October 4, 2010

Honorable Henry A. Waxman  
Chairman  
U.S. House Committee on Energy and Commerce  
2125 Rayburn House Office Building  
Washington, DC 20515

Honorable Ed Markey  
Chairman  
U.S. House Committee on Energy and Commerce  
Subcommittee on Energy and Environment  
2125 Rayburn House Office Building  
Washington, DC 20515

Dear Chairman Waxman and Chairman Markey:

Thank you for granting us an extension on the final response to your May 21, 2010, letter in which you requested information on historical challenges the CSB has encountered during various accident investigations.

The board continues to appreciate your support in resolving the challenges encountered during its accident investigations. Today I am providing responses to all five questions. The answers for questions 2, 4, and 5 are original to this response and answers to questions 1 and 3 have been reproduced here, but were provided in a previous letter on June 4, 2010.

To reiterate the sentiments of my predecessor, former Chairperson John Bresland, please let me state that I look forward to working with you and your respective staff to improve the authority and effectiveness of the U.S. Chemical Safety Board.

Sincerely,

Rafael Moure-Eraso  
Chairperson and CEO
1. Describe any instances since 1997 in which local, state, or federal authorities did not allow the CSB full and unfettered access to the site of a chemical accident, witnesses to the accident, or information relevant to an investigation.

   We recognize that the aftermath of a major fire or explosion often involves multiple goals and priorities. These goals may include rescuing the injured, extinguishing fires, recovering victims, protecting the environment, controlling imminent safety hazards, ruling out criminal acts, investigating possible regulatory violations, and restoring undamaged parts of a facility to normal production – as well as independently and thoroughly investigating all the causes so that future events can be avoided. Our answers attempt to be responsive as best we are able and do not suggest or imply that other parties acted for improper reasons.

   The following are instances where the CSB’s site access was significantly restricted by local, state, or federal authorities.

   Kaltech Industries (2002)

   On April 25, 2002, a reactive chemical explosion in the basement of a mixed-use commercial building in Manhattan injured 36 people, including six New York City firefighters. On the second day of the Board’s investigation, the CSB investigative team was expelled from the accident site by New York City fire officers as the CSB sought to interview hospitalized eyewitnesses. By the time the standoff was resolved several days later, the most pertinent physical evidence had been removed from the site by state and local authorities. The CSB never received access to the key evidence nor any control or influence over how it was tested or handled. Later in the investigation, the CSB concluded that weaknesses in the 85-year-old New York City fire code and inadequate code inspections were contributing causes of the accident.

   Praxair (2005)

   Three years later in June 2005, a massive fire swept through a gas cylinder distribution facility in St. Louis, destroying the facility, triggering the death of an asthmatic woman, and threatening the surrounding community with hazardous metal projectiles. One day into the investigation, the CSB investigative team was removed from the accident site without explanation by St. Louis fire department officials and was denied access to the key physical evidence. The CSB was later able to reconstruct some of what happened based on surveillance video, company documents, and engineering principles, and to recommend improved valve design and cylinder storage practices for companies around the country.

   CAI/Arnel (2006)

   Following a major plant explosion on November 22, 2006, that heavily damaged a residential neighborhood in Danvers, Massachusetts, the CSB investigative team was completely blocked from accessing the accident site by state and local authorities. A local site commander publicly declared the Board to be “uninvited,” “unwelcome,” “not a piece of the pie,” and “a distraction that has taken time away from the real investigators.” (See AP Domestic News, November 26, 2006, “Probers Look for Clues in Mass. Blast;” Boston Globe, November 26, 2006, “Dispute besets blast probe US investigators barred from site by Danvers chief;” Salem News, November 27, 2006, “Investigators probe blast cause, feds fight to get access.”)

   The blockade remained in place for seven days after the accident, until November 29. During the seven-day period, CSB investigators were refused access to the destroyed facility where the explosion
occurred, were denied permission to view damage in the adjacent residential community, and were denied access to view the area from the vantage point of a public waterway. During this period when the CSB was excluded, the central area of the accident site was heavily disturbed and cleared of debris – and possibly important evidence of the accident’s cause – using heavy equipment, under the supervision of state and local authorities who controlled the site. Even after the CSB achieved access to the site, and in spite of a written request to state authorities, no photography or documentation of how the site was altered was ever produced.

**Xcel Energy (2007)**

On October 2, 2007, five painting contractors were killed and three others were injured when an accidental chemical fire erupted 1,000 feet underground in a tunnel at the Xcel Energy hydroelectric power plant in Georgetown, Colorado. When the CSB lead investigator arrived at the site, local law enforcement personnel kept him out of the tunnel and then threatened him with arrest after he requested that evidence inside the tunnel be preserved in its original condition until site and evidence control agreements could be developed. The request to preserve evidence occurred after emergency response and rescue efforts had concluded.

**Imperial Sugar (2008)**

On February 7, 2008, a huge sugar dust explosion and fire occurred at the Imperial Sugar refinery northwest of Savannah, Georgia, causing 14 deaths and injuring 38 others, including 14 with serious and life-threatening burns. The ATF’s National Response Team deployed to the scene and treated the incident as a criminal investigation, preventing CSB from accessing the explosion site for almost a week. Although the ATF communicated early on to the CSB that no criminal activity was involved, the ATF did not relinquish control of the site until law enforcement personnel had finished recovering the last of the bodies many days later. In addition, the ATF stated it would only allow the CSB to interview employees after they had been interviewed by ATF, but then delayed releasing employees for CSB interviews even after their ATF interviews had concluded.

**ConAgra Foods (2009)**

On June 9, 2009, four workers were fatally injured and 67 others were injured in an accidental natural gas explosion at the ConAgra Foods Slim Jim meat production facility in Garner, North Carolina. The ATF National Response Team and an inspection team from North Carolina OSHA, a state agency, both arrived at the scene and immediately asserted that their authorities superseded the rights of the CSB to conduct its investigation. ATF agents stated that they had to conduct all interviews before the CSB and OSHA, and then state OSHA officials asserted that they had to conduct all interviews before the CSB. ATF and OSHA maintained their assertions despite CSB’s requests to work together to efficiently interview the hundreds of potential witnesses. CSB investigators were forced to wait until each individual was interviewed by both other agencies.

During this period of several days, ATF agents made entries deep into the interior of the accident site without other investigative agencies present, sequestered key witnesses away from CSB investigators, and gave instructions to worker representatives not to cooperate with the CSB. Following the departure of the ATF team, which eventually conceded that no intentional crime had occurred, the general counsel for the North Carolina Department of Labor asserted in an email on June 14, 2009, that North Carolina OSHA was now the primary investigatory agency because that agency was working under a six-month statutory deadline. North Carolina OSHA refused to enter in a joint site and evidence control agreement with the CSB. In February 2010, the CSB issued urgent safety recommendations to address the lack of adequate fuel gas codes to prevent the practices that led to the explosion.
Caribbean Petroleum (2009)

On Friday, October 23, 2009, a large fire and explosion occurred at a fuel storage terminal operated by the Caribbean Petroleum Corporation near San Juan, Puerto Rico. No one was seriously injured but the resulting pressure wave damaged surrounding buildings up to two miles away. More than one hundred ATF and FBI investigators deployed to the site and treated the incident as a possible crime or terrorist scene. The ATF and FBI took control of the site on Sunday, October 25, once the fire had been extinguished, and denied the CSB entry. On Tuesday, October 27, CSB investigators met with the FBI site lead, who indicated that the FBI had determined at that point that the explosion was not the result of criminal or terrorist activity. However, the CSB was still limited on that day to a ride around the site in a golf cart escorted by the ATF. On Thursday, October 29, the CSB was allowed to perform a walkthrough of the site escorted by ATF. It was not until the following day (October 30) that CSB was allowed unfettered access to the site. The FBI and ATF also prevented CSB from interviewing any witnesses until October 30, by instructing the company not to make employees available to the CSB.

Kleen Energy (2010)

On the morning of February 7, 2010, six workers were killed and at least 50 were injured during a planned natural gas pipe cleaning operation at Kleen Energy in Middletown, Connecticut. Local officials and others immediately described the event as accidental in origin. The next day at approximately 10:45 a.m., CSB investigators arrived at a police checkpoint on a public roadway some distance from the plant. Middletown police told the CSB team that they were not allowed on site and to leave the area. The CSB lead investigator then contacted the Middletown police station and was instructed to arrive at the station and show his credentials. The CSB investigator met with the Middletown acting police chief at the station; the chief stated that the site was considered a crime scene and the CSB would not be allowed on site until the crime scene investigative work had been completed. That afternoon the CSB lead investigator spoke with the offices of the Middletown mayor and the governor of Connecticut and was informed that CSB was not to enter the site and was further told that they would let the CSB know when they were “ready to hear from us.”

The Middletown police chief finally allowed just one CSB investigator into the plant site that afternoon. An hour later (following numerous media inquiries concerning the CSB’s absence from the site) the governor’s chief of staff informed the CSB that the governor had ordered the Connecticut State Police to allow the CSB what she termed full access to the site. The following morning, February 9, representatives of the Office of State Fire Marshal, Middletown Fire Department, OSHA, and the CSB met to discuss access to the site and evidence identification and collection. At the meeting, the CSB offered a model site and evidence preservation agreement that the CSB had used at other accident sites around the country, and which would provide equal evidence rights to all the investigative parties. A Connecticut state police sergeant serving in the Office of the State Fire Marshal stated that this remained a criminal investigation and that it superseded the safety investigation of the CSB. He also stated that state and local criminal investigators had already removed some evidence from the site, including a camera and a portable combustible gas detector.

The Connecticut state attorney who would oversee any potential prosecution stated he had never heard of the CSB and asked how the investigation could be turned over to a small agency that he had never heard of. State police representatives stated that they did not want to be slowed down by the CSB and did not want to enter into the proposed site preservation agreement. The meeting concluded with the police agreeing to allow the CSB to have an escorted tour of the periphery of accident site that day, although state and local investigators had already accessed the interior of the site.
Later that day an ATF agent, who had been detailed to the state investigation, entered a trailer occupied by CSB and OSHA investigators. The ATF agent stated that he and other criminal investigators were interviewing 70-80 witnesses and that witness testimonies might be made available to the CSB only after those authorities completed their “cause and origin” investigation. The ATF agent further stated to several CSB investigators, “we will be interviewing witnesses before you [CSB and OSHA] interview them, that’s just the way it is.”

At 2:15 p.m. on February 9, state and local authorities allowed four CSB investigators to tour only the outside perimeter of the accident site. CSB investigators were explicitly forbidden from approaching the building. During the tour CSB noticed several construction workers who were not being escorted by police. The CSB later determined that these workers were employees of the construction contractor, O&G, who were working to seal openings to a building with plastic sheeting. The CSB later learned that this building was a compressor building where high-pressure fuel gas first entered the site. The original valve positions in this building were potentially very important to understanding the sequence of events on the day of the incident. However, CSB investigators had lesser rights and lesser access than the unescorted workers for one of the companies that was nominally a focus of the law enforcement investigation. Only on Thursday, February 11, did the CSB team begin to receive satisfactory access to the site and witnesses – four days after the incident – following extensive interventions by elected officials and media criticism of the CSB’s exclusion.

However, by that time, over one hundred pieces of physical evidence had been removed from the site by state and local investigators and placed in the unilateral custody of the Middletown Police Department. The police and other state and local authorities refused numerous requests by the CSB to enter into an agreement on evidence preservation and testing, and to date have not provided a complete inventory of the items seized. In May 2010, the CSB served the police chief with a subpoena for the combustible gas detector, which it was believed might contain gas level readings from the minutes prior to the explosion. In response to the order of a Connecticut Superior Court judge, the Middletown police relinquished custody of the detector to the CSB on May 11.

Additional Cases

There are further examples of interference or blocked access among the investigations the CSB has conducted since 1998. For example, in 1998 local law enforcement officials in Nevada blocked the access of CSB investigators for several days to a mining explosives facility that had been destroyed by a series of accidental blasts. In February 2003, agents from the Bureau of Alcohol, Tobacco, Firearms, and Explosives (ATF) blocked the access of CSB investigators to an industrial explosion site in Kentucky for several hours. In 2004, officials from New Mexico OSHA challenged the CSB’s jurisdiction to investigate a fire at an oil refinery near Gallup and blocked access of the team to witnesses for several hours. Local and state officials in North Carolina blocked the CSB’s access to the site of a major reactive chemical explosion for approximately 24 hours in February 2006.
2. Describe any instances since 1997 in which the owner or operator of a site challenged or delayed the CSB’s access to the site of a chemical accident, witnesses to the accident, or information relevant to an accident investigation.

Inappropriate company challenges to CSB document requests or delayed development of protocols for equipment testing can result in significant delays in issuing CSB safety recommendations and final reports. The data below summarize 17 instances since 1997 where CSB investigations were delayed due to company challenges or activities.

**Tosco Avon Refinery (1999)**

In 1999, a fire occurred in the crude unit of the Tosco Avon Refinery in Martinez, California. The refinery dismissed key employees involved in the fire and then imposed settlement agreements that jeopardized the employees’ benefits if they cooperated with federal safety investigators, according to a senior company official. A company attorney later refused to leave a hotel conference room where the subpoenaed former employees were gathered; the attorney left only after CSB investigators called the police.

**Bethlehem Steel (2001)**

In 2001, an Indiana steel mill that experienced a fatal hydrocarbon fire denied CSB investigators permission to enter the site for approximately half a day. Eventually CSB investigators entered the site and began their work; however, the company had removed the physical evidence from the accident before CSB work began.

**Motiva Enterprises (2001)**

In 2001, a Delaware refinery was the site of a fatal tank explosion. The company placed severe constraints on CSB investigators’ movements within the refinery, confining them to a specific room and requiring them to be escorted around the facility at all times. The company later refused access to numerous management witnesses, numerous company witnesses failed to comply with CSB subpoenas, and the company refused to produce company emails for months that could document maintenance practices for the subject tank.

**First Chemical (2002)**

A chemical production plant located in Pascagoula, Mississippi, experienced a powerful reactive chemical explosion. The company challenged CSB investigators’ authority to enter the premises by claiming that all hazardous substances had been consumed in the ensuing fire and the CSB had no jurisdiction under the Clean Air Act. The company later dropped the claim and CSB investigators entered the site.

**West Pharmaceuticals (2003)**

In 2003, a North Carolina medical products company delayed CSB investigators’ entry to a fatal dust explosion site by requiring burdensome safety equipment (Level A or total encapsulation suits), which was of questionable necessity.
Hayes Lemmerz (2003)

In 2003, a Kentucky automotive products company that experienced a fatal dust explosion removed CSB investigators from the accident site and challenged the agency’s jurisdiction by questioning whether the massive fire had actually released hazardous air pollutants.

Giant Refinery (2004)

Six workers were seriously injured in a hydrocarbon explosion at a refinery in Gallup, New Mexico, on April 8, 2004. The CSB investigators focused on a critical isolation valve that suddenly and unexpectedly released the flammable hydrocarbon onto the plant grounds. The valve was removed from the equipment and secured at the refinery site, and the company refused to release the valve to the CSB for testing to determine the root cause of the accident. Finally in October 2004, the CSB served the company with a subpoena for the valve, but the company resisted the subpoena. On the eve of a federal court hearing to enforce the subpoena, the company relented but did succeed in delaying the actual testing until February 15, 2005, more than ten months after the accident.

BP Texas City (2005)

In the CSB’s investigation of the 2005 Texas City refinery explosion, the company disputed whether the CSB was authorized to look at root causes above the level of an individual facility, such as a lack of safety oversight by corporate officials and directors. A number of CSB document requests were insufficiently answered and the CSB later obtained a number of records from other parties that should have been produced by BP in response to the CSB requests.

Little General (2007)

On January 30, 2007, four people were killed and five others were seriously injured when propane leaked from a storage tank and exploded at a convenience store in Ghent, West Virginia. Months after the accident, CSB investigators had still not been able to conduct full testing of the key piece of physical evidence, a withdrawal valve on one of the propane tanks. The agency was significantly delayed by negotiations about testing conditions among approximately 41 different litigating parties, including representatives of companies, insurers, and victims. Litigating attorneys went to local courts and the news media and threatened to seek a federal court injunction to delay testing and have it conducted on terms more favorable to their clients’ various theories. Setbacks in conducting testing of the withdrawal valve resulted in an approximate three-month delay in completing the CSB’s final report.

Valero Refinery (2007)

The CSB experienced significant delays in testing the critical control station, valves, and piping that failed on February 16, 2007, at a refinery in Sunray, Texas. The accident caused a major fire that injured three workers, closed the refinery for several months, and had a major impact on gasoline prices in the Midwestern United States. Valero, which is the largest U.S. independent refinery operator, proposed testing the evidence at a firm with which it had a significant business relationship to limit the information the laboratory could report to all parties, including the CSB. The company opposed testing at the National Institute of Standards and Technology (NIST), which the CSB had proposed. The company retained custody of the subject equipment, and negotiations delayed the testing for months until the CSB finally took possession of the evidence in late July 2007.
Xcel Energy (2007)

On October 2, 2007, five people were killed and three others injured when a fire erupted 1,000 feet inside a penstock tunnel at Xcel Energy’s hydroelectric power plant in Georgetown, Colorado, located approximately 45 miles west of Denver. The fatally injured workers were trapped deep inside a mountain during an operation to recoat the inside of the tunnel with epoxy using highly flammable solvents. During the CSB’s investigation, RPI Coating – the contracted company working within the penstock – inappropriately challenged the authority of the CSB, stating the agency did not have investigative jurisdiction because there had not been a release of chemicals into the atmosphere. However, a release to the ambient air had occurred as a result of the fire. RPI Coating allowed eyewitnesses to return home to California before they could be thoroughly interviewed by the CSB. The lead foreman gave testimony to the CSB that he was instructed to remain in a vehicle on the day investigators were conducting initial interviews to avoid speaking with the board’s investigators. As a result of these actions, the CSB spent an unprecedented amount of time locating and arranging for interviews with the witnesses throughout the state of California.

Xcel failed to fully respond to a number of CSB requests for both records and information. The company’s nonresponsiveness persisted to the point that the CSB required the assistance of the Civil Division of the U.S. Attorney’s Office for the District of Colorado to obtain information relevant to the CSB investigation. Xcel’s lack of cooperation delayed the CSB’s investigation and caused considerable expense.

Finally, when requested to provide comments on a draft report to help conclude the investigation, Xcel took the unprecedented step of going to federal court to block the publication of the CSB report. After weeks of legal activity, the presiding judge squarely rejected Xcel’s effort to prohibit publication of the report. While the CSB’s position was supported by a federal district judge, Xcel’s legal action contributed to the delayed completion of the CSB report and diverted CSB resources from other ongoing investigations, including the BP/Transocean Deepwater Horizon investigation that was requested by the Committee.

Bayer CropSciences (2008)

On August 28, 2008, two workers were fatally injured when a process tank containing the pesticide methomyl violently exploded, damaging a process unit at a chemical plant in Institute, West Virginia. Evidence obtained by the Committee on Energy and Commerce demonstrated that the company “engaged in a campaign of secrecy by withholding critical information from local, county and state emergency responders; [and] by restricting the use of information provided to federal investigators…”1 In a hearing entitled “Secrecy in the Response to the Fatal Bayer Chemical Plant Explosion” held by the Subcommittee on Oversight and Investigations on April 21, 2009, CSB Chairman John Bresland testified that Bayer marked approximately 2,000 pages of investigative documents in 2009 as sensitive security information, or SSI, under the 2002 Maritime Transportation Security Act (MTSA), a Department of Homeland Security designation that prevents release of the information to the public. Bayer President and CEO William Buckner stated that company officials initially thought they could “refuse to provide information to the CSB…” and began labeling documents as SSI in order to “discourage the CSB from even seeking this information.” Documents showed that Bayer approached the Coast Guard about using SSI designation to deter the CSB from inquiring about the highly toxic chemical MIC and pressed the Coast Guard for sweeping new SSI determinations to blunt the CSB investigation and any negative public disclosures that might stem from it. Mr. Buckner also admitted that one of Bayer’s goals in withholding

information from the public was “the desire to avoid making the controversial chemical MIC part of the public debate regarding the incident.”

Responding to Bayer’s authority challenge and to necessary document requests from Congress to expose Bayer’s misconduct resulted in weeks of delays to the CSB investigation and diverted multiple staff from other projects.

**Imperial Sugar (2008)**

During the CSB’s investigation of the explosion at a sugar refinery, the company’s human resources director accosted CSB investigators at a hospital burn center in Augusta, Georgia, as an investigator sought to interview injured victims and cooperating family members. Approximately two months later, on April 10, 2008, three investigators arranged meetings with victims’ families through the Joseph M. Still Burn Center staff and conducted additional interviews with two victims. All family members and victims consented to the interviews. The next day at the site, two company lawyers confronted CSB investigators demanding to know what they had discussed with the victims at the burn unit and accusing the CSB of acting inappropriately. The lawyers falsely accused the CSB of not gaining proper authority to interview these victims. During this conversation, the attorneys for the company indicated that because CSB investigators went to the burn center to conduct interviews without notifying them, future interviews by CSB and OSHA might be prevented. Subsequent to this meeting, the attorneys contacted OSHA and inaccurately alleged that victims, their family members, and hospital staff were disturbed by the CSB’s interviews in Augusta. In the following weeks, the CSB received a letter from the company’s lead counsel in which he made false allegations that CSB investigators had acted inappropriately and unprofessionally while at the burn center. The letter also demanded a chronology of facts and a summary of information the CSB had gathered and claimed that the company would not grant interviews of anyone else in the future.

**ConAgra (2009)**

Upon the CSB’s initial arrival at a facility following an explosion in a meat processing facility in Garner, North Carolina, a company vice president tried to throw CSB investigators off the property. The company also stated that it would not recognize the CSB’s authority to conduct investigative activities until OSHA and ATF completed their investigative work. ConAgra made changes to the site evidence without advance notification to the CSB, despite receiving a preservation letter from the board. In a letter from ConAgra attorney Leo Knowles to the CSB General Counsel dated July 2, 2009, he asserted that piping and sections of the ceiling had been removed before investigators completed their investigation.

**Delphi Oil (2009)**

On October 31, 2009, two teenagers in Carnes, Mississippi, were fatally injured when a gas condensate storage tank exploded after tank vapor contacted an ignition source. On November 30, 2009, the CSB received a letter from Delphi Oil’s legal counsel questioning its jurisdiction to investigate the explosion. The company asserted that the facility has never produced, processed, handled or stored “extremely hazardous substances” above the “threshold limit” and that there was no emission of a hazardous substance. Company counsel did not cooperate with CSB inquiries to obtain information. Additionally, the company refused to provide documents or answer interrogatories regarding the accident and the substances contained inside the tank.
M-C Productions and Drilling Company (2010)

An oil tank explosion at a rural oil and gas well site in New London, Texas, fatally injured a 24-year-old woman and critically injured a 24-year-old man. When investigators contacted the company following the accident, company representatives initially agreed to comply with the CSB’s request for documents; however, they later refused to give the CSB access to evidence obtained from the site, questioning the CSB’s investigative authority. The company never provided the CSB with any information or requested documents.

BP Deepwater Horizon (2010)

On April 20, 2010, a sudden explosion and fire occurred on the BP/Transocean Deepwater Horizon oil rig. The accident resulted in the deaths of 11 workers and caused a massive oil spill into the Gulf of Mexico. The CSB received a Congressional request to investigate the accident. Upon receipt of the initial document and interview requests, two companies with significant roles in incident (Transocean and Cameron) contested the agency’s jurisdiction in the investigation. Responding to the company’s jurisdictional questions delayed the team’s access to critical documents and witnesses. At the time of this letter, the CSB has not been granted access to key Transocean witnesses.
3. Describe any instances since 1997 in which the CSB believes physical evidence at an accident site was moved, altered, or removed without prior notice to, and consent from, the CSB.

Physical evidence is often the key to understanding the sequence of events in a major chemical accident. In some cases, where there are no surviving eyewitnesses, physical evidence is all that remains to tell investigators exactly what happened. Key pieces of evidence – such as valves, explosion debris, or computer records – can be indispensable in understanding an accident and developing recommendations for preventing future accidents. In many cases, knowing the exact positions of control valves at the moment of an accident is critical to understanding what went wrong. In some cases, computer modelers can decipher the nature and fuel for an explosion by performing calculations on damaged or deformed structures – known as “blast markers” – but only if those markers remain intact and undisturbed.

However, if the evidence is moved from its original locations or subject to any possible alteration then the causes of accident may remain permanently in doubt. Worse still, incorrect conclusions may be reached when evidence has been altered without investigators’ knowledge.

Disturbance of the physical evidence at accident sites – even after fires have been extinguished and victims have been recovered, and there is no threat of additional environmental damage – has been a common problem that has delayed or impaired many CSB investigations. In several cases, the CSB actually decided not to consider conducting an investigation because, by the time investigators arrived, too much of the relevant physical evidence had been lost or destroyed.

During the first few years of the CSB’s existence, the agency had few investigators and did not pursue physical evidence as aggressively. However, from 2001 onward, as the agency became better organized and deployed larger teams more quickly to accident sites, disturbance or loss of physical evidence became a recurrent problem, as shown in the following examples.

**Bethlehem Steel (2001)**

One worker died and four were injured when flammable liquid was released from a gas piping system at an Indiana steel mill. A key piece of physical evidence – the heating lamp that likely ignited the flammable liquid – was removed from its original location by company personnel before CSB investigators were allowed to access the site.

**Georgia-Pacific (2002)**

Two workers died and eight others were injured at an Alabama pulp and paper mill when an uncontrolled chemical reaction inside a process sewer released deadly hydrogen sulfide gas onto the plant grounds. By the time CSB investigators gained access to the site, the unsealed manhole cover through which the toxic gas escaped had been replaced with a new cover and sealed; the original cover could never be located or examined.

**Kaltech Industries (2002)**

Thirty-six people were injured when a reactive chemical explosion in the basement collapsed portions of a Manhattan commercial building. CSB investigators were expelled from the site by New York City fire personnel (see Question #1) and when they were able to return several days later, all the most pertinent physical evidence had been removed, including the containers of waste chemicals that reacted. The CSB never gained access to the evidence and was not allowed to participate in any testing.
First Chemical Corporation (2002)

Three workers were injured and a public shelter-in-place was ordered when a reactive chemical explosion blew apart a 145-foot distillation tower at a Mississippi chemical manufacturer. The CSB requested that the company not conduct testing on a key steam valve that leaked, triggering the runaway chemical reaction and explosion. When CSB investigators left the site, however, the company immediately tested the valve on its own without the CSB’s knowledge or input.


Seven workers were reported to be injured in a plastic dust explosion July 22, 2003, at a South Carolina pharmaceutical packaging company, including one worker with serious burns. When CSB investigators arrived, the area of the explosion had already been cleaned up by the company. No investigation was done.

Technic Inc. (2003)

One chemical plant worker was seriously injured and a public evacuation was ordered when a worker, tapping on a chemical ventilation duct with a hammer, triggered an apparent reactive chemical explosion. The Rhode Island state fire marshal’s office removed from the site both the hammer and a large section of the ductwork, including the area where the hammer struck. The CSB could never gain access to this key physical evidence and was never able to determine the immediate cause of the explosion. The CSB uncovered the existence of a company surveillance videotape showing the explosion; when the state fire marshal’s office learned of the tape’s existence CSB investigators were threatened with arrest unless they surrendered the tape. The fire marshal took the videotape, along with the hammer and the ductwork, but never issued any citations or report on the accident.

One worker was killed and a public evacuation was ordered when a vessel overheated and exploded at a Kentucky food additive plant, causing a release of ammonia into a residential neighborhood. When the CSB team arrived at the site, local fire personnel had already loaded physical evidence such as fragments from the subject tank onto a flatbed truck and were in the process of driving the truck away from the site.  

Avery Dennison (2003)

A runaway chemical reaction and chemical release at a Pennsylvania adhesives producer deposited acrylic polymer on several hundred vehicles, buildings, and members of the public, including nearby middle school students. When CSB investigators arrived the company had already emptied the subject reactor and cleansed it of any residues, which could have pointed to the nature of the reaction. The CSB eventually dropped the investigation.

Isotec (2003)

One worker was injured and a public evacuation was ordered when a powerful explosion occurred in a 300-foot tall underground distillation column at an Ohio chemical company. As soon as the fire department released the site back to the company, management instructed employees to clean the site, discarding much of the explosion debris without regard to its possible evidentiary value. The CSB could not determine an exact cause for the explosion.

Formosa Plastics (2004)

Five workers died and two others were seriously injured when highly flammable vinyl chloride was released from a batch reactor at an Illinois chemical plant, evidently when an operator opened the incorrect valve in a system that lacked many safeguards. Reliable knowledge of the position of the key valve would be critical to any investigation. However, the company determined the accident site to be structurally hazardous and certain hot zones were deemed unsafe for entry. Nonetheless, the CSB learned that on two occasions – prior to any access by CSB investigators – a company supervisor entered the accident site without authorization and gained access to the key valves and other equipment. The supervisor denied altering the evidence but there were no witnesses to corroborate his account.

C&G Aircraft (2004)

One worker was killed and two others were seriously injured by a reactive chemical explosion at a Dallas-area aircraft parts company. When CSB investigators arrived at the site, the physical evidence of the explosion had already been cleaned up. The CSB decided not to attempt an investigation.

Marcus Oil (2004)

After an explosion and fire at a southwest Houston chemical plant, the city building department ordered the immediate demolition of the company’s office and warehouse building – even though it had survived the accident and the fire had been extinguished hours earlier. By the time CSB investigators arrived at the site, all the company’s documents and equipment records, which were housed in the main office building, had been destroyed, and a large area was cleared preventing search and identification of crucial evidence from the chemical tank that exploded. As the investigation progressed, CSB

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2 Several days later the fire department brought back the evidence for the CSB investigators to identify.
investigators suspected that the explosion was caused by pressurizing the tank of hot, flammable material with air instead of inert nitrogen. Two company employees then admitted in sworn depositions to CSB investigators that, a few days after the accident, one of the company owners had instructed them to remove and discard the valve and piping that had connected the compressed air system to the nitrogen system. The air-contaminated nitrogen system was determined to be a key factor in the explosion.

Acetylene Service Co. (2005)

Three workers were killed in an explosion at an acetylene gas distribution facility in Perth Amboy, New Jersey. Without the CSB’s knowledge or consent, federal OSHA inspectors removed the two key pieces of physical evidence from the site: (a) a check valve that was thought to have leaked acetylene gas into a shed near the workers; and (b) a propane space heater that was believed to have ignited the acetylene gas. The evidence was taken out of state, and OSHA conducted its own testing, without CSB input on the testing protocols. The CSB report on the case was largely based on computer blast modeling and engineering analysis of exemplar items purchased by the CSB, rather than actual test data from the key pieces of evidence.

BP Texas City Refinery (2005)

During the emergency response to the refinery disaster in Texas City, which killed 15 workers and injured 180, company personnel changed numerous valve positions in the unit where the explosion occurred, without documenting the original valve positions. The company later tried to assist the CSB in determining the original positions, and the CSB conducted numerous interviews trying to understand what changes had occurred during the response. Nonetheless, certain key valve positions could never be conclusively resolved.

Praxair (2005)

After St. Louis fire officials removed CSB investigators from a gas cylinder explosion site (see Question #1), the CSB had no access to the key physical evidence, including a propylene gas bottle that was believed to have leaked through a faulty relief valve. The CSB safety bulletin and recommendations were based on the company report, surveillance video, data provided by the relief valve manufacturer, engineering principles, and a review of other similar fires.

CAI/Arnel (2006)

During the seven-day period when CSB investigators were blocked from the explosion site in Danvers (see Question #1), state and local fire investigators had unrestricted access and extensively moved explosion debris both by hand and using heavy equipment. This activity occurred long after the fires had been extinguished and any emergency response had ceased. When the site was finally opened to the CSB, a central area within the destroyed chemical facility had been completely cleared of debris – and possibly of relevant physical evidence – using heavy equipment such as a front-end loader. CSB investigators could never locate certain key physical evidence, such as steam valves that may have been left open overnight, potentially overheating a tank filled with flammable solvents and causing the explosion. Although a written request was submitted to the state fire marshal’s office, the CSB was never provided with any photographs, video, or other documentation of the handling of the accident site or the movement of the evidence during the seven-day period of exclusion.
**Little General Store (2007)**

Four people died at a West Virginia convenience store when gas from a leaking propane tank exploded. During the first several days while the site was under state control, some looting occurred. In addition, private investigators representing individual litigating parties were allowed onto the site. When the site was released to the Chemical Safety Board, CSB investigators controlled the activities of private investigators, secured the key physical evidence under tarps, and enlisted company security guards to protect the site.

**Barton Solvents (2007)**

Approximately 6,000 people were requested to evacuate from a Wichita, Kansas, suburb when fire swept through a solvent distribution company, sending exploding tanks rocketing through the air. Specifically, the fire is believed to have been ignited by a sudden explosion of flammable naphtha in Tank 31. Most of Tank 31 left the ground and landed about 150 feet from the tank farm, on company property. The CSB instructed the company in writing on July 26 to “take special care to preserve” physical evidence in its undisturbed condition, specifically including the “area surrounding Tank 31 and its current location.” Nonetheless, on August 1, the company’s own private insurance firm entered the site—which was then under the company’s control—and, without the CSB’s knowledge or consent, used heavy equipment to flip over Tank 31 from its as-found position and examine the underside of the tank.

**Xcel Energy (2007)**

During the CSB’s investigation of a fire at Xcel Energy (see Question #1), law enforcement authorities including the ATF and the County Medical Examiner moved evidence within the tunnel where the fire occurred. Several key pieces of evidence were removed or altered before any site or evidence control agreements could be developed among the investigating parties. This evidence did not need to be moved or altered for emergency response purposes. The items included a lighter, which the CSB was never given the opportunity to document or examine; a lamp that was a potential ignition source; and a bucket containing a chemical product involved in the fire. A hose that was part of an epoxy sprayer system at the center of the fire—a critical piece of evidence—was detached from the sprayer. Additionally the physical position of a key valve on the sprayer was altered. The CSB investigation was significantly delayed while CSB investigators laboriously reconstructed the causes of the fire from the evidence that remained.

**ConAgra (2009)**

During the CSB’s investigation of the natural gas explosion at the ConAgra Slim Jim plant (see Question #1), ATF agents entered the accident scene to collect evidence without collaboration or pre-planning with the other investigative agencies, including the CSB. During these entries, evidence was altered. The ATF collected critical pieces of evidence without the CSB’s knowledge or collaboration, despite repeated suggestions that the agencies work together to develop a joint site and evidence control protocol. Acting unilaterally and without the CSB’s knowledge, the ATF collected surveillance video equipment from the facility and a gas meter from the immediate area of the explosion. Later the ATF returned the items directly to ConAgra instead of the CSB or other investigative agencies, destroying any chain of custody. Subsequent photographic evidence showed that during these ATF site entries a potentially critical piece of evidence—a cap from the two-inch gas line that was releasing gas into the building—had been moved from its original position. ConAgra also made changes to the site following the accident without obtaining prior consent and approval from the CSB, despite an earlier CSB letter instructing the company to preserve all evidence. Photographic evidence shows that after the accident the
company severed natural gas and propane piping on the roof of the building, an operation that was performed without the CSB’s knowledge or approval.

**Tesoro Refining (2009)**

On October 21, 2009, flammable liquid hydrocarbons were ejected from a flare stack at the Tesoro Refinery in Salt Lake City during an effort to restart the refinery’s crude unit. The hydrocarbons ignited in a pool fire that damaged a trailer and other equipment that were positioned nearby. The CSB began an investigation due to similarities with the BP Texas City refinery disaster of 2005, sending a team from its Denver office. On October 22, the CSB communicated both verbally and in writing with Tesoro on the need to preserve the site and affected equipment while investigators arrived. However, the company removed and destructively examined or repaired evidence from the fire before the CSB could examine it. For example, the relief valves that leaked during the accident were removed, repaired, and reinstalled before the CSB arrived on site. The pump that malfunctioned was also repaired before the CSB’s arrival. The relief valves again leaked during a subsequent restart, but the company once again repaired them without notifying the CSB and thus prevented the CSB from determining if the problem was relevant to the earlier fire.

**Caribbean Petroleum (2009)**

During the investigation of the massive fire and explosion at the Caribbean Petroleum fuel terminal near San Juan, Puerto Rico, the CSB determined that FBI agents had instructed facility operators to manipulate valves to determine their functionality. These site alterations occurred during the period when CSB investigators were excluded from the accident scene (see Question #1).

**Kleen Energy (2010)**

During the CSB’s investigation of the natural gas explosion at Kleen Energy in Middletown, Connecticut (see Question #1), evidence was collected from the explosion site by state and local authorities without collaboration or consultation with the CSB. Over 100 pieces of evidence were removed from the site, many of which remain unidentified or undisclosed to the CSB. In order to obtain copies of three pieces of documentary evidence, the CSB had to take the unprecedented step of issuing subpoenas to the Middletown police chief. The CSB was also forced to issue a subpoena for a combustible gas detector that state and local authorities had removed from the site during the period when the CSB was excluded from access. Although the CSB eventually obtained the detector following judicial proceedings that occurred months later; state and local authorities had already altered components of the device, in concert with the manufacturer and over the CSB’s objections.
4. Describe any instances since 1997 in which medical privacy restrictions prevented the CSB from accessing medical records or autopsy results deemed necessary to satisfactorily investigate a chemical accident.

Regulations adopted by the Department of Health and Human Services (HHS) implemented the Health Insurance Portability and Accountability Act of 1996 (HIPAA). Covered providers frequently cite HIPAA and refuse to provide the CSB with basic health status information for victims following an incident. Accordingly, the CSB needs to clarify its legal right to obtain such information.

The access to protected health information by the CSB immediately following a chemical accident is vital to the board’s ability to carry out its statutory mission to protect public health and safety. This information plays a critical part in assessing the severity of a chemical accident and determining what hazardous substances were involved. The CSB encounters issues related to privacy restrictions predominantly during its incident screening activities but also during the detailed investigations of accidents. Below are three specific incidents where the board’s investigation activities were hindered due to an inability to quickly gather health-related information.

El Dorado Chemical (2009)

On July 30, 2009, a massive ammonium nitrate fire occurred at the El Dorado Chemical plant in Bryan, Texas, resulting in an evacuation of approximately 70,000 people from Bryan and College Station. In an effort to determine the effects of the accident, the CSB sought medical records from St. Joseph Health System where a number of residents sought medical evaluations. A byproduct of an ammonium nitrate fire is nitrogen dioxide, a health hazard that can exhibit a delay in the onset of severe symptoms for five to seven hours; patients may not have associated their symptoms with the fire due to the delay. Data were needed to develop a baseline when a chemical fire was not occurring. However the hospital declined to provide the necessary records citing health privacy concerns, eventually necessitating a subpoena for the information. In the end, the CSB did not pursue an investigation of the health effects of the fire, or possible emergency response or siting considerations for ammonium nitrate facilities.

Enbridge Energy (2010)

On Saturday, January 10, 2010, a hydrogen sulfide leak occurred at a desulfurizing process at the Enbridge Energy gas processing plant in Longview, Texas. The leak fatally injured one worker and injured six others, one critically. The CSB contacted LSU Hospital in Shreveport, Louisiana, where the critically injured worker was hospitalized. The nurse at the hospital refused to provide any information on the victim, citing health privacy rules. The incident screener also contacted Linden Good Shepherd Hospital in Linden, Texas, where five victims were treated and released for hydrogen sulfide intoxication. The hospital refused to provide information on the victims’ status over the phone and denied other faxed requests for information due to HIPAA.

Quality Surface Processing (2010)

On February 9, 2010, one worker was fatally injured and two others were injured while stripping paint at Quality Surface Processing in Schofield, Wisconsin. The incident screener at the CSB called the hospital to obtain a status on the victims, but the hospital staff refused to provide any information, citing HIPAA.

Such refusals to provide information by health care providers are common during CSB incident screening activities. In 2010, the CSB improved its incident screening database to begin systematically tracking such refusals and can provide more complete information to the Committee in the future.
The CSB is also pursuing an administrative declaration from HHS that would confirm the board’s status as a public health agency and its ability to obtain HIPAA-protected health information. The same status has been given to the National Transportation Safety Board (NTSB). On June 1, 2010, the CSB submitted a letter to the Department of Health and Human Services (HHS), Office of General Counsel, to confirm the CSB’s interpretation of HIPAA and its ability to receive public health information. However, to date, no response has been received despite repeated contact attempts.
5. Describe any other situations in which the CSB was hindered from fulfilling its statutory authority at an accident investigation site, from completing a comprehensive investigation, or from publicly releasing the results of an investigation.

The CSB has been hindered by the increasing requests for and use of CSB investigative records by criminal enforcement authorities – especially the use of CSB interview and deposition transcripts. As a result of the growing demand for CSB information in criminal actions, an increasing amount of CSB time is taken up responding to the requests. Worse, the CSB believes some witnesses have been reluctant to cooperate and to provide information to the CSB based on their knowledge that CSB information may find its way into criminal prosecutions. Similarly, the use of CSB witness statements in civil litigation might also discourage full and open participation of witnesses in CSB safety investigations. The following examples illustrate how concurrent criminal and civil actions – or even the specter of such actions – have impacted the CSB’s safety investigations.

Motiva Enterprises (2001)

During an investigation into an accident at a Delaware oil refinery in 2001, a number of witnesses retained criminal defense counsel and CSB depositions were delayed for months as the witnesses were concerned about criminal prosecution. The NTSB has encountered similar problems with witnesses who have asserted the Fifth Amendment privilege against self-incrimination and refused to cooperate with safety investigations.

BLSR Operating Ltd. (2003)

Following a CSB investigation into a fatal accident in Texas in 2003, federal criminal investigators demanded access to and custody of witness statements that had been provided voluntarily to CSB safety investigators – backed by a threat to subpoena the CSB chairman and other officials before a federal grand jury.


In 2005, a state district attorney in Kentucky sought a variety of CSB records for use in a state criminal investigation, including an all-encompassing request for any incriminating statements made to CSB investigators conducting an investigation of a fatal tank explosion in Louisville in 2003. Again, the requests diverted attention from pursuing CSB investigative matters.

CAI/Arnel (2006)

Following a serious explosion in Danvers, Massachusetts, in 2006, state officials repeatedly requested CSB information for potential use in regulatory or criminal citations, causing delays in the CSB’s own investigative efforts.

Xcel Energy (2007)

Federal prosecutors in Colorado sought extensive documentation from the CSB in connection with the indictment of two companies for federal criminal violations resulting from the serious accident at Xcel Energy in 2007. The rolling requests diverted substantial CSB staff time from conducting the investigation itself. Moreover, the use of this information by the prosecution led the witnesses and company officials who were facing potential prosecution to refuse to testify or to assert their Fifth Amendment privilege (out of the legitimate fear their statements to the CSB would later be gathered and used by prosecutors).
Ultimately, the use of CSB witness statements by criminal prosecutors led criminal defendants in 2010 to seek an injunction against the CSB to prohibit the publication of the CSB’s Xcel safety report and recommendations, including recommendations to OSHA to improve its confined space standard. The criminal defendants incorrectly alleged that the CSB had acted in concert with federal prosecutors. Ultimately, the presiding judge squarely rejected the company’s effort to prohibit publication of the CSB’s report. While the CSB’s position was supported by a federal district judge, the company’s legal action delayed completion of the CSB report and diverted CSB resources from other ongoing investigations. However the company’s legal actions likely would not have occurred had the U.S. Attorney not used CSB transcripts in federal criminal grand jury proceedings.

Use of CSB Witness Statements in Civil Litigation

It is also increasingly common for attorneys in civil litigation arising from accidents investigated by the CSB to make Freedom of Information Act (FOIA) requests for the transcripts of witness interviews and other investigative records. The transcripts may then used for a variety of litigation purposes for which they were never intended. Companies subject to CSB investigations, perhaps because their employees’ statements and testimony may be used against the company in litigation, are more often insisting that company attorneys be permitted to observe investigative interviews. Such observation is strongly discouraged in safety investigations, because it may dissuade witnesses from being forthcoming with critical information about problems and deficiencies that might reflect poorly on their employers.

An additional concern is the potential negative impact on the witnesses resulting from the availability of interview transcripts to litigants. For example, witnesses may receive unwanted contact from attorneys seeking or even compelling their participation or testimony in the litigation. If the contents of the witnesses’ statements are further disseminated, the witnesses may be subjected to criticism or retaliation from co-workers or employers. Current exemptions to the FOIA do not allow the CSB to adequately protect interview transcripts from disclosure.

Allowing the continued use of CSB witness information in civil and criminal litigation is likely to have a chilling impact on witnesses who may wish to speak to the CSB. This could damage the speed and quality of CSB investigations. On the other hand, modifying the CSB statute to protect witness information under certain circumstances would not prevent other authorities from independently collecting their own witness statements for use in criminal proceedings. As detailed below, other agencies afford greater protection for witness information. The CSB statute could be amended to provide similar protections.

The U.S. Air Force provides that information supplied to its safety investigators “may not be used in any disciplinary or criminal proceedings”. See James K. Brengle et al., Aviation Professionals and the Threat of Criminal Liability—How Do We Maximize Aviation Safety?, 67 J. Air L. & Com. 875, 902 (Summer 2002). This has prompted some to call for greater protection of information provided to NTSB safety investigators. See id. at 928 (recommending in part that legislation should be adopted prohibiting the use of any information provided to the NTSB in an accident investigation against the provider of that information in a subsequent criminal case, except in a prosecution for perjury or giving a false statement). The same arguments for protecting such information should also apply to CSB safety investigations.


3 United States v. Xcel Energy, Inc., et al., No. 09-cr-00389-WYD (District of Colorado).