



U.S. Chemical Safety and Hazard Investigation Board

BUDGET JUSTIFICATION

Fiscal Year 2008

Final Budget Request for Fiscal Year 2008
Chemical Safety and Hazard Investigation Board
February 5, 2007

Summary

For fiscal year (FY) 2008, the Chemical Safety and Hazard Investigation Board (CSB) requests a budget of \$10.5 million,¹ an increase of \$1,404,000 above the FY 2007 recommended level of \$9.1 million.² The increase will fund three new chemical incident investigators, at a net cost of \$393,000, bringing the CSB Office of Investigations up to a total of 24 technical personnel. The request also includes \$250,000 for the expansion of the CSB's new outreach program, specifically for the production of short computer-animated safety videos. Finally, a \$250,000 increase will establish a small office to conduct nationwide studies on significant chemical safety issues. Remaining funds will defray an expected January 2008 cost-of-living increase, the cost of Freedom of Information Act (FOIA) system improvements and other small adjustments to the agency's payroll and expenses.

Agency Continues Its Focus on Major Refinery Explosion

On March 23, 2005, there occurred the worst U.S. chemical accident in almost 15 years, killing 15 workers and injuring 180 others at the BP Texas City refinery. The accident happened as operators restarted an octane-boosting isomerization unit, inadvertently overfilling a distillation tower, and causing a geyser-like release of highly flammable hydrocarbons from a nearby stack. The resulting explosion killed and injured personnel in nearby trailers, which were flattened by the blasts.

The accident cost billions in victims' compensation, property damage, and lost production. Nearly two years after the explosion, gasoline production remained depressed at the refinery - the nation's third largest.

On August 17, 2005, the Board issued the first recommendation designated "urgent" in its eight-year history, urging BP's Global Board of Directors to commission an independent panel to examine safety management systems, culture, and oversight at the company's five North American refineries in Ohio, Washington, Indiana, and California as well as Texas.

The Board cited a series of safety lapses at the Texas City site, including the decision to proceed with the startup of the isomerization unit despite known problems with safety alarms and instrumentation. BP promptly accepted the recommendation, and BP Group chief executive John Browne commented: "Today's recommendation from the CSB is a welcome development and we take it seriously. We will move speedily to appoint an independent panel and offer it

¹ Under Section 112(r) of the Clean Air Act Amendments of 1990, the CSB prepares its budget request and justification independently from the Office of Management and Budget; as a result, the requested amounts differ from those in the President's Budget.

² Based on U.S. Senate Report 109-275.

every help to do its job. When it reports, we will act with equal speed to deal with its recommendations.”

Just over two months later, BP announced the appointment of the panel, chaired by former U.S. Secretary of State James A. Baker III. As recommended by the CSB, the panel included ten other members with diverse and distinguished backgrounds in process safety, nuclear safety, aviation, and other fields. The panel held public meetings at the five BP refinery locations in the U.S., audited the safety practices at all five locations, surveyed the attitudes and beliefs of thousands of BP employees, conducted interviews of hundreds of employees, and reviewed thousands of documents.

The Chemical Safety Board’s urgent recommendation was the first action of the U.S. government to highlight systemic problems at BP – months prior to environmental and oil supply disruptions in Prudhoe Bay.

On January 16, 2007, the independent Baker panel finished its work and issued a sweeping 374-page report that found pervasive safety problems at all five of BP’s North American refineries. The identified safety problems included inadequate maintenance, near-miss investigation, training, staffing, and investment. Pointing to a lack of safety leadership at the highest levels of BP, the panel issued 10 major recommendations to the company, including recommendations to the global board of directors for greater safety accountability.

Even as the Baker panel’s work unfolded, the CSB’s own investigation continued at a high pace. On October 25, 2005, the Board issued two new urgent safety recommendations calling on the petrochemical industry to establish new policies for the siting of trailers and other temporary structures away from hazardous process areas. At BP’s Texas City refinery, all of the deaths and most of the injuries resulted from positioning trailers too close to the operating isomerization unit. Responding to the urgent recommendation, the American Petroleum Institute immediately convened an industry panel to develop new trailer siting guidance. The API panel issued draft interim guidance in December 2006.

Recognizing the worldwide interest among business leaders in understanding the causes of the Texas City accident, the CSB has issued a series a significant preliminary findings over the course of the two-year, \$2.5-million investigation. On October 27, 2005, the CSB convened a public meeting in Texas City where investigators presented six key lessons from the investigation, noting the use of unsafe and antiquated equipment, the unsafe trailer placement, and the company’s ineffective response to prior flammable releases and abnormal startups.

On November 10, 2005, CSB Chairman Carolyn Merritt issued testimony noting the role of worker fatigue in the Texas City accident: unit operators had been working consecutive twelve-hour shifts for almost 30 days prior to March 23, and the number of units under the supervision of a single operator had increased.

In June 2006 the Board released the results of detailed blast modeling studies on the damaged trailers in Texas City, and on October 15, 2006, the CSB issued a safety bulletin based on a second serious accident at the refinery: a July 28, 2005, hydrogen fire that caused \$30 million in

property damage and forced the surrounding community to take shelter. The safety bulletin attributed the accident to the inadvertent switching of two non-interchangeable pipe elbows; the bulletin urged industry to make greater use of “positive material identification” techniques to prevent such mistakes that can have catastrophic consequences.

Finally, on October 30, 2006, the CSB issued a final set of preliminary findings on the March 2005 explosion, broadening the focus of the investigation to include organizational and cultural issues. Chairman Merritt stated that “internal BP documents prepared between 2002 and 2005 revealed knowledge of significant safety problems at the Texas City refinery and at 34 other BP business units around the world -- months or years prior to the March 2005 explosion.” Citing BP internal audits and other information, investigators also found that “stringent budget cuts throughout the BP system caused a progressive deterioration of safety at the Texas City refinery” during the years preceding the accident.

The following day, the Board issued additional safety recommendations to OSHA and to the oil industry, calling for the nationwide elimination of the kind of unsafe and antiquated hydrocarbon disposal equipment that was the source of the fatal explosion in Texas City.

The CSB’s investigation of BP has been widely reviewed and studied, not just in the chemical and refining industries but in a whole host of sectors, ranging from construction to nuclear energy to space exploration. In December 2005, the agency made available over the Internet a five-minute video narrated by the CSB’s lead investigator that used computer animation to depict the precise sequence of events that led to the explosions at BP.

The video rapidly became the CSB’s most popular product ever, and to date it has been viewed more than 410,000 times from the CSB’s web site. The video has been shown to oil company boards of directors, top government officials, and the workforces of refineries and other industrial facilities throughout the U.S. and overseas. Major oil companies have translated the video into several languages, and the CSB is making the video available on its web site in French, German, Spanish, Cantonese, and Mandarin.

Although the BP investigation was a major undertaking for the CSB throughout the year 2006, the agency continued to make progress on a number of other fronts. Highlights of the year included:

January 11, 2006: A CSB investigative team was sent to the Bethune Point wastewater treatment plant operated by the City of Daytona Beach, Florida, where two municipal workers died in an explosion and fire as they performed hot work near a flammable methanol storage tank. The accident occurred while the workers used a high-temperature cutting torch to remove a steel roof above the tank. A third worker suffered disabling burn injuries.

January 26, 2006: The Board completed its investigation of an acetylene gas explosion at a gas distributor in Perth Amboy, New Jersey, that killed three workers in January 2005, and at a news conference in Newark, the Board released a safety bulletin and a safety video explaining good practices to prevent similar accidents. The CSB called on

the U.S. Occupational Safety and Health Administration to update its safety standard for acetylene handling and on the manufacturer of a check valve involved in the accident to alert its customers of the accident and replace the unreliable valves.

January 31, 2006: CSB investigators were deployed to Morganton, North Carolina, where an explosion caused by an uncontrolled chemical reaction fatally burned one worker and injured about a dozen others. The facility, which produced batch chemicals, was completely destroyed and damage occurred to a nearby church and to passing vehicles. The plant was not rebuilt and all its jobs were lost. The CSB plans to issue its final report and a safety video on reactive chemical hazards in May 2007.

March 30, 2006: The Board issued its final report and a new safety video based on the investigation of a 2004 ethylene oxide gas explosion at a medical products sterilization facility in Ontario, California. The explosion injured four workers and heavily damaged the facility. The report urged that national fire codes be modified to provide greater safeguards against explosions at sterilization facilities.

April 11, 2006: At a news conference in Dalton, Georgia, the Board issued its final report on the investigation of a serious toxic vapor release from a chemical manufacturer that sent 154 people – mainly local residents – to the hospital. The release occurred due to a runaway reaction during the first production batch of a chemical. The Board noted serious challenges that occurred during the emergency response, resulting from the lack of emergency planning and of necessary protective equipment among local fire and police personnel. The Board recommended improved chemical emergency planning and preparedness in Whitfield County and the State of Georgia.

June 5, 2006: A CSB team began an investigation of an explosion and fire at an oil production facility outside of Jackson, Mississippi, which killed three contract workers and seriously injured a fourth. The explosion occurred when flammable vapors ignited during welding on a crude oil storage tank. The CSB investigation focuses on safety practices in the oil and gas production sector, which has a significantly elevated rate of worker deaths and injuries.

June 6, 2006: At a Houston news conference, the Board released a case study report on a pressure vessel explosion and fire at a chemical manufacturer that caused two injuries and damaged local residences and a church. The CSB noted that uninspected, defective welds had weakened the pressure vessel and led to the explosion. The Board called on the City of Houston to adopt national standards for pressure vessels and develop an inspection program for repaired or modified vessels.

June 14, 2006: Investigators were deployed to a Chicago-area construction products manufacturer, where an explosion and fire killed a driver and injured five other workers. The explosion occurred while workers heated and mixed flammable solvents in an open-top tank. The investigation is examining the adequacy of codes and standards governing this apparently unsafe practice.

June 15, 2006: At a news conference in St. Louis, the Board issued a new safety bulletin from its investigation of a massive fire at a gas cylinder distribution facility in June 2005. The fire that swept through the Praxair Distribution facility on a 97° day in St. Louis sent dozens of cylinders rocketing into the surrounding residential community, endangering the lives of firefighters and the public. The safety bulletin urged industry to follow safe storage practices for gas cylinders, such as avoiding direct sunlight, using fire suppression systems, and erecting barriers to confine exploding gas cylinders. The Board recommended that national standards for relief valves on propylene cylinders be modified to provide a greater margin of safety. The CSB also issued a safety video based on the investigation showing dramatic footage of several similar serious gas cylinder fires around the country; the video has received over 20,000 web hits to date.

July 20, 2006: The CSB released its final report on a major process fire at the Formosa Plastics chemical complex in Point Comfort, Texas, which injured over a dozen workers and heavily damaged an olefins unit. The report cited the use of unprotected piping, non-fireproofed structures, and a lack of automatic shutoff valves at the facility. The CSB recommended greater use of flame-resistant clothing to prevent burn injuries from such accidents. In tandem with the report, the CSB issued a safety video, which has received over 27,000 web hits to date.

October 5, 2006: CSB investigators were dispatched to Apex, North Carolina, where a fire at an EQ hazardous waste handling facility caused up to 17,000 community residents to flee their homes. The investigators found that the fire, which began at night while the facility was unoccupied, could have resulted from the reaction of an incompatible chemical mixture. The CSB investigation is focusing on whether fire protection standards are adequate for hazardous waste facilities.

November 2, 2006: At a news conference near Wilmington, Delaware, the CSB released its final report on an accident one year earlier that claimed the lives of two workers from oxygen deprivation at the Valero Delaware City refinery. The CSB used the report to emphasize the dangers of low-oxygen environments that can be created inside or near confined spaces, such as large pipes or process vessels that are purged with nitrogen gas. The Board recommended improved training procedures be developed by Valero and by the American Petroleum Institute.

To increase awareness of this often deadly hazard, the Board produced a safety video to coincide with the release of the report; in less than three months it has generated over 55,000 web hits. The video is now being translated into several languages. The urgency of this effort was underscored just two days after the release of the CSB Valero report, when a worker died of asphyxiation inside a confined space at a South Carolina chemical plant, and another required emergency resuscitation.

November 3, 2006: A CSB investigative team flew to South Hutchinson, Kansas, where an ammonia release at a Tyson Food refrigeration plant a day earlier caused the death of one worker and seriously injured another. The accident occurred when a pipe split during maintenance on a vessel containing highly toxic anhydrous ammonia.

November 9, 2006: At a large public meeting in Washington, DC, the CSB issued the final report from a two-year study of combustible dust hazards in industry, and called for a new federal OSHA standard to protect workers from deadly dust explosions. The study identified 281 combustible dust fires and explosions between 1980 and 2005 that killed 119 workers and injured 718, and extensively damaged industrial facilities. The CSB study was commissioned after the agency investigated three major dust explosions in 2003 that killed 14 workers and crippled two major manufacturing facilities in Kentucky and North Carolina. The CSB concluded that straightforward measures such as improved training, risk communication, housekeeping, and building design could prevent these devastating accidents and should be required by the federal government.

November 22, 2006: While nearby residents slept, a massive explosion pulverized a Danvers, Massachusetts, ink and pigment factory, damaging dozens of nearby homes and businesses. Although no serious injuries occurred, the explosion had a real potential to cause multiple fatalities under slightly different circumstances. At least 10 homes were damaged beyond repair and were slated for demolition. A large CSB team entered the explosion site on November 29 and began a detailed investigation that includes extensive blast modeling in an effort to determine the cause of the explosion, which was felt miles away and heard across state lines in New Hampshire.

December 14, 2006: The CSB convened a public hearing in Daytona Beach, Florida, to release the conclusions of its year-long investigation of the January 2006 fatal methanol explosion at the city's wastewater treatment facility. Investigators pointed to inadequate safety planning prior to hot work, inadequate maintenance of a critical flame arrestor, and a lack of statewide OSHA regulatory coverage for Florida's public employees. At the hearing, outside witnesses advocated extending to the state's public workers the same safety protections afforded in the private sector. The CSB's final report and recommendations are planned for release in February 2007.

Proposed New Initiatives for FY 2008

Expanding the Office of Investigations

From July 2004 to June 2005, the agency received notification of 645 chemical incidents from sources including the National Response Center, media reports, and other federal agencies. While the great majority of the 645 incidents were relatively minor and did not warrant federal root-cause investigations, there were some 18 incidents that scored medium, medium/high, or high according to the agency's selection criteria. Most of these involved fatalities, serious injuries, or large-scale public evacuations.

Because of resource constraints, CSB investigators could only be deployed to 6 of the 18 priority events scoring medium or above.³ These personnel and financial constraints were further exacerbated by the major accident at the BP Texas City refinery, which required the lengthy field

³ A detailed report on the agency's incident screening data was provided to Congress and OMB in February 2006.

deployment of more than half of CSB's staff investigators and as well as the costliest equipment testing program in agency history.

In the following 12-month period, the agency was again bottlenecked due to a lack of available investigative teams. With one team fully engaged in the BP investigation throughout the year, only around a dozen investigators were available to handle all the remaining serious accidents around the country. In 2006, CSB investigative teams were deployed to serious accidents at the Valero St. Charles refinery in Louisiana and at a Huntsman Chemical olefins facility in Port Arthur, Texas, but no investigations were carried forward.

In a number of other serious cases during that 12-month period, no CSB investigative team was deployed at all. Examples include:

August 9, 2005, Romulus, Michigan: A series of explosions and a fire at a hazardous waste recycling facility resulted in approximately 12 worker injuries and the evacuation of residents within a one-mile radius. The same company, EQ, later experienced the accident in Apex, North Carolina, which the Board is now investigating.

August 25, 2005, North Pekin, Illinois: Three workers were hospitalized following explosions involving propane cylinders at a refilling depot, and members of the local community were evacuated.

September 21, 2005, Taylors, South Carolina: One contract worker was killed and two others were injured by an explosion during welding near an ethyl acetate tank; three schools were evacuated.

November 14, 2005, San Antonio, Texas: An explosion and fire at a propane gas distribution facility prompted the evacuation of a half-mile area, including a day-care facility; a building was leveled and a car was destroyed in the explosion.

December 29, 2005, Fort Smith, Arkansas: One hundred-fifty pounds of anhydrous ammonia vapor was released from a food plant refrigeration system, causing 21 individuals to be transported to local hospitals.

January 9, 2006, Carson, California: One worker was killed and two others were severely burned after a series of solvent drum explosions outside a paint manufacturing company.

February 15, 2006, Cincinnati, Ohio: One worker was killed and another was critically injured by a release of toxic hydrogen sulfide gas at a major chemical company facility.

March 4, 2006, Corpus Christi, Texas: Two employees died after a chemical tank released material at a hazardous waste disposal facility.

May 12, 2006, Wynnewood, Oklahoma: A major fire in refinery alkylation unit resulted in community evacuation and forced a halt to gasoline production.

Following the conclusion of this twelve-month period, an even more serious accident occurred: on December 6, 2006, a propane explosion destroyed a large section of the Falk Corporation gear manufacturing plant, one of Milwaukee's oldest businesses. Three workers died and approximately 46 others were injured. This was a major chemical accident within the CSB's investigative jurisdiction, but with staff stretched to the limit at other sites around the country, there was simply no team left to send. As a result, there will be no independent federal root-cause investigation of this tragedy.

The Board believes that the public interest would be served by conducting root-cause investigations of a greater proportion of serious chemical accidents that have major workplace or community impacts.

Even if all vacant positions were filled, the agency's current investigative staff of 16 is sufficient to form just three accident investigation teams, capable of deploying to approximately 6-8 accidents each year. Although the completion of the CSB's major BP investigation in March 2007 will free up significant investigative resources, it remains true that the Board has too few investigators and too few teams to conduct all the work envisioned under its statutory authorization. In addition, the long-term shortage of investigators has potentially serious impacts through fatigue, burnout, attrition, accumulation of large leave balances, and deferral of necessary training among CSB staff.

The Board therefore requests funds for the hiring of three additional incident investigators in FY 2008. The hiring of these investigators will allow the agency to constitute a fourth investigative team during FY 2008. A fourth team will be able to deploy to conduct at least two additional accident investigations each year.

Without a fourth investigative team, it is inevitable that there will continue to be serious accidents – many causing fatalities or live-threatening injuries – for which no public, root-cause investigations will occur. The lack of public investigations represents a significant lost opportunity for developing new findings and recommendations that could save lives in the future.

Expanding Outreach Efforts

Under its Strategic Plan for FY's 2007 to 2012, the agency has established a new strategic goal for the broad dissemination of its findings, recommendations, and lessons learned among a multitude of stakeholders. The Board recognizes that a potent tool for achieving its mission is more widespread awareness of the causes of chemical accidents and the measures that can prevent them. The agency's vision for outreach is that one day, the CSB's findings and recommendations will be able to reach the majority of all the companies, agencies, and other organizations that can benefit.

Companies and their employees share a strong interest in avoiding major chemical accidents that cost lives, damage reputations, destroy productive capacity, and often result in expensive

litigation. But many companies, particularly smaller businesses, are not aware of all the high-consequence, low-probability risks they face in operating their facilities.

For example, major industrial dust explosions are rare events but when they occur they can cause multiple fatalities and destroy or incapacitate large facilities. The culprit is often a thin layer of combustible powder – such as a fine resin dust – that has accumulated in concealed or hard-to-reach places. This hazard was responsible for devastating explosions in North Carolina and Kentucky in 2003 that cost 13 lives and caused tens of millions in property damage. In both cases, the companies were not fully aware of the catastrophic nature of the combustible dust hazard. If they had been, they would likely have taken relatively inexpensive control and housekeeping measures before the tragedies occurred.

While outreach is a shared responsibility among many federal agencies involved in chemical safety, the CSB has a unique body of knowledge and insight gained from its more than 40 detailed accident investigations and safety studies. The agency's experience over the past several years is that relatively inexpensive and achievable outreach campaigns can greatly increase the dissemination of its reports, findings, and recommended safety practices.

At costs that are a fraction of those expended on the investigations themselves, the agency can effectively disseminate its safety information to thousand of facilities and millions of individuals in locations all over the world. The CSB's outreach programs have reached not only the traditional audiences in the oil and chemical industries but also hospitals, national parks, nuclear power plants, schools and universities, fire departments, and many other organizations. Perhaps most importantly, outreach efforts provide communities around the country with essential information they need to promote improved safety at chemical facilities in their midst.

The FY 2008 budget request seeks an increase of \$250,000 to fund the production and distribution of seven short safety videos based on CSB investigations. The agency began by producing six videos on an experimental basis during FY 2006. The videos use advanced computer animation to explain in just a few minutes precisely how a major chemical accident occurred. The videos present the specific findings and recommendations from CSB reports and feature interviews with CSB Board Members, investigators, and outside experts discussing appropriate good safety practices for all similar companies to follow.

The initial videos generated more than 610,000 web hits during the first 13 months they were offered as streaming content over the Internet. The agency received thousands of requests for DVD copies of the videos from throughout the world. Hundreds of unsolicited testimonials from industry have told of how the videos are already being used to design safer processes, educate workers, teach investigative methods, and promote awareness of specific life-threatening hazards.

The CSB funded the initial group of experimental videos by reallocating funds from its existing public affairs program, temporarily decreasing the number of community public meetings, and reprogramming unspent compensation from vacant board seats and other sources. Since the videos have been shown to be the most popular and widely used CSB product by far – with viewership at least ten-fold higher than the written reports and summaries – the Board proposes

establishing the video program with its own funding in FY 2008. The budgeted cost of each video, including computer animation, production, and editing, is approximately \$35,000.

Establish an Office of Safety Studies

The 1990 Clean Air Act Amendments, which authorize the CSB, direct the agency to:

... issue periodic reports to the Congress, Federal, State and local agencies, including the Environmental Protection Agency and the Occupational Safety and Health Administration, concerned with the safety of chemical production, processing, handling and storage, and other interested persons recommending measures to reduce the likelihood or the consequences of accidental releases and proposing corrective steps to make chemical production, processing, handling and storage as safe and free from risk of injury as is possible ...

Studies may be conducted “whether or not an accidental release has occurred, where there is evidence which indicates the presence of a potential hazard or hazards.” This role was clearly distinguished in the legislation from the Board’s role in investigating specific accidental releases. The Board views safety studies as integral to accomplishing its mission of preventing future accidents.

In recent years, the Board has conducted several safety studies, including studies on reactive chemical hazards (2002), nitrogen asphyxiation (2003), sodium hydrosulfide (2004), and combustible dust hazards (2006). In 2007, the CSB anticipates contracting for a study of process safety indicators, an outgrowth of the Board’s BP investigation and the work of the independent Baker panel. The purpose of the project will be to develop a consensus on leading and lagging safety indicators in the oil and chemical industries.

The Board believes that these broader studies form an important part of its work by leading to safety recommendations that have greater national impact. For example, the reactive chemical and combustible dust studies included significant recommendations to EPA and/or OSHA for new workplace safety standards.

For FY 2008, the Board requests \$250,000 to establish the nucleus of a new Office of Safety Studies. To date, all CSB studies have been conducted by its accident investigators, who do not necessarily have specific backgrounds in research, survey design, statistics, or public policy. Using accident investigators for this purpose has been costly and challenging and has led to delays in other investigative projects.

Establishing a separate Office of Safety Studies is consistent with the agency’s Strategic Plan for FY’s 2007 to 2012, and follows the model of the NTSB, on which the CSB was originally patterned. In a recent program audit, the Government Accountability Office (GAO) encouraged the NTSB to conduct more safety studies, noting that nationwide studies of widespread problems help the agency to accomplish its mission more proactively.⁴

⁴ U.S. Government Accountability Office, *National Transportation Safety Board: Progress Made, Yet Management Practices, Investigation Priorities, and Training Center Use Should Be Improved*, GAO-07-118 (November 2006).

The CSB believes that its most recent investigations raise numerous issues of national importance that should be considered through safety studies. For example, the Board's BP investigation has drawn attention to the fact that there is little if any available guidance for preventing worker fatigue in the oil and chemical industry. Yet, as the BP accident underscores, fatigue-related lapses in judgment can contribute to catastrophic chemical accidents. Likewise, the CSB investigations of the accidents in Apex, North Carolina, and Danvers, Massachusetts – where there were huge community impacts from chemical fires and explosions – raise important questions concerning the siting of hazardous chemical facilities in residential neighborhoods. Both investigations may point to the need for better guidance and practices in facility siting and permitting.

These subjects, as important as they are, are difficult to address in the context of a single accident investigation. Establishing an improved studies and research capacity at the CSB will allow the agency to better recommend new safety measures – before other serious accidents occur.

Freedom of Information Act (FOIA) System Improvements

Under Executive Order 13,392, "Improving Agency Disclosure of Information," each agency's Chief FOIA Officer is required to recommend adjustments to agency funding as may be necessary to improve FOIA operations. The Justice Department's Office of Information and Privacy has asked agencies to consider the use of contract support and information technology to improve FOIA operations. OMB has emphasized coordinating FOIA operations with other E-Government activities and initiatives. The CSB has begun implementing a variety of measures to meet an increased demand for FOIA services in an efficient manner that results in improved service and performance.

To ensure that sufficient resources are available for these improvement measures, the FY 2008 budget requests an increase of \$30,000. This money will be dedicated to full implementation of long-term FOIA improvements, including expanded contractor support and the use of information technology to establish and maintain a paperless processing system. Current funding has been sufficient to begin the improvement process but dedicated funding is necessary due to an increasing number of requests for FOIA disclosure of CSB investigative records and competing agency demands for current funding.

The trend of increased FOIA requests began in FY 2003, when the number of requests received by the CSB more than doubled from the rate over the previous five fiscal years. By FY 2005, the number of requests received had nearly quadrupled from that benchmark, and the trend is likely to continue upward. Further, with the release of the BP report in FY 2007, we anticipate that the FOIA workload will greatly increase in FY 2008 given the high profile of the investigation and the hundreds of thousands documents in that investigation file to date.

Status of Emergency Fund

The CSB currently has a no-year emergency fund for investigations totaling \$844,000. The agency is not currently requesting any change to this fund. Thus far, the CSB has been able to fund investigation costs through reprogramming of existing funds without drawing down the emergency fund. Should the need arise for the Board to draw upon the fund due an emergency circumstance, the agency will immediately inform the Committees and the Office of Management and Budget.

Conclusion

Over the past two years, the CSB's value to the nation has been demonstrated as never before. The Board's investigation of the tragic explosion at the BP Texas City refinery is having national and international impacts. Major multinational corporations and their workforces are benefiting from the Board's safety findings through better facility siting, elimination of unsafe equipment, and greater attention to maintaining favorable safety cultures and effective corporate oversight. Furthermore, the CSB's efforts at broadly disseminating its findings are succeeding to an unprecedented degree, with hundreds of thousands of oil and chemical executives, managers, and workers using the Board's products in their front-line efforts to prevent major accidents.

The Board's budget, which is significant but modest, is literally dwarfed by the costs – both human and financial – of the accidents it investigates. For FY 2008, the Board seeks an additional investment in its mission, which the agency will repay by a further strengthening of its vital safety efforts in workplaces and communities.

Recommended Appropriations Language

CHEMICAL SAFETY AND HAZARD INVESTIGATION BOARD

Federal Funds

General and special funds

CHEMICAL SAFETY AND HAZARD INVESTIGATION BOARD

SALARIES AND EXPENSES

For necessary expenses in carrying out activities pursuant to section 112(r)(6) of the Clean Air Act, as amended, including hire of passenger vehicles, uniforms or allowances therefore, as authorized by 5 U.S.C. 5901-5902, and for services authorized by 5 U.S.C. 3109 but at rates for individuals not to exceed the per diem equivalent to the maximum rate payable for senior level positions under 5 U.S.C. 5376, [~~\$9,108,000~~] \$10511,000: Provided, That the Chemical Safety and Hazard Investigation Board (*Board*) shall have not more than three career Senior Executive Service positions: *Provided further, That in fiscal year 2008 and thereafter, notwithstanding any other provision of law, the Environmental Protection Agency Inspector General shall not serve as the Inspector General for the Board.*⁵

⁵ The discontinuation of the EPA Inspector General's oversight role was approved by the full House of Representatives on May 18, 2006, in H.R. 5386; the Senate committee-passed Interior appropriations bill likewise contained no language extending the role of the EPA Inspector General in 2007. Since neither bill was signed into law, however, the issue has not been conclusively resolved.

CHEMICAL SAFETY AND HAZARD INVESTIGATION BOARD

FISCAL YEAR SALARIES & EXPENSES

(in thousands of dollars)

	FY 2006 Actual	FY 2007 Recommended*	FY 2008 Request
Personnel Compensation & Benefits	\$ 5,200,096	\$ 5,865,297	\$ 6,935,000
Contractors	1,254,989	582,000	594,000
Fixed Costs			
Rent, Communications, & Utilities	763,994	777,000	790,000
Interagency Services	497,158	501,200	509,000
Maintenance	29,612	55,000	56,000
Total Fixed Costs	1,290,764	1,333,200	1,355,000
Variable Costs			
Travel & Transportation	251,451	311,500	366,000
Rent, Communications, & Utilities	63,751	92,000	98,000
Printing	17,737	32,000	36,000
Other Services	831,891	715,928	939,000
Supplies	147,786	162,500	175,000
Equipment	0	13,000	13,000
Total Variable Costs	1,312,616	1,326,928	1,627,000
Total Costs	\$ 9,058,465	\$ 9,107,425	\$ 10,511,000

* Based on the Senate Report 109-275

**Salaries and Expenses
Analysis of Change**
(in thousands of dollars)

FY 2007 Appropriation (Salaries & Expenses)\$ 9,107,425

Summary of Adjustments to Base and Built-In Changes

Personnel Cost Increases¹

Cost of FY 2007 Hires315,703
 Cost of FY 2008 Hires611,000
 Estimated Cost of January 2008 Pay Increase²143,000
***TOTAL INCREASE*.....1,069,703**

Contractors

***TOTAL INCREASE*.....12,000**

Fixed Cost Increases

Rent, Communications, & Utilities.....13,000
 Interagency Services7,800
 Maintenance1,000
***TOTAL INCREASE*.....21,800**

Variable Cost Increases

Travel & Transportation54,500
 Rent, Communications, & Utilities.....6,000
 Printing and reproduction4,000
 Other services.....223,072
 Supplies.....12,500
 Equipment0
***TOTAL INCREASE*.....300,072**

Total Adjustments to FY 2007 Salaries & Expenses1,403,575

Total FY 2008 Appropriation Request\$ 10,511,000

¹ Benefits are calculated at 27.5 percent of base pay.
² FY 2008 pay increase estimated at 3.00 percent of base pay.

Analysis of Change (Significant Adjustments)

Personnel Costs: The FY 2008 budget for personnel costs reflects increases to fully fund positions which will be filled in FY 2007, three new investigator positions and two positions in the office of Safety Studies to be filled in FY 2008, and for the projected January 2008 pay increase.

Contractors: The CSB uses on-site contractors in lieu of employees for several essential functions including: public affairs, support for responding to Freedom of Information Act (FOIA) requests, and library services. The net increase of \$12,000 is a result of an additional \$30,000 for increased FOIA activity and a reduction of administrative temps of \$18,000. The CSB has experienced significant increases in FOIA requests since FY 2003 and anticipates this trend to continue. Further, with the release of the BP report in FY 2007, we anticipate that the FOIA workload will greatly increase given the high profile of the investigation and the over 650,000 documents in that investigation file to date.

Rent: In accordance with our lease the CSB will have a \$15,000 increase in office rent in FY 2008, along with a reduction of miscellaneous storage of \$2,000.

Interagency Services: The CSB has been informed that there will be \$7,800 in increases to interagency agreements for basic services such as personnel, payroll, accounting, and procurement.

Travel: The increase of \$54,500 is a result of increased investigational (\$22,500) and outreach activities (\$32,000).

Other Services: The majority of this increase (\$250,000) would fund the production and distribution of seven short safety videos based on CSB investigations. The videos use advanced computer animation to explain in just a few minutes precisely how a major chemical accident occurred. The videos present the specific findings and recommendations from CSB reports and feature interviews with CSB Board Members and investigators discussing appropriate good safety practices for all similar companies to follow. The demand for these videos has been tremendous and if a video can prevent even a single accident that will more than justify the cost of this overwhelmingly successful yet modest program.

**CSB APPROPRIATIONS BY FISCAL YEAR
(DOLLARS IN MILLIONS)**

Salaries and Expenses

Fiscal Year	One-Year Funds	Two-Year Funds	Total Funds
1998	\$4.00	\$0.00	\$4.00
1999	6.50	0.00	6.50
2000	7.97	0.00	7.97
2001	4.99	2.49	7.48
2002	5.34	2.50	7.84
2003	7.31	0.50	7.81
2004	8.20	0.00	8.20
2005	9.03	0.00	9.03
2006	9.06	0.00	9.06
2007 ^a	9.11	0.00	9.11
2008 ^b	10.51	0.00	10.51

^a Based on the Senate Report 109-275

^b Request

Emergency Fund^c

Fiscal Year	New Funding	Amount Spent to Date	Total Available
2004	\$0.44	\$0.00	\$0.44
2005	0.40	0.00	0.84

^c The Emergency Fund was established in FY 2004. It provides a funding mechanism so periodic accident investigation cost fluctuations can be met without delaying critical phases of the investigations. It is no-year funding, meaning it is available until expended.

CSB PERSONNEL DATA

Grade	On Board 9/30/2005	On Board 9/30/2006	On Board 1/31/2007	Projected 9/30/2007
GS-7	8	6	6	7 ^b
GS-8	-	-	-	-
GS-9	2	3	2	6 ^b
GS-11	1	1	1	1
GS-12	1	1	1	4
GS-13	4	3	3	3
GS-14	16	13 ^a	11 ^b	12
GS-15	5	8 ^a	8	8
Executive	3	5	5	5
Schedule C	-	-	-	-
SES	1	1	1	1
Totals	41	41	38	47

Notes:

^a Reclassified three GS-14 positions to GS-15 positions in October 2005.

^b One GS-14 position was vacated in October 2006. It was converted one GS-7 and one GS-9 position in FY 2007. The new positions are currently vacant, but we anticipate that they will be filled before the end of FY 2007.