nelson Curve, in the area
17 that was considered to be safe.

18 CSB process modeling also
19 estimates that the coldest region where HTHA
20 was identified during the testing likely
21 operated up to 120 degrees below the Nelson
22 Curve, shown here in the green area.

1 HTHA occurring below the Nelson
2 curve indicates that the location of the
3 carbon steel Nelson Curve is inaccurate.

4 This tells us that the carbon
5 steel Nelson Curve cannot be relied upon to
6 accurately predict the occurrence of HTHA.
7 The best way to prevent HTHA is to use
8 inherently safer design. The refining
9 industry has already determined that high
10 chromium steels are not susceptible to HTHA at
11 conditions normally seen within refineries.

12 Several organizational
13 deficiencies contributed to the April 2010
14 incident, and we'll now discuss these
15 organizational issues that we identified
16 during the investigation.

17 During the start-up following
18 cleaning, the NHT heat exchangers would
19 frequently leak from flanges, occasionally
20 resulting in fires, which created hazardous
21 conditions for workers. This hazard had
22 persisted for more than a decade.

1 Over the years, Tesoro attempted
2 maintenance and engineering solutions to stop
3 the exchanger leaks. However, these attempts
4 did not effectively resolve the problem of the
5 heat exchangers leaking during start-up.

6 As a result, various operational
7 techniques were developed to accommodate the
8 fact that the leaking would typically cease,
9 once the exchangers stabilized at their normal
10 operating temperatures.

11 The leaks were very hazardous, as
12 the hot Naphtha was high flammable and had the
13 potential to be operating above its auto-
14 ignition temperature.

15 However, because these leaks were
16 never effectively prevented, the leaks from
17 the NHT heat exchangers during start-up became
18 an accepted and normalized hazardous condition
19 at Tesoro.

20 To mitigate the leak hazards
21 during start-up, operators used steam to
22 disperse the flammable vapors using steam

1 lances. We believe this practice likely
2 contributed to the large number of personnel
3 assisting in the heat exchanger start-up on
4 the night of the incident.

5 These leaks should have been
6 prevented through engineering or design
7 changes and in the interim, Tesoro should have
8 viewed the heat exchanger leaks during start-
9 up as a high-hazard activity, and minimized
10 the number of people in harm's way.

11 Tesoro did not assess the risk
12 associated with involving additional personnel
13 in the heat exchanger start-up procedure.

14 One way this could have been
15 performed is through management of change or
16 MOC. MOC is one of the 14 elements of the
17 State of Washington PSM regulations used to
18 assess the potential risk of changes in a
19 facility.

20 Tesoro conducted an MOC on the
21 installation of new steam stations in the NHT
22 unit. However, Tesoro decided that a hazard

1 evaluation of the addition of steam stations
2 was not required under their procedures,
3 because additional steam stations only
4 involved a minor change to a utility system.

5 The safety implications of the
6 additional personnel needed to operate the
7 steam lances was not considered.

8 Tesoro also had the opportunity to
9 analyze potential procedural risk associated
10 with the heat exchanger start-up during the
11 unit's process hazard analysis or PHA's,
12 during NHT procedure reviews and the conduct
13 of management of organizational change.

14 However, PHA's and the procedure
15 reviews never identified the additional
16 personnel risk during exchanger start-ups and
17 though required by company procedures, Tesoro
18 did not conduct a management of organizational
19 change review, to evaluate the risk of using
20 additional personnel from other process units
21 to assist in the NHT heat exchanger start up.

22 The PSM required process hazard

1 analysis, or PHA's, is an element of process
2 safety management, intended to identify and
3 control process safety hazards. These PHA's
4 were conducted on the NHT heat exchangers and
5 they failed to prevent the April 2010
6 incident.

7 None of the Anacortes Refinery
8 PHA's effectively controlled the number of
9 people required to perform the heat exchanger
10 start-up.

11 After an NHT heat exchanger leak
12 incident, near workers that occurred in 2009,
13 the PHA team reviewed unspecified
14 administrative controls and determined that
15 they were in place and effective to control
16 the number of personnel present.

17 However, the CSB identified no
18 administrative controls in place to minimize
19 the number of workers present or their
20 exposure to these start-up hazards.

21 In April of 2010, less than two
22 months after the PHA team determined that the

1 administrative controls were in place and
2 effective, seven workers, five of which were
3 from other units, were requested to be present
4 during the hazardous non-routine start-up of
5 the NHT heat exchangers.

6 According to the Tesoro procedure,
7 a single field operator should have conducted
8 this start-up work.

9 Damage mechanism hazard reviews,
10 often called corrosion reviews, were performed
11 to analyze risk from damage mechanisms, such
12 as HTHA. However, all of the damage mechanism
13 hazard reviews conducted over the heat
14 exchanger's history used design data, the CSB
15 modeling estimates -- that CSB modeling
16 estimates, did not reflect actual operating
17 conditions.

18 Actual operating conditions were
19 not adequately measured or analyzed to
20 determine the HTHA susceptibility of the NHT
21 B and E heat exchangers.

22 Therefore, all of the reviews

1 determined that HTHA was not a risk because
2 the design data was below the carbon steel
3 Nelson Curve, where HTHA was not predicted to
4 occur.

5 The use of design data did not
6 account for the temperature increase that
7 occurred, as the heat exchangers fouled.

8 We can see here that the CSB
9 estimated inlet operating temperatures were,
10 at times, higher than the design inlet
11 temperature.

12 We identified significant short-
13 comings with the applicable industry codes and
14 standards, which we'll now discuss, and I'll
15 turn the presentation back over to Don
16 Holmstrom.

17 MR. HOLMSTROM: Thank you, Dan.
18 As I mentioned previously, API-941 is the
19 industry resource on HTHA. However, it is
20 very permissively written, and what we mean by
21 that is there are a lot of should's' in the
22 standard and not very many shall's', and it

1 contains no minimum requirements for users to
2 prevent HTHA, and a minimum requirement in the
3 API world is determined to be a shall'.

4 It does not require the
5 implementation of inherently safer design,
6 where feasible, such as use of high chromium
7 steels, that API has indicated are not
8 susceptible to HTHA at conditions normally
9 seen in refineries.

10 It also does not require users to
11 verify actual operating conditions, when
12 performing HTHA susceptibility analysis.
13 Other API standards also share these
14 weaknesses.

15 These weaknesses are especially
16 troubling when there is not quantitative proof
17 that the location of the Nelson Curve
18 accurately predicts HTHA.

19 The location of the curve is based
20 upon voluntary submittals from companies of
21 single operating points, where failure did or
22 did not occur.

1 However, it is difficult to verify
2 the quality of the data provided in the
3 submissions and not all incidents are
4 reported.

5 For instance, Tesoro did not
6 formally report this failure in a written
7 submission to API.

8 The April 2, 2010 incident is not
9 the first incident where HTHA was identified
10 to have occurred below the carbon steel Nelson
11 Curve, that area thought to be not susceptible
12 to HTHA.

13 We learned in our investigation
14 that HTHA has been found to have occurred
15 below the carbon steel Nelson Curve in at
16 least eight other refinery incidents at
17 companies, including Exxon Mobile, Valero,
18 Shell and Quantico Phillips.

19 In 2011, API issued an industry
20 alert on HTHA and refinery service. The API
21 alert noted multiple incidents of HTHA in
22 carbon steel equipment at operating conditions

1 where carbon steel was previously thought to
2 be resistant to HTHA.

3 These refinery incidents and the
4 subsequent API response strongly suggests an
5 industry-wide problem with the carbon steel
6 Nelson Curve.

7 As a result of both the Tesoro
8 failure and the other eight incidents of HTHA
9 below the Nelson Curve, the CSB proposes a new
10 location of the carbon steel Nelson Curve
11 shown here, and it's the line at 400 degrees,
12 at the bottom of the graph.

13 The location of this new curve is
14 below the likely operating conditions at which
15 HTHA occurred in Tesoro's heat exchangers.

16 It would also permit the use of
17 carbon steel equipment that operates in
18 hydrogen service over 400 degrees. It would
19 prohibit that use, which is the temperature
20 that API identifies as the minimum temperature
21 at which HTHA can occur.

22 We also identified some

1 significant deficiencies with the regulatory
2 system in place to prevent process safety
3 incidents, which we'll now discuss.

4 I want to emphasize that the
5 responsibility for the safe operation of a
6 facility like an oil refinery's responsibility
7 -- is the responsibility of the company.

8 However, regulations play an
9 important role in shaping how safety is
10 managed overall within an industry, and the
11 CSB, when it was created in the Clean Air Act,
12 was given an -- specifically named two
13 recipients that we would make recommendations
14 to, and the only two were EPA and OSHA, and
15 we've made probably many more recommendations
16 to other recipients, companies, trade
17 associations, standard setting bodies, but
18 those are the two that are referenced in our
19 statute that enabled us to operate.

20 Like in the CSB's investigation of
21 the August 2012 Chevron incident that occurred
22 in Richmond, California, the CSB found

1 regulatory deficiencies in the State of
2 Washington that did not prevent the occurrence
3 of Tesoro's 2010 major process safety
4 incident.

5 Washington is an OSHA state plan
6 state, meaning they're able to enforce their
7 own workplace safety regulations, as long as
8 they're at least as protective as the Federal
9 requirements.

10 Washington's process safety
11 management regulations are largely modeled
12 after the Federal requirements, the Federal
13 process safety management standard.

14 Both the State and Federal
15 regulations rely on a framework that is
16 primarily activity based, without a risk
17 reduction target and the regulations do not
18 effectively involve the workforce in hazard
19 analysis and in prevention of major accidents,
20 and what do we mean by activity-based?

21 What we're talking about is, there
22 are two of the 14 elements of the PSM standard

1 that have some goal setting. The process
2 hazard analysis element requires control of
3 hazards and the mechanical integrity element
4 of PSM requires that equipment and piping and
5 refineries, that hazardous materials be
6 contained within that equipment and piping.

7 The other 12 elements, including
8 significance ones like management change and
9 incident investigation have no significant
10 goal setting element to them, and often are
11 more activity-based, which means that the
12 activity is to do a management of change
13 review where there are not strict requirements
14 that that analysis of the change which are
15 reviewing the safety implications of the
16 change, effectively establish and meet the
17 goal of preventing an accident or a release of
18 hazardous chemicals as a result of the change.

19 Enforcement of Washington's
20 workplace safety regulations is performed by
21 the Labor and Industry's Division of
22 Occupational Safety and Health, or DOSH.

1 The CSB found that DOSH does not
2 employ a sufficient number of staff members
3 with the technical expertise needed to provide
4 sufficient oversight of petroleum refineries.
5 In fact, it only has four PSM specialists to
6 regulate the nearly 270 PSM covered facilities
7 in the State of Washington.

8 Many regions around the world,
9 such as the United Kingdom, Norway and
10 Australia have implemented regulatory regimes
11 that have improved features that are listed
12 here on this graph, consisting of both
13 prescriptive and goal setting elements that
14 place the duty on the owner/operator of the
15 facility to demonstrate to the regulator, that
16 they have risk -- reduced risks to as low as
17 reasonably practical or ALARP.

18 This approach is also known as the
19 Safety Case Regime, and I think the concept of
20 ALARP is also applied in the United States in
21 the regulatory schemes of the Nuclear
22 Regulatory Commission and also, within the

1 safety application of safety systems within
2 NASA.

3 The CSB has determined there are
4 key features of an effective major accident
5 prevention regulatory approach, such as the
6 safety case that includes duty-holder or also
7 referred to as the employer, safety
8 responsibility, including a written case for
9 safety, and what is that? It's a
10 permissioning system.

11 In other words, the employer or
12 duty-holder has to demonstrate to the
13 regulator that they have sufficient controls
14 and safeguards in place that are adequately
15 effective, in order to control the hazards at
16 the location, prior to being permitted to
17 operate.

18 Adaptability and continuous
19 improvement within the safety case regime, the
20 regulator can make changes without having to
21 go through a regulatory process.

22 One example of that, in the wake

1 of Bunsfield accident, which was an explosion
2 and fire at a tank farm in the United Kingdom,
3 that particular incident led the regulator,
4 the United Kingdom's HSC, to implement a
5 regulatory system that required automatic
6 level control for refinery processes --
7 refinery tanks having hazards material, like
8 flammable liquids, that was not really
9 previously required by either standards or
10 regulations, and they did not need to go
11 through rule making, because it's a
12 permissioning system.

13 This type of regulation -- there
14 is also active workforce participation,
15 process safety indicators that drive
16 performance and the CSB has made
17 recommendations previously on process safety
18 indicators in the BP Texas City incident and
19 also, in the Chevron incident. That's a draft
20 report currently. We think it's a key element
21 that drives transparency and accountability,
22 in terms of how process safety is being

1 managed.

2 Regulatory assessment,
3 verification and intervention, and then an
4 independent well-funded competent regulator.
5 We believe that in this report, in this draft
6 report and looking at these other regimes,
7 that the regulatory workforce needs to be made
8 up of people who have at least the same types
9 of technical competencies as those in the
10 regulated communities, to be able to identify
11 hazards and whether they're being controlled
12 appropriately and challenge the duty-holder
13 and employer where necessary, and that sort of
14 technical expertise is needed, to be able to
15 do that.

16 This type of regulatory regime
17 requires facilities to prove to the regulator
18 they are operating safely, which is very
19 different in the State of Washington than the
20 current Federal Government activity-based
21 system, that only has limited goal setting.

22 The CSB believes this type of

1 regime is the future of process safety
2 regulation in states like Washington and
3 California, and in the United States. The
4 safety case regulatory regime will require a
5 full commitment and extensive effort by the
6 Washington Legislature, regulators and
7 Washington petroleum refineries.

8 The CSB believes that this effort
9 is necessary to ensure that Washington, like
10 other regions around the world, is effectively
11 managing process safety and risk, and in the
12 process, preventing major accidents, such as
13 the April 2010 Tesoro incident.

14 Both the Chevron and Tesoro
15 incidents could have been prevented, if
16 inherently safer equipment materials of
17 construction had been used. Although
18 inherently safer technology is the most
19 effective major accident prevention approach
20 in the hierarchy controls, and the hierarchy
21 of controls for those, many of you know,
22 inherent safety, eliminating the hazards,

1 engineering are at the top of the hierarchy
2 and as you go down at the bottom, you have
3 things like administrative controls,
4 procedures, training, things that rely on
5 people, that are -- tend to be less reliable
6 than eliminating the hazard in the first
7 place.

8 Although inherent safer technology
9 is effective, this hasn't been -- this hasn't
10 been implemented or enforced, either through
11 the general duty clause, which labels EPA to
12 regulate through -- by identifying hazards and
13 standards that require those hazards to be
14 controlled in certain specific ways, or
15 through other regulatory provisions of the
16 risk -- EPA's risk management program.

17 EPA has the authority to require
18 the application of inherently safer technology
19 through the general duty clause. Furthermore,
20 the Clean Air Act provides the authority for
21 the EPA to develop and implement new
22 regulations requiring the use of inherently

1 safer systems, analysis and the hierarchy of
2 controls, to establish more effective
3 safeguards for identified process hazards to
4 prevent major accidents.

5 I will now summarize the team's
6 proposed -- these are draft recommendations
7 and they're only in effect by a vote of the
8 Board, but they're being proposed for public
9 review by the professional staff, for the
10 Board's consideration.

11 The first recommendation is to the
12 U.S. Environmental Protection Agency.

13 Revise the Chemical Accident
14 Prevention Provisions under 40 CFR Part 68, to
15 require the documented use of inherently safer
16 systems analysis and the hierarchy of controls
17 to the greatest extent feasible, in
18 establishing safeguards for identified process
19 hazards.

20 Until this revision is in effect,
21 develop guidance and enforce the use of
22 inherently safer systems through the Clean Air

1 Act's general duty clause.

2 Recommendation to the Washington
3 State Legislature, then Governor of
4 Washington. Develop and implement a step-by-
5 step plan to supplement the existing process
6 safety management regulatory framework with a
7 more rigorous safety management principles of
8 the safety case for petroleum refineries in
9 the State of Washington.

10 In the Section 8 of the draft
11 report, there are more details about these
12 recommendations. For example, one of the
13 recommendations to the State of Washington,
14 Legislature and Governor is to adopt and
15 implement the use of leading and lagging
16 process safety indicators and have those
17 reported publically.

18 Recommendations to the Washington
19 State Division of Occupational Safety and
20 Health, Labor and Industries.

21 Perform verifications at all
22 Washington petroleum refineries to ensure

1 prevention of equipment failure because of
2 HTHA and that effective programs are in place
3 to manage hazardous non-routine work.

4 In addition, provide oversight for
5 the development of a process safety culture
6 program at the Tesoro Anacortes Refinery, and
7 in the specific recommendation, there are
8 specific things that are identified as part of
9 that safety culture review, particularly to
10 Tesoro.

11 Recommendation to the American
12 Petroleum Institute. Revise API standards to
13 prohibit the use of carbon steel equipment in
14 HTHA susceptible service, and require
15 verification of actual operating conditions.

16 Make additional revisions to
17 establish minimum requirements to prevent HTHA
18 failures and to require the use of inherently
19 safer design.

20 Recommendation to the Tesoro
21 Refining and Marketing company, LLC.

22 Participate with API in the

1 revisions of API standards to establish
2 minimum requirements to prevent HTHA failures
3 and to require the use of inherently safer
4 design.

5 Follow the standards revision,
6 develop and implement a plan to meet the new
7 requirements, improve process safety
8 management programs for damage mechanism
9 hazards to require the hierarchy of controls
10 and the use of inherently safer design.

11 A recommendation to the Tesoro
12 Anacortes Refinery, implement a process safety
13 culture program that will assess and
14 continually improve any identified process
15 safety culture issues at the Tesoro Anacortes
16 Refinery.

17 With that, we conclude tonight's
18 presentation. I would point out in our report
19 and recommendations, the CSB and our Board
20 have adopted a causal analysis approach that
21 requires us not only to look at the immediate
22 causes of an incident, but organizational

1 failures, failures in culture and also,
2 regulatory deficiencies.

3 I think you'll note, and we have
4 addressed all those areas and included
5 recommendations to a wide range of recipients
6 that include the refinery, Tesoro Corporate,
7 standard setting bodies, such as API and
8 regulatory agencies.

9 This is a full accident
10 investigation report. We have placed on the
11 web, I believe over 1,000 pages of
12 documentation, including technical reports of
13 testing and analysis, including reviews of the
14 testing by third-party independent contractors
15 hired by the CSB.

16 So, there is a quite a bit of
17 reading material there, in addition to the
18 investigation report, and there is a number of
19 appendices, and one of the appendices we've
20 included is our draft Chevron report, which
21 adds a lot more detail about the proposed
22 regulatory system recommendations.

1 We would now like to have public
2 input comment, questions from the audience,
3 and I'll turn the meeting over to Hillary
4 Cohen, to facilitate that public comment
5 period. Thank you.

6 MS. COHEN: Good evening. I am
7 Communications Manager Hillary Cohen. We're
8 going to go ahead and start with the list that
9 we have the sign-up outside. Please come to
10 the front and make your public comment. It
11 will be transcribed.

12 Do you want to go down there and
13 do it?

14 MS. ROSENBERG: Hi. I'm Beth
15 Rosenberg. I'm one of the Board members, and
16 I just wanted to offer my condolences to the
17 friends, families and coworkers of the seven
18 people who died.

19 Seven deaths leave holes in many,
20 many hearts and those holes will get smaller
21 over time, but will never, ever go away.

22 You have a right to be angry at

1 the company that permitted unsafe conditions
2 to exist and to a much lesser extent, us, who
3 have been overdue in giving you the answers
4 you deserve.

5 But tonight, we've begun to answer
6 those questions and offer some solutions.

7 Among other recommendations, we
8 asked you to consider a new regulatory regime,
9 the safety case, which might down the road, be
10 more protective of workers.

11 I have some serious reservations
12 about how you -- how it gives labor a
13 meaningful role, but it's worth considering.

14 More immediately, I want to
15 support the increased funding for process
16 safety management unit. As Don Holmstrom
17 pointed out, there are only four inspectors,
18 four PSM specialists to inspect nearly 270
19 hazardous chemical facilities.

20 So, I think a more near term
21 improvement would be to bolster staffing and
22 create a separate PSM unit, with added

1 capacity, to oversee refineries and other PSM
2 covered facilities.

3 So, we really want your input on
4 this report, so we -- so, it can do the most
5 good.

6 Let us know what we're missing and
7 I'm looking forward to your feedback. Thank
8 you.

9 MR. GRIFFON: Hi. I'm Mark
10 Griffon, another one of the Board members, and
11 I understand this is a staff presentation and
12 it's mainly a listening session, but I just
13 wanted to make a quick remark also.

14 I wanted to also express my
15 condolences to the family and friends of the
16 seven workers tragically killed in this
17 incident.

18 This tragedy again, points to an
19 ongoing process safety failure in the refinery
20 sector.

21 I must first say I am disappointed
22 that it has taken so long to have some answers

1 for all of you. I do, however, feel that at
2 this point, the most important thing to make
3 sure of, is that the final report is beyond
4 reproach.

5 To this end, I would urge your
6 participation and commenting on this draft
7 report. We value this input and will fully
8 assess these comments in finalizing this very
9 important report.

10 The draft report notes
11 deficiencies of the facility, as well as
12 deficiencies with regulatory oversight.

13 First, at the facility level, it
14 must be emphasized that this incident was not
15 simply a result of not using the correct
16 material for the heat exchanger. The badly
17 corroded metal was a symptom of a broader
18 process safety problem. The process safety
19 problems need to be addressed.

20 Second, and of particular interest
21 to me, are the organizational findings and the
22 findings related to safety culture.

1 The report includes findings which
2 for those of us who have studied this issue,
3 appear to be symptoms of poor safety culture,
4 normalization of deviance, which is the idea
5 of gradually sliding into less safe practices,
6 also group think, which is a decision making
7 process that tends to marginalize dissenting
8 opinions.

9 These are just two examples of
10 such symptoms noted in the report.

11 What is of greater interest,
12 however, is how and why these types of things
13 happened. What are the causes of these
14 lapses?

15 We should not be satisfied with
16 trying to treat the symptoms. We should strive
17 to prevent the illness.

18 Lastly, the regulator. A key
19 finding in the report is that the regulator
20 DOSH is not adequately resourced for process
21 safety inspectors to cover the state. This
22 should also be addressed and the team should

1 consider a recommendation to strengthen the
2 regulator's capability, with regard to process
3 safety.

4 Again, I apologize for this far
5 overdue report, but I look forward to
6 receiving your input and finalizing this, as
7 soon as possible. Thank you very much.

8 CHAIRPERSON MOURE-ERASO: Hello.
9 My name is Rafael Moure-Eraso. I am the
10 Chairperson of the Chemical Safety Board.

11 First, I would like to echo the
12 statements of my fellow Board members, and
13 give you my condolence for the deaths of seven
14 of your brothers and sisters that died in this
15 accident.

16 I would like to tell you that I am
17 here with the CSB professional staff, and we
18 are for refinery safety reform.

19 I am presenting to you and they
20 presented to you today, our work of four years
21 to make the changes that the staff of the CSB
22 recommends to prevent further fatalities, not

1 only in Tesoro, but in the whole sector of the
2 refineries in the United States.

3 As the Chairman of the Chemical
4 Safety Board, I fully stand behind the
5 findings and recommendations of the report
6 that you saw today, and that we made available
7 in this presentation.

8 The report from the CSB
9 professional investigation team with
10 recommendations is finished, as far as the
11 professional investigation team is concerned.

12 It is -- we have hard copies in
13 the entrance. There are -- you can go to our
14 website and you will find both the report with
15 all the appendixes and the supporting
16 materials, in addition to the video, and we
17 would like you to spend the time looking at
18 this. You are probably the most important
19 stakeholders on this particular situation, the
20 most important stakeholders to try to prevent
21 these things from happening in the future,
22 because you are there. You work there. You

1 know what is -- how it is.

2 That's why we are asking for you,
3 that in this next 45 days, read very carefully
4 through the report and send to us, through
5 emails and electronically, any comments that
6 you believe will help or will improve the
7 report, as we are presenting it.

8 After that comment period, a vote
9 will be taken by the Board and -- on the
10 report, that will include your comments, that
11 will include whatever changes came out of this
12 45 day period of comments.

13 I believe that we have an
14 opportunity here, if we work together, to make
15 a difference on the safety and management of
16 refineries, and that the recommendations here
17 go a long way to prevent tragedies as we
18 experienced here in Tesoro. Thank you.

19 I'll give you back to the podium,
20 to Hillary for -- to direct the comments that
21 could come from the group. Thank you.

22 MS. COHEN: As I was saying, we'll

1 start with the list that I have, and then
2 we'll open up the floor. If you could please
3 spell your first and last name, and they will
4 -- all your public comments will be
5 transcribed.

6 The first person I have is Mr.
7 Steve Garry.

8 MR. GAREY: Thank you. My name is
9 Steve Garry, last name is spelled G-A-R-E-Y.
10 I worked as a machinist in the Tesoro Refinery
11 for more than 20 years now, and I am here also
12 as President of the United Steel Workers Local
13 12-591. In that capacity, I'm representing
14 about 500 people who operate and maintain both
15 the Tesoro and the Shell refineries, as well
16 as the general chemical plant on Marshall's
17 Point.

18 I will add, the 14 members of our
19 Local who have lost their lives, in either the
20 Tesoro or the Shell refinery in the past 15
21 years, we will not forget them.

22 I am gratified that we finally

1 have an opportunity to move towards a final
2 report that the Board can approve. I am also
3 very frustrated, as I've heard you express,
4 with how long it's taken. I am frustrated
5 with a number of assurances that have not been
6 met along the way, and I'm particularly
7 frustrated by the fact that some of these
8 assurances have been characterized by little
9 or no communication.

10 So, actually, I have a
11 recommendation for the Board right off. You
12 need to start communicating properly with
13 stakeholders and you need to do it right away.

14 I have a second recommendation,
15 also for the Board, about the most recent
16 assurance we were given, which is that a final
17 report would be ready for the Board's approval
18 tonight.

19 We will participate in the public
20 comment process, but I would like to see this
21 Board return to this place with a final report
22 that can be approved by the Board, so that

1 this community can finally receive the
2 assurance that they were promised.

3 Some initial thoughts about the
4 report and the recommendations. We've only
5 had it for about a day now, so, very, very
6 preliminary, but again, we will participate in
7 the public comment period and provide more
8 detail, and I encourage everyone else to do
9 that same thing.

10 Those who care about refinery
11 safety, we have an opportunity now for input.
12 We want to take that opportunity.

13 The recommendations do appear to
14 be a very, very heavy lift in this political
15 climate that we're in, and I think it might
16 make sense actually, to have more of a short-
17 term and long-term approach, if possible, and
18 identify perhaps a couple priorities that
19 might be achievable more short-term, that
20 could provide real benefit, and I am going to
21 come back to that here in a minute.

22 I want to talk about what I think

1 are four truths, or four facts, that people
2 who don't know a lot about refinery safety
3 need to keep in mind, if they're going to
4 really understand what we need to improve
5 across the entire industry.

6 The first fact, as stated, is that
7 the owner/operator owns the responsibility to
8 manage and -- a safe workplace. They are the
9 duty holders. They are the ones who have a
10 responsibility under the law, to maintain a
11 safe workplace and most importantly, they have
12 that responsibility, irregardless of how
13 viable or capable the regulator is or the
14 workforce is or any other stakeholder.

15 The second truth that I'd like to
16 discuss is that these owner/operators, they
17 know what they're suppose to be doing.

18 Again as stated, the regulations
19 and the industry's best practice standards
20 that are -- they're written with the word
21 should'. They are full of what these
22 owner/operator should be doing.

1 They know what they should be
2 doing. The entire industry, including Tesoro,
3 and this is the third fact, they're not doing
4 what they should be doing all the time.
5 They're not doing what they should be doing
6 often enough. That's why we have seven killed
7 at Tesoro. That's why we had 15 killed at
8 Texas City eight years ago. That's why we had
9 11 killed in the Gulf of Mexico, with the
10 entire Gulf of Mexico polluted. That's why
11 Cherry Point burned up north a short while
12 ago. That's why Chevron refinery in Richmond,
13 California nearly killed 20 people and put
14 thousands in the hospital. They're not always
15 doing what they know they're suppose to be
16 doing.

17 So, that leads me to the fourth
18 truth. The most effective changes that we can
19 make, I think at least short-term, will be
20 those things, any thing that can effectively
21 compel or require them to do what they already
22 know they need to be doing.

1 I'm going to give one example to
2 close, of a simple change, perhaps not simple.
3 Wrong word. A change that might be effective
4 in compelling compliance.

5 I think we should mandate public
6 disclosure of all leaks or losses of primary
7 containment, of all hazardous substances
8 subject to the process safety regulations
9 anywhere they occur in the operation, either
10 inside or outside the refinery, whether it's
11 a rail car coming down the tracks in the
12 Columbia Gorge or an exchanger in the
13 refinery. I think if it leaks, if it leaks
14 containment, the public ought to know about
15 it.

16 Public disclosure acts as a lever.
17 It leverages the industry's very real interest
18 in maintaining a good public image. Tesoro
19 actually should be commended. They remind us
20 all the time, that we serve at the pleasure of
21 the community. Public disclosure acts as a
22 lever with that value.

1 Public disclosure compels them to
2 do the right thing more often. Public
3 disclosure is like opening a door and turning
4 on a light in a room that has been very dimly
5 lit up until now, but it's a room where far
6 too many people have died. Thank you.

7 MS. COHEN: Thank you, Mr. Garey.
8 Mr. Kim Nibarger.

9 MR. NIBARGER: Good evening. My
10 name is Kim K-I-M, N-I-B-A-R-G-E-R. I'm a
11 health and safety specialist for the United
12 Steel Workers International Union. We are the
13 Union that represents the operators and
14 proprietary maintenance employees at the
15 Tesoro Puget Sound Refinery.

16 We're troubled by the direction
17 this meeting has taken, since the Federal
18 Register announcement in December.

19 The USW, which was a major
20 stakeholder in this investigation, was not
21 consulted or notified of the intent to change
22 the character of this meeting from a report

1 presentation and vote to something termed a
2 community listening session.

3 A little confused, as we do not
4 recall the CSB ever having a community
5 listening session, prior to a report release.

6 In discussions at the request of
7 the CSB Chair in September, the local union
8 expressed their anxiousness to get the report
9 out, but that if it meant delaying the report
10 until March or April, in order to obtain a
11 quality report, which addressed some specific
12 issues, they would prefer the delay.

13 The local union was assured at
14 that time, that getting it out by the end of
15 the year was no problem.

16 The CSB proposed releasing the
17 report and holding the public meeting several
18 days prior to Christmas, which the local union
19 advised they did not think was an appropriate
20 time to hold the meeting.

21 The CSB then proposed late in
22 January. At no time, did anyone allude to the

1 fact that the report was not actually ready,
2 despite conversations we had with the
3 investigators, as late as the 21st of January.

4 Then a week prior to a scheduled
5 vote, the plans changed. We found out through
6 a Federal Register notice that Congressman
7 Rick Larsen's office sent us, and asking --
8 asked us if we knew what was going on.

9 What we want now are some answers.
10 We want a firm date that the Tesoro report
11 will be voted on and approved. We want a
12 confirmation of the location of that vote and
13 we would request that it be held here in
14 Anacortes. We do not want to find out there
15 was a notation vote taken at a CSB Board
16 meeting, or another public meeting in another
17 part of the country.

18 We request that the CSB respond to
19 our question on the location of the vote, on
20 the final Tesoro report, so we have it on the
21 record.

22 We have obviously not had time to

1 review the final draft of the report that was
2 released late last night, but be assured that
3 we will supply written comments during the 45
4 day comment period.

5 I want to close with a quote from
6 the National Chemical Safety Program at Texas
7 A&M University regarding the Phillip's
8 chemical explosion.

9 "The most critical
10 responsibilities for chemical process safety
11 rests not with Government agencies, but with
12 industry, and specifically, with each petro
13 chemical producer at each location or
14 workplace. Through regulation, enforcement,
15 technical assistance, training and other
16 means, OSHA acts to ensure the employers
17 fulfill their responsibility with regard to
18 chemical process safety for employees, as well
19 as other types of worker hazards."

20 "OSHA's role, however, is not that
21 of a supervisory body for the industry or for
22 the individual plant. As specified in the OSH

1 Act, the responsibility for the safe operation
2 of any workplace always remains with the
3 employer."

4 So, no matter what system of
5 regulation is in place, unless the employer
6 executes their own written plan, these types
7 of tragedies will continue to happen in the
8 petro chemical industry in this country.

9 Thank you for the opportunity to
10 present some of our concerns with the
11 direction this investigation has taken.

12 MS. COHEN: Thank you. Mr. Butch
13 Cleve.

14 MR. CLEVE: Good evening. My name
15 is Butch Cleve, C-L-E-V-E. I'm a proud member
16 of United Steel Workers Local 12-591, which
17 represents me, as well as the other workers at
18 the Tesoro Anacortes Refinery, the Shell
19 Refinery and other petro chemical sites in the
20 local area, as well as Hawaii.

21 I appreciate the opportunity to
22 address the group. I haven't had an

1 opportunity to thoroughly review the report,
2 but we will -- I will take advantage of that
3 over the next 45 days.

4 Because I can't make comments
5 about the report itself, I'd like to talk a
6 little bit about the process that led us here
7 to this night, and I'll address my comments
8 directly to Dr. Moure-Eraso.

9 Almost four years have passed
10 since the terrible events of April 2nd, 2010.
11 That time has been about promises and
12 patience, promises from you, that the report
13 would be done in a timely fashion and patience
14 on my part, waiting for the report from the
15 capable, compassionate investigation team the
16 came to our aide and shed light on our
17 situation in really, one our darkest hours.

18 I understand there has been a
19 technical investigation, and there have been
20 a number of resource constraints that have
21 gotten in the way. There have been tragedies
22 in other parts of the country.

1 I also recognize that you're faced
2 with attrition and other resource issues, some
3 of which have caught the attention of the
4 Inspector General and Congress.

5 What I can't understand are the
6 promises that have been made, but not kept.

7 In 2011, you issued an emergency
8 communication related to mechanical integrity
9 and said that the Tesoro Anacortes report
10 would soon follow.

11 More than two years ago, you
12 promised some of my coworkers a finished
13 report by the end of 2012. In September of
14 2013, five months ago, you personally promised
15 me a completed report by the end of December.

16 I assured you at that time, that
17 it was more important to have a good,
18 thorough, completed investigation than it was
19 to meet some arbitrary date on a calendar.
20 You told me that at that point, the report was
21 already done, and that additional time would
22 be of no value, and yet, here we are tonight.

1 Supposedly, allegedly the
2 Government shutdown delayed this meeting
3 tonight into January, but again, here we are,
4 almost four years down the road, with no final
5 report.

6 The families, the refinery
7 workers, this community deserves better than
8 empty promises. This community deserves an
9 opportunity to weigh in on a finished report
10 and be available and participate in that
11 meeting, where the final acceptance vote is
12 taken.

13 So, I have a question for you,
14 Doctor. When and where will the final vote
15 take place and will it be in a public setting
16 where the vested parties, people with real
17 interest can participate, not buy a ticket to
18 the east coast, but come to a meeting like
19 this and participate, provide feedback, when
20 that vote is taken?

21 CHAIRPERSON MOURE-ERASO: First of
22 all, the report is there, 250 copies of it.

1 MR. CLEVE: A final draft.

2 CHAIRPERSON MOURE-ERASO: Exactly,
3 that's what it is.

4 MR. CLEVE: That's not final, by
5 any means.

6 CHAIRPERSON MOURE-ERASO: You
7 know, after -- we are giving the opportunity
8 to the community, because this is such an
9 important case, to comment on the final draft.
10 The final draft that our technical staff put
11 out.

12 So, we are going -- we are doing
13 this simply to allow all of you to get into
14 the report and to be part of it.

15 The report is there. The report
16 is finished. When we get your comments, we
17 evaluate your comments, we will set up a vote
18 for the Board to finalize it.

19 But our findings and our
20 recommendations are there in the report. You
21 can read it.

22 MR. CLEVE: Then what exactly is

1 the purpose of the comment period?

2 CHAIRPERSON MOURE-ERASO: The
3 purpose of the commentary is if, for any kind
4 of reasons, those recommendations or those
5 findings are not accurate, we would you, as an
6 interested stakeholder, to put out to me,
7 before we take the vote. That's the purpose.
8 That's the process that we decided to proceed.

9 MR. CLEVE: And not knowing
10 exactly what that final draft is going to look
11 like, not knowing exactly what the vote will
12 be taken on, again, people with a vested
13 interest in seeing a good, accurate, thorough,
14 complete report --

15 CHAIRPERSON MOURE-ERASO: I am
16 asking you to make a comment on this final
17 draft that we have here, to improve it and to
18 make it better. That's why we are following
19 this process.

20 I am giving you the opportunity to
21 correct any kind of mistake or any kind of
22 things that are not addressed in the report.

1 That's why we are having this meeting here.

2 That's why we are having the listening
3 meeting, to get that input from you, the
4 people that work in the plant.

5 MR. CLEVE: So, you're asking me
6 to be patient and wait.

7 CHAIRPERSON MOURE-ERASO: No, I am
8 asking you to give me you input, so that we
9 can include it in the report and we have a
10 final report that truly reflects what will be
11 needed for you to prevent the things that have
12 happened, to happen.

13 MR. CLEVE: I appreciate the
14 opportunity to speak.

15 MS. COHEN: Thank you. Mr. Ryan
16 Anderson.

17 MR. ANDERSON: Good evening. My
18 name is Ryan Anderson, R-Y-A-N, A-N-D-E-R-S-O-
19 N. I am a maintenance employee at the Tesoro
20 Anacortes Refinery, as well as the Local Unit
21 Chair for the Tesoro United Steel Workers
22 Members. I represent them as their lead

1 negotiator.

2 I'd just like to reiterate
3 tonight, the deep level of frustration felt by
4 myself and our members, not towards the good
5 work of the investigators, but towards the
6 delay in the release of this report.

7 Seven of our friends were killed
8 in this tragedy at Tesoro. Seven of our
9 coworkers, seven of our brothers and sisters.
10 Seven families were devastated. Our
11 membership was devastated. Our communities
12 were devastated, and for almost four years
13 now, we have all waited for a factual of
14 accounting of how this could have happened.

15 For almost four years now, we've
16 waited for a final CSB report.

17 Yet here we are, closer, yes, but
18 still waiting. Kathryn Powell, Matthew Bowen,
19 Darrin Hoines, Lew Janz, Donna Van Dreumel,
20 Matt Gumbel and Dan Aldridge deserve better.

21 For almost four years now, we've
22 waited on the CSB recommendations, to help

1 stop a tragedy like this from ever happening
2 again. Recommendations that could help reign
3 an industry out of control, an industry that
4 kills workers because profits and production
5 trump people.

6 We all deserve better. So, I
7 would ask this Board to please take this to
8 heart and bring us back a final report and
9 have it approved here in this community, as we
10 were promised. Thank you.

11 MS. COHEN: Mr. George Welch.

12 MR. WELCH: Thank you very much.
13 George, G-E-O-R-G-E, middle initial E, Welch,
14 W-E-L-C-H. Although I am Executive Vice
15 President of my Local Union and past
16 President, past Bargaining Unit Chair of one
17 of the bargaining units, I speak more of my
18 experience in the industry.

19 During the report, I heard some
20 really promising things. It is the owner's
21 duty to provide us with a workplace that is
22 safe, and Brother Gary talked about should'.

1 It's obvious that they are not doing what they
2 should do.

3 They'll tell you that they do.
4 They tell our NOSH inspectors, "Oh, no, we're
5 just fine." The process safety management
6 standard is a performance standard and in my
7 mind, the red bell and flag that goes off is,
8 "We're doing fine, as long as we don't kill
9 people."

10 Brother Gary and Brother Anderson
11 and Butch talked about the number of our
12 members. These two refineries have been
13 running for together, almost 115 years,
14 together.

15 We have had near two dozen killed
16 in our refineries, and Ryan read their names
17 off.

18 We have had to hold hands with the
19 six families of the folks that were killed in
20 (inaudible) in 1998, for the past 15 years,
21 and the hope was that it got somebody's
22 attention. Unfortunately, we relied on hope

1 and luck.

2 I really am pleased to see some of
3 the recommendations about putting some teeth,
4 some teeth to the Chemical Safety Board, some
5 authority teeth, and the recommendation is
6 that you saw some deficiencies within
7 Washington and (inaudible).

8 We have been pushing. Steve
9 talked about a heavy lift with the current
10 political climate. We pushed to get a
11 separate process at the group formed within
12 the State of Washington, as well.

13 I am pleased too, I did note that
14 the Chemical Safety Board had some postings,
15 some postings, and that's always good to see
16 the progress that's being made.

17 But enough deaths are enough
18 deaths. For the human beings, we all talk
19 about patience. I have the utmost admiration
20 for the family members, some that I finally
21 got to meet last night in my union hall, and
22 the ones that I haven't met, for their

1 patience and persistence, and we'll see what
2 they think about the report, because they also
3 will probably have comments.

4 I will write you something though.
5 Thank you very much, Hillary.

6 MS. COHEN: Thank you. Mr. Leido
7 Cantee? Ms. Nancy Miner?

8 MS. MINER: It's Nancy Miner, M-I-
9 N-O-R. I came here from Philadelphia. I
10 represent 700 oil workers of Philadelphia
11 Energy Solutions.

12 Historically, we have referenced
13 and used investigations at the CSB as
14 completed in our facility, in order to get the
15 company to change their minds on certain
16 things.

17 I can say I am disappointed in the
18 way things have been handled, with respect to
19 the Anacortes explosion. Seven families,
20 which I want to express my condolences to the
21 entire local and to those families, lost
22 someone. Somebody isn't there with them, and

1 they do need this report to be finalized, so
2 that they can move on with their lives.

3 The report appears to be as close
4 as possible. It appears that the
5 administration hasn't planned very well.

6 When we made our plans to come
7 here, we expected a public meeting, not a
8 listening session. There were things that
9 need to happen for these people, and they need
10 to happen soon, and they need to have these
11 delays stopped. I believe that's all I need
12 to say.

13 MS. COHEN: Thank you. Mr. Brian
14 Hughes.

15 MR. HUGHES: Hi. That's Brian, B-
16 R-I-A-N, Hughes, H-U-G-H-E-S. I am a root
17 cause analysis consultant and I'm based out of
18 Seattle, and I wanted to express my
19 condolences to the family members. I'm
20 terribly sorry for your loss. It's got to be
21 terrible.

22 I have a unique perspective, in

1 that I get to see failures in a lot of
2 different industries, including oil and gas
3 and including chemicals, as well as aerospace
4 and the other industries, as well, and what
5 you end up seeing with something like this a
6 lot of times, underlying everything, is there
7 is a big financial motive to get things up and
8 moving as fast as possible, to keep things
9 moving as quickly as -- and as efficiently as
10 possible, and I would stop short by saying --
11 of saying that people take risks on purpose,
12 but there -- it's a culture of risk that is
13 encouraged, starts at the top, starts at Wall
14 Street and it starts with incentives from the
15 managers at the very top, that that risk --
16 the thing is, is that with risk at the top
17 like that, it's easy for them to sort of
18 diversify that away, whether you hold assets
19 of a company in a portfolio, that the losses
20 on one side can be made up for by gains
21 another.

22 You know, the risk is really at

1 the other side of the country, or just so far
2 away from you, or if you are a manager, you
3 know, it's easy to sort of have those risks be
4 a long way away from you.

5 But people, like lost their lives
6 in this incident, they're at the sharp end of
7 that risk and they aren't able to diversify
8 that away, and that's the truth, whether it's
9 in this incident or in the incident in West
10 Virginia with the spill, or with other
11 incidents, even outside the United States.

12 As we increase our production of
13 petroleum products here in the U.S., as that
14 comes online with natural gas production, I'd
15 like to say that even though a lot of people
16 are frustrated by the CSB and the delay of
17 this report, you guys are kind of a shining
18 star in a lot of ways to bring forward these
19 kinds of incidents, for us to all learn from
20 them.

21 When I do an investigation, it's
22 always shuttered behind some kind of

1 confidentiality agreement, and I understand
2 the need for those kinds of things, but you
3 guys don't have those constraints.

4 So, what I'd like to see, as a
5 part of this and other investigations, is a
6 little deeper dive into the systemic sort of
7 financial motives that caused these risks that
8 start out on a spreadsheet made by a bunch of
9 MBA's, that translate down into real life
10 safety risks and reliability risks and even
11 quality risks down on the plant floor.

12 I think that you guys at the CSB,
13 you have a unique opportunity to sort of bring
14 that systemic risk forward, in particular as
15 production ramps up in the United States.

16 I mean, we're building the
17 refineries and we're building new chemical
18 process facilities here, and I think that the
19 time is now, to get in front of this,
20 otherwise I'm concerned that what we end up
21 with is another incident kind of like the
22 financial crisis, when there is a rush to

1 profits throughout the late 1990's up to 2008,
2 and they're like, "Why did we not see this
3 coming?"

4 You know, and so, I hope that in -
5 - you know, the next few years, that we can
6 see a reduction in risk and we can see -- we
7 can get in front of these systemic risks, you
8 know, so that we don't have a repeat of that
9 sort of manifestation and we can see a
10 reduction in deaths and injuries and every
11 other kind of failure, you know, result from
12 failures.

13 So, thank you very much for
14 allowing me to address this.

15 MS. COHEN: Thank you. Mr. Steve
16 Irkees? Mr. John Colvin?

17 MR. COLVIN: The name is John
18 Colvin, last name is C-O-L-V-I-N.

19 Unlike the rest of my coworkers, I
20 will speak directly to the report. I spent
21 last night working the control board for that
22 unit, reading your report.

1 API-941. You said it's very
2 important to change that, to identify HTHA.

3 As soon as that was known, that
4 should have gone out to the entire industry,
5 saying, "We need to change API-941. You need
6 to look at this equipment."

7 There are 130 refineries across
8 this country that could possibly have this
9 problem. That needs to be addressed and not
10 45 days from now, not two years from now. It
11 needs to be addressed right now.

12 As for your other recommendations
13 with the Washington State PSM standard, that
14 standard helps Washington State. It helps us
15 here, but it doesn't help the other 49 states.

16 They might look at our program and
17 say, "Hey, that's great, but it costs us too
18 much to do that."

19 So, instead of recommending the
20 improvements to the Washington State PSM
21 standard, recommend the improvements to the
22 United States PSM standard, because states

1 like Washington and California will have to at
2 least meet that minimum requirement, if not
3 higher.

4 The fact that anyone would assume
5 they knew why there were seven people in that
6 unit that night is presumptuous at best.

7 I was on that team. Those were my
8 friends. It was a team building exercise,
9 nothing more.

10 You guys addressed in your report,
11 the last time those units were started up,
12 they did not leak. So, they were prepared, in
13 case there was a leak, but they did not
14 anticipate a leak on the unit start-up.

15 There is no way, and I will repeat
16 this, absolutely no way to predict a
17 catastrophic failure of a piece of equipment
18 at any given time.

19 Twelve hours before that, I had
20 230 contractors within 50 feet of those heat
21 exchangers, and a change to our composition of
22 feed or innumerable many other changes could

1 have triggered that explosion.

2 So, part of your investigation, I
3 believe is flawed, because you know, one
4 casualty is bad. Seven casualties is
5 horrendous. Two-hundred casualties, we
6 probably would have had an investigation done
7 in six months.

8 But it doesn't matter how many
9 people died. People died. Why they were
10 there in the first place, I believe is
11 irrelevant to your investigation.

12 The HTHA, the API-941 and the PSM
13 standard are the things that you should be
14 focusing on.

15 MS. COHEN: Thank you. Mr. Dennis
16 O'Hern.

17 MR. O'HERN: Hello. My name is
18 Dennis O'Hern. D-E-N-N-I-S, O-H-E-R-N.

19 I am retired from Tesoro as a
20 machinist. I'm a member of Local 12-591 and
21 I was -- I'll read a short letter for you.

22 "Following the tragic fire and

1 explosion at the Tesoro Plant on April 2,
2 2010, I was asked to sit in on the
3 investigation interviews conducted by the
4 Department of Labor and Industries."

5 "My role was to intercede if
6 necessary, on behalf of union members being
7 interviewed. During the course of these
8 interviews, several documents crossed the
9 table, which were very disturbing to me
10 personally. I have a few questions in regard
11 to these documents."

12 "The first was a recommendation
13 dated in 1998, when Tesoro purchased the
14 Anacortes Plant. This was an inspection
15 report, stating that the 6,600 exchangers were
16 structurally sound at that time, but should be
17 inspected again within a 10 year period."

18 "The second document was from
19 Tesoro's own inspection department. It was
20 written following an exchanger failure and
21 release occurring in the DHT unit of the
22 refinery. This document stated that all

1 exchanges in hydrogen service, including the
2 6,600 exchangers be inspected."

3 "None of the operators interviewed
4 could recall ever having issued a permit for
5 the inspection of these exchangers, at least
6 not an entry permit into the exchanger shells
7 themselves."

8 My role here was very limited and
9 I had no access to inspection records. My
10 questions are all related to the inspection or
11 possible lack of inspection of the 6,600
12 exchangers.

13 One, did any follow up inspections
14 occur? Two, if not, did this information
15 factor into the CSB's report? Three, again,
16 if inspections did not occur, has the CSB made
17 any recommendation to correct the problem?
18 Four, again, if not, are the people who
19 decided not to inspect the exchangers still in
20 a position to make similar decisions today?
21 Thank you.

22 MS. COHEN: Thank you. Mr. David

1 Miller.

2 MR. MILLER: Good evening. My
3 name is David Miller, and I am the standards
4 director of the American Petroleum Institute.

5 API appreciates the opportunity to
6 provide verbal comments at the U.S. Chemical
7 Safety and Hazard Investigation CSB listening
8 session on the April 2, 2010 Tesoro Refinery
9 accident.

10 API represents more than 550
11 companies involved in all aspects of the oil
12 and natural gas industry, including
13 exploration and production, refining,
14 marketing, pipeline and marine transporters,
15 as well as service and supply companies that
16 support all segments of the industry.

17 API and our members are
18 significantly affected by the efforts of the
19 CSB and are regularly called upon to respond
20 to and implement the CSB recommendations.

21 The oil and natural gas industry
22 is committed to operating in a safe and

1 responsible manner, while minimizing our
2 impact on the environment. Protecting the
3 health and safety of our workers, our
4 contractors is a moral imperative and a top
5 priority.

6 No incident, no incident is
7 acceptable. Our industry takes every incident
8 seriously. Continued vigilance is essential
9 in helping to present -- prevent future
10 incidents.

11 API and the U.S. refining
12 companies have worked, and continue to work
13 with many stakeholders, such as the U.S.
14 Chemical Safety Board, OSHA, the American Fuel
15 and Petro Chemical manufacturers and others,
16 to improve refinery safety.

17 Industry has a long-standing
18 history of safe operations, demonstrated
19 safety, performance and we are committed to
20 continuous improvement.

21 An intricate part of API's efforts
22 to improve refinery safety is our standards

1 program.

2 The API standards program has
3 grown from our first published standard in
4 1925 to now more than 600 standards and
5 technical reports.

6 API currently maintains more than
7 185 safe operating standards, recommended
8 practices and technical reports for the
9 refining of petro chemical industries.

10 API and its member companies are
11 committing to ensuring that all standards
12 contain the latest science and technologies,
13 that they recognize industry proven ensuring
14 practices and that they incorporate lessons
15 learned from incidents and near-misses.

16 The API standards program is
17 accredited by the American National Standards
18 Institute or ANSI, the authority on U.S.
19 standards development and our program
20 undergoes regular audits, to ensure it meets
21 ANSI's essential requirements for openness,
22 balance, consensus and due process.

1 This is the same body that
2 accredits programs at several national
3 laboratories.

4 API standards are developed
5 through a collaborative effort with industry
6 experts, as well as technical experts from
7 Government, academia and other interested
8 stakeholders.

9 API standards are referenced in
10 Federal regulations, because they are
11 recognized as proven engineering practices.

12 Overall, 130 API standards are
13 referenced in more than 370 citations by
14 Government agencies, including the Bureau of
15 Safety and Environmental Enforcement, the
16 Coast Guard, the Environmental Protection
17 Agency, the Federal Trade Commission, the
18 Department of Transportation's Pipeline and
19 Hazardous Materials Safety Administration and
20 OSHA.

21 Additionally, API standards are
22 the most widely cited and used petroleum

1 industry standards by state regulators, with
2 180 API cited over 3,300 times in state
3 regulations, including 33 here in Washington
4 State, cited 130 times.

5 Part of API standards development
6 process includes revisions to the standards,
7 when technical or safety justification exist
8 for such updates.

9 As part of API's learnings from
10 the Tesoro accident, API has taken the
11 following steps.

12 API reactivated its recommended
13 practice 941 steels for hydrogen service at
14 elevated temperatures and pressures in
15 petroleum refineries and petro chemical plants
16 task group to be in work on the next revision
17 of this document.

18 API prepared an industry alert on
19 high temperature hydrogen attack, HTHA, which
20 was posted on API's website in September 2011,
21 and distributed via API smart-brief electronic
22 newsletter, which has a circulation of over

1 26,000 users.

2 API staff and committee members
3 met with members of the Chemical Safety Board
4 staff at API's Spring 2012 refining and
5 industry standards meeting in Dallas, to
6 discuss potential revisions to the API
7 recommended practice 941.

8 Work is progressing on this
9 critical document and proposed revisions will
10 be balloted for consensus approval and made
11 public for comments later this year.

12 Like many in the audience, we have
13 not had a chance yet -- an opportunity yet to
14 review the report, as it was just provided to
15 us, but we will do so and provide comments,
16 and also consider its content as part of our
17 work on 941.

18 In closing, every incident is both
19 one too many and a powerful incentive for API
20 and industry and all the stakeholders to
21 improve training, operating procedures,
22 technology and industry standards.

1 As everyone else has said, our
2 thoughts remain here with the families of all
3 of those who lost their lives in this tragic
4 accident, and we stand ready to work with the
5 CSB and all interested stakeholders in
6 improving refinery safety.

7 Thank you for the opportunity to
8 make these comments. I forgot to spell my
9 name. D-A-V-I-D, M-I-L-L-E-R. Thank you.

10 MS. COHEN: Thank you. Mr. Corey
11 Nibarger. I have three Nibarger's. I think
12 they made the sheets -- did they get messed
13 up? I have Brook and Cole. If you'd like to
14 make a public comment. Ms. Shannon Bigger?

15 I'll just go through the list. I
16 apologize, if it got confusing.

17 Ms. Tessa Gerhart. Ms. Miguel
18 Perry, Mr. Miguel Perry.

19 MR. PERRY: My name is Miguel
20 Perry, M-I-G-U-E-L, P-E-R-R-Y. I am a
21 carpenter, recording secretary, Local Union 70
22 in Mount Vernon. I am also a representative

1 for the Carpenter's Union, and I'm here with
2 other carpenters, as well, that are here.

3 I believe for the same reason that
4 everyone is here, first of all, show support
5 to the families of the seven workers who died
6 almost four years ago.

7 We're here to show support to the
8 United Steel Workers International Local Union
9 12-591 and also, the trades that are here and
10 the labor, and we're here to show support to
11 this community of Anacortes.

12 With labor, we have some -- a say
13 that says a wrong done to one is a wrong done
14 to all. As a carpenter, often times, I have
15 hit my thumb with a hammer, holding -- fingers
16 holding the nail and the pain goes, not just
17 in thumb, but the entire body, and I think
18 there is an open wound here, and from what I
19 hear and what people are saying here, it's
20 about time to bring this to a closure.

21 You can bring a lot of healing by
22 bringing closure, by bringing final reports,

1 and I think that is important.

2 What is the worth of a life? How
3 do you measure the cost? What is the value of
4 a life?

5 I don't think there is to expense
6 too large, to trouble too great, there is no
7 -- no expense too large, no trouble too great,
8 no safety measures taken too costly, but it is
9 worth it, to save -- to keep a life safe at
10 the workplace, and whatever it takes, the
11 worth of a life is beyond all the profits and
12 all the wealth that anybody can accumulate,
13 and I would ask you to bring this to a
14 closure.

15 I want to say thank you for the
16 work you've done, and I believe that you put
17 a lot of work into this. So, I want to thank
18 the CSB for all they're doing, but I would ask
19 to finalize the process.

20 MS. COHEN: Thank you. If there
21 anyone who didn't sign up, who would like to
22 make a public comment, you can come to the

1 microphone in the front of the room.

2 MR. RICKS: Good evening. My name
3 is Brian Ricks, B-R-I-A-N, R-I-C-K-S. I'm a
4 member of the USW Local 12-591, the local that
5 represents the workers at the Tesoro Refinery
6 and the Shell Refinery in Anacortes.

7 I am an operator and the process
8 safety representative at the Shell Refinery.

9 In just over 60 days, we'll be at
10 the four year anniversary of the tragedy at
11 Tesoro, that claimed the seven lives.

12 With the magnitude of this
13 tragedy, it is troubling that it has taken so
14 long for the CSB to complete the investigation
15 of this tragic event.

16 In September of 2013, I had the
17 opportunity to talk with Chairman Moure-Eraso
18 about the timing for the public meeting to
19 consider and vote on the final investigation
20 report into the April 2, 2010 tragedy at the
21 Tesoro Refinery.

22 At that time, I was assured the

1 report would be completed and the public
2 meeting to consider and vote on the final
3 investigation report would be in early
4 December 2013.

5 After the Government shutdown in
6 October 2013, the date for the vote on this
7 report was rescheduled to tonight.

8 Early last week, I found out the
9 meeting to consider the vote on the report was
10 cancelled by the CSB and a listening session
11 meeting would be held instead.

12 The lack of communication from the
13 CSB to the local union about this change or
14 the reason why the public meeting to consider
15 and vote on the final investigation report was
16 cancelled has been very disappointing.

17 In the Federal Register, the CSB
18 states this listening session is to obtain
19 additional stakeholder and community input on
20 a draft final investigation report into the
21 April 2, 2010 explosion and fire that fatally
22 injured seven employees.

1 Since the draft report wasn't
2 released until last night, comment on the --
3 I won't be able to comment on the actual
4 report.

5 When I do read the report, I'm
6 hoping to see some details on why these
7 exchangers were fouling in the first place and
8 required so much maintenance work and taking
9 in and offline, while the unit was running.

10 I'll be developing my written
11 comments and submitting them to the full Board
12 after I have had time to review the report in
13 more detail.

14 I have briefly reviewed the
15 recommendations in this report and believe
16 some of the recommendations will take quite
17 some time to implement. So, I hope the --
18 there are recommendations that can be
19 implemented in a more immediate time frame.

20 I look forward to the full Board
21 of the CSB coming to Anacortes as soon after
22 the 45 day comment period as possible, to

1 conduct a public meeting to consider and vote
2 on the final investigation report into this
3 tragedy at the Tesoro Refinery. Thank you.

4 MS. COHEN: Thank you, sir. Is
5 there anyone else who would like to make a
6 public comment?

7 MS. BIGGER: My name is Shannon
8 Bigger. I thought that was a sign-up sheet,
9 but I actually do have a comment to make.

10 I am here in representation of my
11 husband who was an operator at the Shell
12 Refinery, who is working nights at this
13 moment, and unable to attend.

14 The comments I make are comments
15 that he makes at home repeatedly.

16 The sentiments you've all
17 expressed regarding the lives, I don't mean to
18 show disrespect, but they seem very hollow and
19 shallow.

20 You stand here and read the
21 documentation, as if there is no impact to
22 your personally.

1 If we stop caring about what --
2 the tragedy that happens to one, then how can
3 we call ourselves a society?

4 We are here to stand up and to
5 hold accountable, rather than blame, rather
6 than accuse, and to not shirk responsibility.

7 It is very clear by the draft
8 report, that you have a regulatory system that
9 does not function in maintaining
10 accountability. You've made recommendations.

11 However, there has been a four
12 year delay. That speaks for itself as to the
13 value you all place on life.

14 The fact that the API has not
15 created a standard change that is held
16 accountable is absolutely -- that is so
17 tragic, how many more lives, how many more
18 times do we need to turn away and have a
19 dollar value and diversification scheme
20 representing a life, so that corporations who
21 have obtained personhood, can have benefits,
22 whereas the individual who works, who raises

1 their family, who contributes to the
2 community, that has a ripple effect that is
3 far beyond what any corporation could ever
4 achieve, is minimized and devalued.

5 So, I make these public comments
6 in lieu of my husband, because he is unable to
7 attend, because he is on the Board,
8 functioning as an operator and is continuously
9 taking off special projects because he is a
10 continuous advocate for safety, for
11 accountability and for maintenance and for
12 process change. Thank you.

13 MS. COHEN: Thank you. Any
14 additional comments?

15 MR. MONTGOMERY: Good evening. My
16 name is Tom Montgomery, M-O-N-T-G-O-M-E-R-Y.
17 Retired member, proud member of the oil --
18 excuse me, the old OCAW, the International,
19 which is now United Steel Workers.

20 I have a son. I retired from
21 Shell Oil six or eight years ago. I still
22 have a son who works there. I have lots of

1 brothers and sisters out in this audience who
2 work there.

3 The explanation that wasn't given
4 on the delays from the Chairman. The one that
5 I want to point out in this room, and there's
6 possibly several more, but one that I know for
7 sure, that absolutely should have an
8 explanation is Herschel Janz, right up here in
9 the front row.

10 His son was one of them who was
11 killed out there, and for Butch's questions to
12 be dismissed as they were was absolutely
13 appalling and very unprofessional.

14 We deserve more than that.
15 Herschel Janz deserves more than that.

16 MS. COHEN: You want to go ahead
17 and go to the microphone?

18 MR. POWELL: My name is Estus, E-
19 S-T-U-S, middle name Ken, K-E-N, last name
20 Powell, P-O-W-E-L-L.

21 I would like to commend the Board
22 on their fine work that they have done. I

1 understand that it has taken a lot of work to
2 accomplish what they have got.

3 I have no problem with your
4 report. My problem is the time that it has
5 taken to do this.

6 My question is why was there a
7 period of about eight months, that there was
8 no work done on this report, what so ever? No
9 expenses, not one nickel was spent, not one
10 minute was put on to it. You went to other
11 refineries, other incidents and so on, and
12 left us hanging.

13 Were we not important? It makes
14 us feel that we were second-class.

15 My daughter was one of the ones
16 that was -- that was killed. I stood by her
17 bed while she was on life support, watching
18 the monitor as it clicked the heartbeats, 8:05
19 a.m. in the morning, it stopped.

20 My life has been forever changed.
21 All I want to know is, does anybody care? It
22 seems we can get nobody to have any teeth in

1 anything, to get anything done.

2 We can make recommendations until
3 hell freezes over, but if somebody doesn't put
4 teeth behind those recommendations, and get
5 something accomplished, we will never have
6 anything done. Thank you.

7 MS. COHEN: Thank you, sir.

8 MS. HOWLING WOLF: You're Katie's
9 dad? It's good to see you again.

10 My name is Maria Howling Wolf. M-
11 A-R-I-A, my last name is two words, H-O-W-L-I-
12 N-G, Wolf, W-O-L-F.

13 At the refinery today, there is no
14 -- made no mention of this report coming out,
15 and it used to be that when we go through our
16 emails, that we would see, "Hey, CSB came out
17 with this investigation. Here is a learning
18 experience for you. Here is something for you
19 to see."

20 We used to see the videos and
21 that, and since the explosion and since the
22 death of our coworkers, we don't hear that

1 anymore, and today, we haven't heard anything.
2 In fact, towards the end of the day, internet
3 was lost.

4 I think it's really, really
5 important that it is preceded with fast, that
6 some teeth are added to this.

7 It's still impressed upon us, you
8 know, we still have those think-tanks, you
9 know, where a bunch of us are sitting there
10 thinking and throwing out our suggestions and
11 we're not the subject experts, but they got
12 everybody's input, and it's still impressed
13 upon us, you know, to be our brother's keeper,
14 but if I tell my brother there is a hole
15 there, that doesn't fill in the hole.

16 You know, if I put tape around it,
17 it doesn't take care of the hole, and there is
18 still, I believe 185 of us that are union
19 represented and over 300 of us that are still
20 working out there, and we need a safe place to
21 work at, and while these thought processes are
22 still carried through, when we're still

1 thinking in this manner, and I think it does
2 matter, you know, that at times, we're taught
3 or trained to respond with a steam lance.

4 I've only gotten to page 55 of
5 your report. I've only gotten past the part
6 where the actual hydrogen attack took place
7 next to the welds, where it was found to be
8 stressed, where it wasn't properly heat
9 treated.

10 So, I've only gotten to that part
11 of it, but I'm reading through it.

12 But the faces to it, you know, the
13 Gumbel's, you know, Matt Gumbel, laying there
14 on the floor naked, laying across that cold,
15 dirty floor, with a blanket on top of him, and
16 our FRC's floridum retardant clothing only
17 does so much.

18 You know, his clothing was intact
19 outside the operating shelter. Matt wasn't
20 intact. He was swollen up, because he had
21 been cooked.

22 So, if you take a flame to

1 something over a piece of foil, you know,
2 what's underneath doesn't get crisp right, but
3 you take it right here, and it burns, and the
4 bodies of these people were crisp. They were
5 charred.

6 FRC's isn't going to do it, you
7 know. Behavior, us looking out for each
8 other, doing team work out in the field can
9 actually be dangerous for us.

10 There is still a lot of us out
11 there, and we're still out there working and
12 we're still in a place that they're telling us
13 to -- where they're not acknowledging us,
14 where they're not going ahead and saying,
15 "This is out," and I was thinking about
16 Katie's dad, before he went up there, and he
17 told me that the way identified his daughter
18 was by her pretty toenails, because she used
19 to get manicures and pedicures, and Katie was
20 a beautiful young woman. She was this holly-
21 hobby looking woman, you know, young.

22 Well, we deserve and it is an act,

1 whether we have the right regulations, that we
2 deserve and it is our right to work in a safe
3 workplace, and we do everything that we can
4 do, and what I've read in your report so far,
5 that one of the parts is, is that in this
6 country, we have to prove that there is a
7 danger that exists, where in other countries,
8 they prove that they're safe to operate.

9 I'm still reading on it and I'll
10 come up with whatever I can, and I'll keep
11 working with everybody, but I think about
12 everybody. I think about all of us being
13 safe. You know, I want us to live and I want
14 us to have a good place to work, and we --
15 this country is said to be a country, and I've
16 heard it expressed over and over again, where
17 a lot of the trades moved out, but we want to
18 be technologically advanced.

19 You know, we want to have the
20 smarts and we want to have everything going
21 into this, and we need the people, not just
22 little think-tanks with people who don't have

1 the skills, but with the people who are --
2 have -- are the chemical engineers, the people
3 who do have all this information, the
4 engineers, the inspections, and we do need the
5 paper-pushers, because it's important that it
6 gets through in a timely manner, and we need
7 that, because we're still out here working.

8 I'd like to think that while it
9 just happened, just happened four years ago
10 and it's just us, but it's been going on for
11 a long time, and those regulations need to
12 come out faster and faster, because our
13 equipment is getting older and older.

14 So, I care about my coworkers. I
15 wanted to work and live in a safe place, and
16 I remember the paramedics coming in that
17 night, and taking Matt away. Matt stood
18 himself up and he wrapped himself in a blanket
19 and he sat himself down, and all he talked
20 about was the care of his workers, you know,
21 that Dan, "Oh, God, Dan, Dan is not okay. Dan
22 couldn't have made it through that." Dan

1 Aldridge.

2 "Tell my dad that I'm okay. Tell
3 him I'm okay." He was telling me all these
4 things, and he was walking out and I'm like,
5 "Matt, I'll call everybody," and he wasn't
6 okay and he didn't make it. He lasted, I
7 think 22 days.

8 Yes, there is a lot of faces
9 behind this. You know, Katie's dad, his
10 youngest daughter, you know, his baby, you
11 know. I guess I am going on and on about it,
12 but there is some relevance and there is some
13 faces to it. You know, there is Lou. He was
14 a union member and he became a supervisor,
15 right.

16 His FRC's, when I found his hat
17 and his eye protection, it laid on the ground,
18 it looked good, but the guys that saw it, that
19 found Lou, one of the last telligible things he
20 said on the radio was, "We're dying out here,"
21 and when our coworkers went and got them and
22 put their lives at risk, Lou was running in

1 circles on fire saying, "No, no, no," and they
2 took him to the ground.

3 Those FRC's, we still cook. We
4 still -- we have a flash point. We catch on
5 fire, and it's not auto-ignition, but we do
6 burn.

7 You know, we need stronger
8 regulations. We do need to be protected and
9 it doesn't feel that way, right now. It
10 doesn't feel that way when they're not
11 acknowledging it at work, when they're not --
12 when today, everybody is up here speaking,
13 including the American Petroleum Institute,
14 everybody is holding some kind of
15 accountability, and we don't have anybody
16 telling us -- and I'm hearing on a day-to-day
17 basis, "Hey, are you looking out for your
18 brother? Hey, you guys got the right
19 protection on," and some things have improved,
20 but that overall culture, it's a big fight,
21 and it's not a winning battle. It's
22 something, you know, we're still getting hurt

1 out there.

2 So, please, faster, more. We'll
3 work on our part too, you know.

4 MR. ERLANDSON: Hello. My name is
5 Douglas Erlandson. D-O-U-G-L-A-S, E-R-L-A-N-
6 D-S-O-N. I am a retired refinery worker, 36
7 years at the other refinery, and I was
8 watching the report here, and I have a nagging
9 question. I hope the investigation consider
10 it. I am not sure if someone had raised the
11 point.

12 They talked about exchanger
13 leaking during start-ups was common, and I
14 wonder if that was due to the bolts having
15 lost their tinsel strength and it wasn't
16 possible to tighten them enough.

17 So, that's just something I wanted
18 to bring up. Thank you.

19 MS. COHEN: Do we have any other
20 comments? We'd like to thank everyone. Do
21 you want to go ahead? Go ahead, sir.

22 MR. HOPLEY: My name is Doug

1 Hopley, D-O-U-G, H-O-P-L-E-Y, and on top of
2 the E-6600's which is gathering all the
3 attention here, I just wonder if anyone ever
4 commented about other things that were going
5 on, after the fire, and one that comes to mind
6 is a column that had corrosion under
7 insulation and there is actually a hole in the
8 skirting of the column, and in order to fix
9 it, they had to big cranes holding it up, and
10 I just wondered if that had been addressed.
11 Thank you.

12 MS. COHEN: Thank you.

13 CHAIRPERSON MOURE-ERASO: I would
14 like to say that I really appreciate your
15 candor and the emotion that came from -- as a
16 reflection of your loss.

17 As our Chief Investigator from
18 Denver said, we do take responsibility for the
19 delay. We would like very much to have been
20 able to have the report sooner than we are
21 presenting it today.

22 I would like to say that in my

1 conversations that I have with the
2 representatives of your local in Pittsburgh,
3 last September, we discussed these issues and
4 the issues of the delay, and probably I took
5 the decision when I -- after that
6 conversation, that it was pointed out to me
7 that if more time will be necessary to have
8 the best possible report, that we should take
9 that time, and that is what gave me the idea
10 of the importance to have your input on what
11 we are doing.

12 The recommendations that were
13 presented here are very, very difficult and
14 it's strong recommendations, that -- by the
15 extremes that we have with other refineries,
16 specifically Chevron, have ourselves an
17 incredible amount of opposition from a lot of
18 quarters, specifically from people in the
19 industry.

20 So, the reason for me to have this
21 listening session is to ask you to look at
22 those recommendations, and to see if you can

1 support them, so that we can face the
2 opposition from the people that don't want to
3 comply with it.

4 So, what I am asking of you in
5 these 45 days is to carefully look at those
6 recommendations, be aware that there is
7 tremendous amount of opposition for any one of
8 them to be really acted upon, and to see if
9 you can support or what can you say that we
10 should do, to present -- to prevent these
11 things from happening.

12 Again, I want to say that I
13 appreciate your candor. I appreciate you
14 telling in such a painful way, the feelings
15 that you have on the experience that we have
16 with this investigation.

17 I hope to get your input, to have
18 the report that we can really present and we
19 can really move over an action for prevention.

20 Thank you. I don't know if
21 anybody from the team would like to add
22 anything more.

1 PARTICIPANT: Where do we send you
2 the information in writing? Is there an email
3 address?

4 MS. COHEN: The email address is
5 TesoroComments@CSB.gov.

6 Thank you, everyone, for coming.
7 We appreciate your time and we appreciate you
8 being here.

9 (Whereupon, the above-entitled
10 matter concluded at approximately 8:30 p.m.)

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MATTER: Public Meeting RE Tesoro Refinery

DATE: 01-30-14

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