



AUG - 3 2007

The Honorable Bart Stupak
Chairman
Subcommittee on Oversight and Investigations
Committee on Energy and Commerce
United States House of Representatives
Washington, D.C. 20515-0115

Dear Chairman Stupak:

This is in response to your questions enclosed in Chairman John D. Dingell's June 20, 2007, letter to Richard Fairfax, Director, Directorate of Enforcement Programs for the Occupational Safety and Health Administration (OSHA). These questions relate to Director Fairfax's May 16, 2007, appearance before the Subcommittee on Oversight and Investigations hearing on to the 2006 Prudhoe Bay Shutdown and British Petroleum (BP) management practices.

Question 1: The Chair of the Chemical Safety Board testified that if BP had complied with regulations and standards, the Texas City refinery accident could have been prevented. Do you agree?

Response: OSHA believes that, if BP had complied with all applicable safety and health standards, the Texas City refinery accident may have been prevented. The primary responsibility for the safety and health environment for employees at our nation's workplaces rests with employers. OSHA's accident investigation findings indicate that BP abdicated its responsibility for the safety and health of its employees and suggest that the accident at the Texas City, TX, refinery (BP TCR) on March 23, 2005, could have been prevented or the severity mitigated had OSHA safety regulations been followed. Furthermore, OSHA determined that BP willfully violated OSHA safety standards. OSHA believes this disregard for applicable OSHA standards led to the deaths of 15 employees at BP TCR. As a result, OSHA has referred this case to the U. S. Department of Justice for criminal prosecution.

Question 2: Over the five years prior to the Texas City Refinery explosion in March 2005, has there been sufficient enforcement of the Process Safety Management Standard in the refinery sector?

Response: Enforcement of OSHA's Process Safety Management Standard [29 CFR 1910.119] is an OSHA priority. Between March 2000 and March 2005, Federal OSHA conducted 34 inspections focusing on Process Safety Management (PSM) in refineries; State OSHA programs conducted an additional 14 inspections. There were other inspections based upon complaints and referrals that did not focus solely on PSM.

OSHA has launched a National Emphasis Program (NEP) for refineries. Under this program, OSHA will conduct 81 inspections at petroleum refineries over the next two years. However, the NEP is just one component of several significant enforcement initiatives in the oil, gas, and refining industries on which OSHA is working. In addition to the above nationwide effort, OSHA also has two Regional Emphasis Programs in Region 6, which covers Louisiana, Arkansas, Oklahoma, Texas and New Mexico, that focus on reducing workplace injuries and fatalities in the petrochemical industry, as well as in the oil and gas well drilling and servicing sectors.

Question 3: Are deaths an adequate leading indicator of a failed process safety management system? Are there alternatives?

Response: While employee deaths may certainly be an indicator of problems associated with an employer's PSM system, neither OSHA nor the industry should rely exclusively on tragic accidents to identify PSM performance problems. Typically, industry views employee deaths as a lagging indicator. Indeed, the independent "Baker Panel" conducted a thorough review of BP's corporate safety culture, safety management systems, and corporate safety oversight at its U.S. refineries, and its report states the exclusive use of lagging indicators is not necessarily a good predictor of PSM performance.

OSHA agrees. Although employers have had access to leading indicator information, including their internal statistics and proprietary data from industry associations to determine if specific areas of their PSM program need improvement, this information has generally not been disclosed publicly. OSHA is evaluating the possible use of leading and lagging indicators as a tool to target PSM inspections. The challenge for OSHA is to determine which combination of leading and lagging indicators are the best predictors of deficient PSM programs for various types of employers that process chemicals.

Question 4: Your testimony indicates that the Texas City Refinery did not come up with red flags that would have warned OSHA's Enhanced Enforcement Program (EEP). Why did red flags not go up at OSHA when there were three

deaths and multiple explosions in 2004?

Response: OSHA conducted two inspections in response to the 2004 incidents at the Texas City refinery and issued citations on August 16, 2004 and February 25, 2005 based on its findings. The EEP requires either that a fatality was related to a serious, willful, or repeat violation; or that there were three or more willful or repeat citations or failure-to-abate notices where the violations reflect grave hazards and an accident was probable. The citations issued in August 2004 did not qualify for the EEP because there was no fatality; nor were there violations meeting the classification criteria. In response to your question, OSHA further reviewed its enforcement activity following the February, 2005 BP citations. Our review has clarified that the February 25, 2005, inspection findings did qualify for inclusion in the EEP due to two fatalities and the issuance of a related willful violation. BP was placed in the EEP less than a month before the March 2005 explosion.

Following the BP March 2005 accident, however, OSHA did issue an "Alert" to its field staff. Under the alert, OSHA conducted inspections of BP refineries and similar processing facilities in states under federal jurisdiction. OSHA also worked with state plan states to inspect BP refineries in state plan states. In response to the alert, OSHA inspected the BP refinery located in Oregon, Ohio; found hazards similar to those found at Texas City; and issued BP 34 willful and 5 serious citations with proposed penalties totaling more than \$2.4 million for unsafe operations in Ohio. Those citations are being contested.

Recently, on July 20, 2007, as the result of its monitoring of the Texas City refinery, OSHA issued BP one willful and four serious citations with proposed penalties of \$92,000 for violations related to, among other matters, an inadequate pressure relief system.

In addition, for any case in which a willful violation appears to have caused the death of any employee, such a violation will be carefully considered for possible criminal referral to the Department of Justice (DOJ), under Section 17 (e) of the OSH Act.

Question 5: Please list the recommendations made by the Chemical Safety Board to OSHA arising out of the Texas City Refinery accident. Please list the implementation status of each recommendation.

Response: See Attachment A, *CSB Recommendations to OSHA Related to the BP TCR Investigation*, for the subject list of recommendations and OSHA's response.

Question 6: Has OSHA modified its regulations to require blowdown drums to be burned off through a flare instead of venting to the atmosphere?

Response: OSHA has no current plans to modify its regulations as to blowdown drums. We believe the existing PSM requirements adequately address the situation you have described.

Because there are tens-of-thousands of PSM-covered processes that are, in most cases, configured differently, the PSM standard relies on general performance requirements. A requirement for blowdown drums to be burned off through a flare would be a specification requirement. If the PSM standard were to contain specification requirements, it would need to be vastly expanded to address not only specific types of processes, but their unique configurations, technologies and chemistries in order to assure that the regulation covered the many combinations of potential hazardous conditions at chemical facilities.

This approach to regulating chemical process safety would be too prescriptive to be practical. Instead, the performance approach sets up general performance requirements with which employers are required to comply. This approach requires that employers demonstrate that their performance is in compliance with the PSM standard.

In the case of venting of flammable and/or toxic chemicals to the atmosphere, the PSM standard does not specify a method to relieve the products produced by excess pressures from, for example, a runaway reaction, that is, by a blowdown drum venting to atmosphere or a flare.¹ Rather, the standard mandates that an employer conduct a process hazard analysis (PHA) to, “. . . *identify, evaluate and control the hazards involved in the process.*” 29 CFR 1910.119(e) (1). Under the PSM standard, among other responsibilities, an employer is required to identify hazards through an evaluation performed by a knowledgeable team, to document that its equipment complies with recognized and generally accepted good engineering practices, and to implement the controls identified by the PHA. Under the standard, if the process relieves to a blowdown drum and vents excess relief products to the atmosphere, the employer must conduct a PHA to identify, evaluate, and control the hazards of the process, including hazards created by the

¹ Blowdown drums that vent to the atmosphere are an older method of technology that even if currently well-maintained may no longer be adequate to relieve the products produced by overpressures for various reasons. For example, the process may have been modified to process greater amounts of product at higher temperatures and pressures, creating a situation where the blowdown drum and vent could be overwhelmed. On the other hand, the blow down drum may currently be well-maintained and provide effective and safe pressure relief.

use of this method of pressure relief. The employer is under the same obligation if the process relieves to a flare. For a process tied to a flare, the employer would be required, for example, to evaluate whether the pressure relief equipment tying the process to the flare is properly sized. Failure to meet these requirements subjects the employer to citation for failing to control the process hazards.

To comply with this particular PSM paragraph, the employer with a blowdown drum that vents a Highly Hazardous Chemical (HHC) to the atmosphere must first identify this hazardous condition in its PHA, and then evaluate if the HHC released could expose employees to catastrophic hazards, i.e., fire, explosion or toxic release.

If the employer cannot demonstrate through its evaluation that any HHC released through a vent to the atmosphere will not result in harm to employees, then the employer cannot demonstrate that its performance has complied with this requirement. If the employer cannot demonstrate that existing controls are adequate for this hazardous condition, then additional controls, such as venting the blowdown through a closed system to a flare, would be required. If controls needed to safely control the hazardous condition are not provided or are inadequate, then the employer could be cited for not performing its obligation to control the identified hazardous condition.

Question 7: Several reports indicated concern about the use of contract workers in the petrochemical industry. An OSHA commissioned study found increased use of contract workers could pose increased hazards in petrochemical plants due to differential levels of training and lack of communication between permanent and contract workers. Contractor injuries and illnesses are not recorded on the facility's OSHA 300 logs of injuries and illnesses. What steps is OSHA taking to hold the site owner responsible and accountable for the injuries and illnesses experienced by subcontractor employees? Why does OSHA not require a common OSHA 300 log at these facilities?

Response: While OSHA's occupational injury and illness recordkeeping regulation at 29 CFR Part 1904 does not require host employers to record the injuries and illnesses of contractor employees they do not supervise on a daily basis, OSHA's PSM standard does require site controlling employers to maintain a log of contract employee injuries and illnesses for PSM covered processes. In *Appendix C - Compliance Guidelines and Recommendations for Process Safety Management (Nonmandatory)* of the PSM standard, OSHA explained that its requirement to maintain a contract injury and illness log would give the host

employer a complete representation of the injuries and illnesses related to contractors working on or near a covered process:

Maintaining a site injury and illness log for contractors is another method employers must use to track and maintain current knowledge of work activities involving contract employees working on or adjacent to covered processes. Injury and illness logs of both the employer's employees and contract employees allow an employer to have full knowledge of process injury and illness experience.

Question 8: After several large explosions at chemical plants, the Chemical Safety Board recommended that OSHA expand the Process Safety Management standard to address reactive chemicals. Has that been implemented? If not, why not?

Response: OSHA staff is continuing to review the CSB's rulemaking recommendation. OSHA has implemented or is developing a number of regulatory and non-regulatory initiatives to prevent these types of incidents. The Agency's initiatives related to chemical reactivity hazards are listed in Appendix C, #5.

Question 9: Your testimony indicated that OSHA has made 56 criminal referrals to the Justice Department since 2001. Please provide a list of these 56 referrals, with the name of the party referred, the facility, the location, and a brief summary of the alleged criminal violation.

Response: Please note that a total of 58 criminal referrals have been made to date. See Attachment B, *Criminal Referrals By OSHA To DOJ or US Attorneys (2001 through July 23, 2007)*, for a list of the referrals to DOJ. Please note that only the names of those companies against whom action has been taken can be revealed. In those instances where a decision to move forward has not yet been made or prosecution was declined, OSHA can disclose neither the names of the entities nor their locations.

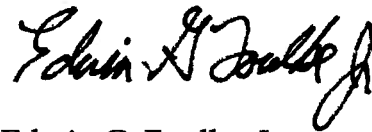
Question 10: How many recommendations has OSHA received from the Chemical Safety Board? Please provide a list and their status with respect to OSHA's implementation. For those recommendations that have not been implemented by OSHA, please explain why they have not been implemented.

Response: OSHA received 22 recommendations from CSB. Some of these recommendations contain multiple parts. See Appendix C, *CSB Recommendations to OSHA* for a list of CSB recommendations to OSHA and the implementation

status of each of the recommendations.

I believe that the above answers are responsive to your questions relative to OSHA's testimony before the Subcommittee. If you should have any additional questions, please feel free to contact me.

Sincerely,

A handwritten signature in black ink, appearing to read "Edwin G. Foulke, Jr.", written in a cursive style.

Edwin G. Foulke, Jr.

cc: The Honorable John D. Dingell
The Honorable Joe Barton
The Honorable Ed Whitfield

Enclosures

Attachment A

CSB Recommendations to OSHA
Related to the BP TCR Investigation

CSB Recommendation	OSHA's Response	Implementation status
<p>2005-4-I-TX-R5</p> <p>1. Implement a national emphasis program for all oil refineries that focuses on:</p> <ul style="list-style-type: none"> - The hazards of blowdown drums and stacks that release flammables to the atmosphere instead of to an inherently safer disposal system such as a flare. Particular attention should be paid to blowdown drums attached to collection piping systems servicing multiple relief valves; - The need for adequately sized disposal knockout drums to safely contain discharged flammable liquid based on accurate relief valve and disposal collection piping studies 	<p>Prior to the issuance of this recommendation to OSHA, the Agency was in the process of developing a national emphasis program to inspect petroleum refineries. Since CSB issued this recommendation, OSHA has implemented the <i>Petroleum Refinery Process Safety Management National Emphasis Program</i> (Refinery NEP), which among other requirements, instructs inspectors to evaluate blowdown systems at all refineries in Federal jurisdiction. All the specific issues addressed by CSB related to blowdowns as well as others are addressed in Appendix A, Section C of the Refinery NEP.</p>	<p>Completed. The Refinery NEP was implemented on June 7, 2007 and is expected to be completed by June 7, 2009.</p>
<p>2005-4-I-TX-R5</p> <p>2. Urge states that administer their own OSHA plan to implement comparable emphasis programs within their respective jurisdictions.</p>	<p>The Refinery NEP strongly encourages OSHA State-Plan States to adopt the NEP.</p>	<p>Completed. See Section VII, <i>Federal Program Change</i> of the NEP.</p> <p>The Refinery NEP was implemented on June 7, 2007. OSHA expects that most, if not all, State-Plan States will adopt the NEP.</p>
<p>2005-4-I-TX-R8</p> <p>1. Strengthen the planned comprehensive</p>		

<p>enforcement of the OSHA Process Safety Management (PSM) standard. At a minimum:</p>	<p>1.a. Identify those facilities at greatest risk of a catastrophic accident by using available indicators of process safety performance and information gathered by the EPA under its Risk Management Program (RMP).</p>	<p>Prior to the issuance of this recommendation to OSHA, the Agency was in the process of determining which facilities and inspection strategy it should employ to conduct additional programmed inspections at PSM-covered facilities. From a review of OSHA's IMIS data base, the Agency determined that petroleum refineries had experienced more fatal and catastrophic incidents since 1992 (promulgation of PSM) than the next 3 industry sectors combined. From this data, OSHA decided that based on their history, petroleum refineries presented a great risk and consequently the Agency developed the Refinery NEP to address catastrophic type hazards covered by PSM.</p> <p>OSHA believes that its PSM fatality study it conducted based on its IMIS database provides as good if not better indicator of facilities at greatest risk of catastrophic type hazards as does EPA's RMP 5 Year Accident Database.</p> <p>Note: OSHA is currently updating its general PSM compliance directive. This directive covers all PSM-covered processes, not just refineries. As such OSHA is evaluating possible inspection targeting systems which will put our inspectors in facilities which are at greatest risk of catastrophic releases of highly hazardous chemicals. We are evaluating leading and lagging indicators that are publicly available that would be appropriate for use as targeting tools for the Agency.</p> <p>OSHA has developed and implemented, <i>Petroleum Refinery Process Safety Management National Emphasis</i></p>	<p>Completed.</p> <p>The Refinery NEP was developed as a result of a data review of the types of facilities which experience the types of incidents PSM was promulgated to prevent and mitigate, i.e. fatal and catastrophic incidents which are a result of the release of <i>highly hazardous chemicals</i>.</p>
<p>1.b. Conduct, or have conducted, comprehensive inspections, such as those</p>			<p>Completed. The Refinery NEP was implemented on</p>

<p>under your Program Quality Verification (PQV) program at facilities identified as presenting the greatest risk.</p>	<p>Program (Refinery NEP). It contains an inspection strategy which utilizes "Inspection Priority Items" (IPI) that we feel is a better inspection strategy for conducting PSM inspections at refineries than our PQV inspection strategy. See the Refinery NEP, Section X.D., <i>Inspection Process</i> for a description of the IPI inspection strategy.</p> <p>Note: Inspections conducted under the NEP are programmed comprehensive inspections.</p>	<p>June 7, 2007 and is expected to be completed by June 7, 2009.</p>
<p>1.c. Establish the capacity to conduct more comprehensive PSM inspections by hiring or developing a sufficient cadre of highly trained and experienced inspectors.</p>	<p>Last summer and prior to the CSB's recommendation, OSHA began an accelerated training initiative for its compliance officers (CSHOs) to conduct PSM inspections. In FY 2007, OSHA trained 184 federal students in PSM courses with another 110 estimated to complete courses by the end of the FY, for a projected total of 294. Please note that other OSHA personnel who had received PSM training prior to our current initiative are available to conduct PSM inspections.</p>	<p>Completed/On-going</p>
<p>1.d Expand the PSM training offered to inspectors at the OSHA National Training Institute.</p>	<p>See above response.</p>	<p>Completed</p>
<p>2005-4-I-TX-R9 (CSB2005-04-I-TX-R9) 2. Amend the OSHA PSM standard to require that a management of change (MOC) review be conducted for organizational changes that may impact process safety including: a. major organizational changes such as mergers, acquisitions, or reorganizations; b. personnel changes, including changes in</p>	<p>OSHA is currently evaluating this CSB recommendation and will respond to CSB when we have determined the Agency's course of action.</p>	<p>Evaluating recommendation.</p>

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<p>staffing levels or staff experience; and c. policy changes such as budget cutting.</p>		
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Appendix B

**Criminal Referrals By OSHA To DOJ
or US Attorneys
(2001 through July 23, 2007)**

Fiscal Year 2001 [3]

- | | | |
|---|---|--|
| 1 | Tyler Pipe Co.
(crushed in machine) | 7/01 Guilty plea 7/19/02
\$250,000 fine, 1 yr. probation |
| 2 | Moshe Junger
(Mordechi Rubbish)
(building collapse) | 5/01 Guilty plea; sentencing 6/02
4 months imprisonment, one
year supervised release, \$100,000 fine |
| 3 | # Company C(trenching) | 6/01 Declined by DOJ |

Fiscal Year 2002 [6]

- | | | |
|---|--|---|
| 4 | Tri-State Scaffolding
Equipment and Supplies,
and Phillip Minucci
(scaffold collapse) | 11/01 Indictment by Manhattan D.A.
10/01/02
Guilty pleas 9/02
minimum jail term 3.5 yrs |
| 5 | # Company B
(electrocution) | 5/02 Declined |
| 6 | * Oscar Miranda
(Azteca Services) | 6/02 Guilty plea 8/03 (one count
each of false stmts & mail fraud)
30 mos. jail, 3 yrs supervised release,
restitution to USPS, payment of ee med.
bills and OSHA penalties |
| 7 | # Company D
(trenching) | 6/02 U.S. Atty. declined |
| 8 | Steve Pate
(Pate & Pate Enterprises) | 6/02 Guilty plea 11-18-04;
5 yrs probation; must |

(trenching)

inform OSHA of companies & work sites; requirements for daily and weekly safety inspections.

9 * Russel Nickel
(Pyro Products)

6/02 Guilty plea 5/04; 2 mos. prison, 2 mos. home confinement; \$2,000 fine

Fiscal Year 2003 [9]

10 *,# Company A
(trenching)

10/02 U.S. Atty. declined 11/02

11 # Company B

2/03 U.S. Atty. declined 12/03

12 *,# Company C

2/03 U.S. Atty declined

13 # Company D
(crushing)

2/03 U.S. Atty. declined 8/03

14 **, Atlantic States Cast
Iron Pipe Co. et al

3/03 12/03 Indictments
4/06 convictions:
environmental crimes,
false statements (company
and Scott Faubert), and
obstruction (company, John
Prisque, and Jeffrey Maury).

15 *,# Individual E

3/03 DOJ declined 4/03

16 *,# Company F
(crane collapse)

4/03 U.S. Atty. declined 5/04

17 Hillandale Farms of Florida (confined space engulfment) 4/03 Guilty plea 8/05; \$128,800 fine, implement safety program with annual audits, submit article to industry magazine and assist Extension Service with training materials

18 # Company H (trenching) 6/03 U.S. Atty. declined 8/03

Fiscal Year 2004 [10]

19 # Company A 2/04 U.S. Atty declined/04

20 #,*,** Company B 3/04 No decision yet

21 # Company C 3/04 DOJ declined 6/04

22 # Company D 3/04 U.S. Atty. declined 7/04

23 # Company E 4/04 U.S. Atty. declined 4/05

24 Union Foundry (crushing) 4/04 Guilty plea 9/05 (OSH Act & RCRA counts) \$4.25 M. fine & commun. service project; 3 yrs probation

25 # Company F 6/04 No decision yet

26 # Company G 7/04 No decision yet

27 ** Jared Bailey (EKK Grading) 7/04 Indictment 8/05 Acquittal 12/05

28 # Company H 7/04 U.S. Atty. declined 9/04

Number of cases discussed with DOJ/US Atty. but not referred: 10

Fiscal Year 2005 [10]

29	# Company A (fall)	10/04 US Atty declined 11/04
30	Glen Wagner; Wagner Excavation Services (trenching)	11/04 Information filed 10/4/05 Guilty plea 10/12/05 fined \$50,000
31	Kang Yeon Lee (Big Apple Constr.) (balcony collapse)	12/04 Guilty plea 4/05 30 months jail; 2 years probation; \$2M restitution and civil penalties
32	* Ralph Guarnieri (Global Electric)	3/05 Indictment 6-8-06
33	#, * Company C	3/05 US Atty declined 10/06
34	# Company D	4/05 No decision yet
35	** Nasir Bhatti & Tariq Alamgir (Metla Const.) (fall)	6/05 Complaint 5/06; guilty pleas 12/06
36	Greg Clark (Greg Clark Roofing) (fall)	6/05 Information 2/06 guilty plea - fine
37	# Company G	7/05 No decision yet
38	# Company H	7/05 US Atty declined 11/05

Number of cases discussed with DOJ/US Atty. but not referred: 11

Fiscal Year 2006 [12]

39	# Company A (electrocution)	12/05	No decision yet
40	# Company B	12/05	No decision yet
41	# Company C	12/05	No decision yet
42	# Company D (caught in machine)	1/06	No decision yet
43	# Company E (trench)	1/06	US Atty declined 2/06
44	#, * Company F	1/06	No decision yet
45	American Asbestos Control (fall)	2/06	Guilty Plea 4/12/07 Sentenced 1 yr. probation \$25,000 fine
46	# Company H (fall)	4/06	No decision yet
47	#, ** Company I	4/06	No decision yet
48	# Company J (electrocution)	7/06	No decision yet
49	# Company K (building collapse)	8/06	No decision yet
50	#, * Company L	9/06	No decision yet

Initial contacts on other cases: 6

Fiscal Year 2007

51	# Company A (trench)	2/07	No decision yet
52	# Company B (trench)	2/07	No decision yet
53	# Company C (confined space)	2/07	No decision yet
54	# Company D (fall from scaffold)	3/01	No decision yet
55	# Company E (fall from scaffold)	3/01	No decision yet
56	# Company F (fall from scaffold)	3/21	No decision yet
57	# Company G (wet concrete collapse)	6/15	No decision yet
58	# Company H (lack of machine guarding)	6/13	No decision yet

* False statements (29 U.S.C. §666(g); 18 U.S.C. §1001)

** Interference with OSHA inspection, 18 U.S.C. §1505, or attempted bribery, 18 U.S.C. §210(b)(1)(A)

+ Assault on compliance officer

Company name withheld. Prosecution has not yet been initiated OR referral did not result in prosecution.

Appendix C
CSB Recommendations to OSHA

#	CSB Recommendation	Implementation Status (per CSB)	Explanation of Implementation Status for Recommendations NOT "closed" by CSB
1	<p>1998-05-I-LA-R4 (Union Carbide Corp. Nitrogen Asphyxiation Incident) Issue a safety alert that addresses the hazards and provides safety guidelines for the use of temporary enclosures that are erected around equipment containing hazardous substances.</p>	Closed	
2	<p>1998-06-I-NJ-R8 (Morton International Inc. Runaway Chemical Reaction) Issue joint guidelines on good practices for handling reactive chemical process hazards.</p>	Open	In process of developing chemical reactivity guidelines as recommended.
3	<p>1998-06-I-NJ-R9 (Morton International Inc. Runaway Chemical Reaction) Participate in a hazard investigation of reactive chemical process safety conducted by the CSB.</p>	Closed	
4	<p>2001-01-H-R1 (Improving Reactive Hazard Management) Amend the Process Safety Management Standard (PSM), 29 CFR 1910.119, to achieve more comprehensive control of reactive hazards that could have catastrophic consequences.</p>	Open	<p>While OSHA is still contemplating this rulemaking recommendation, the Agency feels it has completed this recommendation as we have implemented or are developing a number of regulatory and non-regulatory initiatives related to chemical reactivity hazards including:</p> <ul style="list-style-type: none"> - Continued enforcement of existing OSHA regulations related to chemical reactivity hazards such as PSM, 5(a)(1), and other applicable standards which apply to

			<p>reactives, i.e. Hazard Communication, Flammable and Combustible liquids, etc.</p> <ul style="list-style-type: none"> - Led a group of stakeholders in paying the majority of a 3-year subscription fee to the CCPS book , <i>Essential Practices for Managing Chemical Reactivity Hazards</i>; - Developed a chemical reactivity Alliance with stakeholders including EPA, CCPS, ACC, SOCOMA, Mary Kay O'connor Process Safety Center - Participate in the Reactivity Management Roundtable, a stakeholder group developing safe practices for managing chemical reactivity hazards - Developed a chemical reactivity hazards webpage; - In process of developing a compliance directive for OSHA CSHOs to enforce regulations related to catastrophic chemical reactivity hazards; - In process of developing chemical reactivity hazard guidance -Continued outreach activities associated with chemical reactivity hazards, e.g. OSHA Assistant Secretary spoke at CCPS International Conference, Director of Enforcement spoke at Mary Kay O'Conner Process Safety Annual Symposium.
5	<p>2001-01-H-R2 (Improving Reactive Hazard Management) Implement a program to define and record information on reactive incidents that OSHA investigates or requires to be investigated under OSHA regulations. Structure the collected</p>	Open	<p>OSHA believes it has completed this recommendation as we responded to CSB stating that we have a procedure to compile incident data, including reactive chemical incident data. OSHA obtains this type of data during investigations and the data is</p>

	<p>information so that it can be used to measure progress in the prevention of reactive incidents that give rise to catastrophic releases.</p>		<p>available through our Integrated Management Information System (IMIS) database. OSHA continues to provide CSB investigators unfettered access to our IMIS data, even that data which is not yet publicly available. With respect to obtaining information from reactive incidents which are required to be investigated and reported, OSHA does not have a regulation which requires employers to submit this information to the Agency. We have reviewed the Clean Air Act Amendments of 1990 and believe that Section 112(r) gives CSB the authority to collect such information.</p>
<p>6</p>	<p>2002-02-I-NY-R8 (OSHA, Region II) Occupational Safety and Health Administration) Disseminate information on the requirements of the Hazard Communication Standard, 29 CFR 1910.1200, in the major languages spoken by workers in New York City with limited or no English speaking proficiency.</p>	<p>Open - Acceptable Response or Alternate Response</p>	<p>OSHA considers this recommendation complete as OSHA continues to provide training and outreach in chemical safety including our <i>Hazard Communications</i> Standard in many of the major languages spoken in New York City. Some of these training and outreach activities include:</p> <ul style="list-style-type: none"> • New Spanish-language page on OSHA's website ; • New Spanish-language option on OSHA's 1-800 number; • Numerous Spanish translations including Todo Sobre la OSHA (All About OSHA) and new publication, OSHA: Listos para ayudarle! (OSHA: Here to Serve You); • Collaborative effort working with the Catholic Church in New York; • Liaison with the Mexican Consulate in NYC;

		<ul style="list-style-type: none">• Conduct outreach sessions in Chinese (Mandarin and Cantonese) and Hindi in NYC area;• Some 1300 individual International Chemical Safety Cards (ICSC) from the International Programme on Chemical Safety are available in 14 different languages through the OSHA website . An ICSC summarizes essential health and safety information on chemicals for their use at the "shop floor" level by workers and employers in factories, agriculture, construction and other work places;• Training modules on various safety and health subjects including Hazard Communication can be accessed through our Spanish-language page using a link to Oregon OSHA's website ;• Collection of new data when investigating fatalities to determine the role language and country of origin play in accidents;• Conducted six 10-hour safety training courses in Spanish in NY metro area;• Outreach being conducted in French and Haitian to Restaurant & Nursing Home workers in NY Metro Area;• Safety materials are being translated into Korean for dissemination in NY Metro Area;• Translated OSHA Poster into French and Polish and translation of the poster into Russian, Italian and Portuguese is currently in process; and• Univision, a Spanish Language Channel in New York ran a Special Presentation on
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7	<p>2002-02-I-NY-R9 (OSHA, Region II) Occupational Safety and Health Administration) Establish a complaint and referral system with the New York City Fire Department (FDNY) to provide for a coordinated enforcement effort</p>	<p>Open - Acceptable Response or Alternate Response</p>	<p>OSHA on February 16, 17 and 18, 2004 (different presentations) during their 6 PM and 11 PM news.</p> <p>OSHA considers this recommendation complete as OSHA has developed and implemented a complaint and referral system with the New York City Fire Department (FDNY) to provide for a coordinated enforcement effort.</p> <p>Additionally, OSHA's Region 2 and its Manhattan Area Office worked with the Manhattan District Attorney in its investigation of Kaltech to obtain a guilty plea of "Reckless Endangerment" by the company. As a result, the plea agreement calls for Kaltech Industries to provide and pay for a comprehensive twenty-four hour chemical safety training course which will result in an OSHA certification for all employees who attend. This course will be for employees of sign manufacturers in the New York City area using chemical processes in their work. All Kaltech employees - and those of other sign and chemical companies owned by Kaltech's principals - were required to attend the training courses.</p>
8	<p>2003-06-I-IX-R13 (BLSR Operating Ltd. Vapor Cloud Fire) Issue a Safety and Health Information Bulletin on the potential flammability hazard associated with bulk transportation of oilfield exploration and production (E&P) waste liquids.</p>	<p>Open - Acceptable Response or Alternate Response</p>	<p>OSHA is developing a Safety and Health Information Bulletin to address this issue, therefore, we consider this recommendation complete.</p>

<p>9</p>	<p>2001-05-I-DE-R1 (Motiva Enterprises Sulfuric Acid Tank Explosion) Ensure coverage under the Process Safety Management Standard (29 CFR 1910.119) of atmospheric storage tanks that could be involved in a potential catastrophic release as a result of being interconnected to a covered process with 10,000 pounds of a flammable substance.</p>	<p>Open</p>	<p>Although the subject of this recommendation is important, at this time OSHA continues to believe this issue has not risen to a level where the Agency would consider changing its regulatory priorities. However, to ensure that PSM is being applied to process tanks similar to MOTIVA's spent acid tank, OSHA is developing a compliance directive. We believe that properly instructing our compliance staff with respect to differences in process tanks versus storage tanks will result in a more consistent application of PSM.</p>
<p>10</p>	<p>2005-4-I-TX-R5 (BP America Refinery Explosion) 1. Implement a national emphasis program for all oil refineries that focuses on: - The hazards of blowdown drums and stacks that release flammables to the atmosphere instead of to an inherently safer disposal system such as a flare. Particular attention should be paid to blowdown drums attached to collection piping systems servicing multiple relief valves; - The need for adequately sized disposal knockout drums to safely contain discharged flammable liquid based on accurate relief valve and disposal collection piping studies 2. Urge states that administer their own OSHA plan to implement comparable emphasis programs</p>	<p>Open</p>	<p>The compliance directive is published. OSHA believes we have completed this recommendation. See Appendix A, CSB <i>Recommendations to OSHA From BP TCR Investigation</i> for an explanation on OSHA's development and implementation of its <i>Petroleum Refinery Process Safety Management National Emphasis Program</i> (Refinery NEP).</p>

11	<p>within their respective jurisdictions.</p> <p>2005-4-I-TX-R8 (CSB2005-04-I-TX-R8) (BP America Refinery Explosion)</p> <p>1. Strengthen the planned comprehensive enforcement of the OSHA Process Safety Management (PSM) standard. At a minimum:</p> <p>a. Identify those facilities at greatest risk of a catastrophic accident by using available indicators of process safety performance and information gathered by the EPA under its Risk Management Program (RMP).</p> <p>b. Conduct, or have conducted, comprehensive inspections, such as those under your Program Quality Verification (PQV) program at facilities identified as presenting the greatest risk.</p> <p>c. Establish the capacity to conduct more comprehensive PSM inspections by hiring or developing a sufficient cadre of highly trained and experienced inspectors.</p> <p>d. Expand the PSM training offered to inspectors at the OSHA National Training Institute.</p>	Open	<p>OSHA believes we have completed this recommendation. See Appendix A, CSB <i>Recommendations to OSHA From BP TCR Investigation</i> for an explanation of OSHA's development and implementation of its <i>Petroleum Refinery Process Safety Management National Emphasis Program</i> (Refinery NEP) and an explanation of its expanded/accelerated PSM training of the Agency's compliance officers.</p>
12	<p>2005-4-I-TX-R9 (CSB2005-04-I-TX-R9) (BP America Refinery Explosion)</p> <p>Amend the OSHA PSM standard to require that a management of change (MOC) review be conducted for organizational changes that may impact process safety including:</p> <p>a. major organizational changes such as mergers, acquisitions, or reorganizations;</p>	Open	<p>OSHA is currently evaluating this recommendation and will respond to CSB when our evaluation is completed.</p>

		<p>b. personnel changes, including changes in staffing levels or staff experience; and</p> <p>c. policy changes such as budget cutting.</p>	
<p>13</p>	<p>Open - Acceptable Response or Alternate Response</p>	<p>2005-03-I-NJ-R5 (Acetylene Service Company Gas Explosion) Update the OSHA 1910.102 Acetylene Standard (a. Cylinders, b. Piped Systems, and c. Generators and filling cylinders) to remove the existing references to unavailable and obsolete Compressed Gas Association Pamphlets (CGA G-1-1966, G 1.3-1959, G 1.4-1966). As an alternative, consider incorporating by reference NFPA 51A Standard for Acetylene Cylinder Charging Plants.</p>	<p>OSHA considers this recommendation to be complete as the Agency intends to update the subject references in its rulemaking project, <i>Updating OSHA Standards Based on National Consensus Standards</i>.</p>
<p>14</p>	<p>Open</p>	<p>2006-1-H--R1 (Combustible Dust Hazard Investigation) Issue a standard designed to prevent combustible dust fires and explosions in general industry. Base the standard on current National Fire Protection Association (NFPA) dust explosion standards (including NFPA 654 and NFPA 484)</p>	<p>OSHA is currently evaluating this recommendation and will respond to CSB when our evaluation is completed.</p>
<p>15</p>	<p>Open</p>	<p>2006-1-H--R2 (Combustible Dust Hazard Investigation) Revise the Hazard Communication Standard (HCS) (1910.1200) to:</p> <ul style="list-style-type: none"> - Clarify that the HCS covers combustible dusts, including those materials that may reasonably be anticipated to generate combustible dusts through downstream processing or handling. - Require Material Safety Data Sheets (MSDSs) to include the hazards and physical properties of 	<p>OSHA is currently evaluating this recommendation and will respond to CSB when our evaluation is completed.</p>

	combustible dusts, as well as clear information on safe handling practices and references to relevant consensus standards.			
16	2006-1-H- -R3 (Combustible Dust Hazard Investigation) Communicate to the United Nations Economic Commission for Europe (UNECE) the need to amend the Globally Harmonized System (GHS) to address combustible dust hazards	Open		OSHA is currently evaluating this recommendation and will respond to CSB when our evaluation is completed.
17	2006-1-H- -R4 (Combustible Dust Hazard Investigation) Provide training through the OSHA Training Institute (OTI) on recognizing and preventing combustible dust explosions.	Open		OSHA believes this recommendation is complete as the Agency has committed to and is in fact developing a training program at its OTI on recognizing and preventing combustible dust explosions. This training will supplement the National Emphasis Program discussed below.
18	2006-1-H- -R5 (Combustible Dust Hazard Investigation) While a standard is being developed, identify manufacturing industries at risk and develop and implement a national Special Emphasis Program (SEP) on combustible dust hazards in general industry. Include in the SEP an outreach program focused on the information in the Safety and Health Information Bulletin (SHIB), Combustible Dust in Industry: Preventing and Mitigating the Effects of Fire and Explosions.	Open		OSHA believes this recommendation is complete as the Agency has committed to developing and completing a National Emphasis Program (NEP) for conducting enforcement inspections at facilities with combustible dust hazards. This NEP is in the final stages of concurrence before issuance.
19	2006-3-I-FL-R6 (Bethune Point Wastewater Plant Explosion) Revise 29 CFR 1910.106 to specifically exclude the use of thermoplastics in aboveground flammable liquid service.	Open		OSHA is currently evaluating this recommendation and will respond to CSB when our evaluation is completed.
20	2006-8-I-IL-R1 (Universal Form Clamp Co. Explosion and Fire)	Open		OSHA is currently evaluating this recommendation and will respond to CSB

	<p>Amend 1910.106 Flammable and Combustible Liquids to require facilities that handle flammable and combustible liquids to implement the requirements of 1910.38 Emergency Action Plans.</p>		<p>when our evaluation is completed.</p>
<p>21</p>	<p>2006-8-I-JL-R2 (Universal Form Clamp Co. Explosion and Fire) Amend 1910.38 Emergency Action Plans to require employers to conduct practice evacuation drills at least annually, but more frequently if necessary to ensure employees are prepared for emergencies.</p>	<p>Open</p>	<p>OSHA is currently evaluating this recommendation and will respond to CSB when our evaluation is completed.</p>
<p>22</p>	<p>2006-07-I-MS-R4 (Partridge-Raleigh Smith County Oilfield) Implement a Local Emphasis Program (LEP) to inspect companies in the oil and gas production and extraction sector.</p>	<p>OSHA is currently evaluating this CSB recommendation and will respond to CSB when we have determined the Agency's course of action.</p>	<p>Evaluating recommendation.</p>