U.S. Chemical Safety and Hazard Investigation Board

BUDGET JUSTIFICATION

Fiscal Year 2011
Budget Justification for Fiscal Year 2011
Chemical Safety and Hazard Investigation Board
February 1, 2010

Table of Contents

Summary ............................................................................................................................................... 2
2009 – A Year of Progress .................................................................................................................. 3
Proposed Funding for FY 2011 ......................................................................................................... 5
  CSB’s Plan to Close the Investigative Gap .................................................................................. 5
  Future Issues with Possible Budgetary Impacts ....................................................................... 9
  Status of Emergency Fund ......................................................................................................... 9
Appendix A: Recommended Appropriations Language ................................................................. 10
Appendix B: 25 Fatal Chemical Incidents the CSB Did Not Investigate in 2009 ......................... 11
Appendix C: Fiscal Year 2009-2011 Salaries & Expenses ............................................................. 13
Appendix D: Analysis of Change FY 2010 to FY 2011 ................................................................. 14
Appendix E: Significant Adjustments to Analysis of Change FY 2010-2011 ............................. 15
Appendix F: CSB Appropriations by Fiscal Year ........................................................................ 17
Appendix G: CSB Personnel Data ................................................................................................. 18
Summary

For fiscal year (FY) 2011, the Chemical Safety and Hazard Investigation Board (CSB) requests a budget of $12.71 million, an increase of $2.16 million above the FY 2010 operating budget of $10.55 million\(^1\) and $1.91 million above the president’s request.\(^2\) The proposed increase funds the establishment of a new five-investigator regional office to be located in or near Houston, Texas, the heart of America’s oil and chemical industry. The CSB also requests support for a new three-person investigative team to focus on shorter-term investigations. The Board believes that these two steps are essential to help close the gap between the number of serious chemical accidents that occur each year and the number the CSB is actually able to investigate. Other increases are related to full-year funding for the salaries and benefits of five board members,\(^3\) a director of operations, one additional investigator (an expert in blast modeling), and additional positions required to support increased investigative activity and to meet statutory responsibilities including implementation of a required reporting rule. Finally the CSB requests $327,900 for needed information technology (IT) capital equipment to coordinate operations between headquarters and the various field offices.

---

\(^1\) Excludes a one-time appropriation of $600,000 in FY 2010 for a study on the industrial use of methyl isocyanate by the National Academy of Sciences.

\(^2\) 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 may differ from those in the president’s budget.

\(^3\) The CSB statute authorizes five members, but the agency has had unfilled seats continuously since August 2007. The agency has used funds from the unfilled seats to support investigations and other mission priorities.
2009 – A Year of Progress

The CSB continued to fulfill its statutory mission by deploying investigators to major chemical process accident sites, preparing comprehensive investigation reports, presenting testimony in congressional hearings, convening public meetings throughout the country, and effecting positive change in regulations, standards, and industry practices – all with the goal of preventing future deaths, injuries, economic losses, and environmental damage resulting from chemical accidents.4

During 2009, the Board’s investigations, recommendations, and studies continued to have positive national and global impacts, raising the awareness of hazards and preventing accidents. The CSB testified at an investigative hearing of the House Energy and Commerce Committee in April concerning the August 2008 pesticide waste explosion at Bayer CropScience in Institute, West Virginia, which killed two employees and forced tens of thousands of residents to take shelter. As a result of this hearing, the House and Senate passed new legislation aimed at protecting the public’s right-to-know about chemical accidents and discouraging companies from improperly asserting secrecy claims under homeland security laws. On October 28, the president signed the American Communities’ Right to Public Information Act into law as part of the homeland security appropriations bill.

Following the House investigation and a preliminary report by the CSB, Bayer CropScience pledged an 80% reduction in its inventory of methyl isocyanate (MIC), the deadly chemical involved in the 1984 Bhopal disaster. Up to 37,000 pounds of MIC was stored in an aboveground pressure vessel located near the center of the 2008 explosion in Institute; as part of its inventory reduction plan, Bayer pledged to eliminate aboveground storage of the chemical. The promised MIC reduction is an example of the kind of safety progress that can be achieved by making public the facts and circumstances of chemical accidents. The CSB’s work also helped to protect the community in Woods Cross, Utah, where two serious refinery accidents occurred in 2009, including an explosion that damaged more than 100 homes, rendering some of them uninhabitable. Working in coordination with state and federal regulators, the CSB successfully persuaded the refinery to temporarily shut down until serious equipment integrity and maintenance issues can be resolved.

The CSB completed four accident investigation reports in 2009, issued a safety bulletin on gas purging and urgent recommendations on refinery safety, and conducted three public meetings in West Virginia, Florida, and Georgia. CSB recommendations that were issued in 2009 will help protect workers and communities from releases of toxic substances like hydrogen fluoride, educate chemical engineering students about chemical hazards, and safeguard factories from catastrophic dust explosions. In addition to completing these projects, CSB personnel deployed to 15 accident sites across 11 different U.S. states and territories during 2009. Investigations are now proceeding on a record-high total of 17 cases.

---

4 For a detailed description of the CSB’s activities and accomplishments in FY 2009, please see the agency’s Performance and Accountability Report (PAR), available on the Legal Affairs page at CSB.gov.
During 2009 the CSB officially opened its first regional office in Denver, Colorado, with five investigators. Based at the Denver Federal Center, the office has already made major contributions to the CSB’s investigative program and is now carrying forward nine of the CSB’s ongoing investigations. The Denver regional office also led an effort to increase the CSB’s investigative capacity by conducting a larger number of short-duration investigations, as suggested by the Government Accountability Office (GAO) in 2008. Specifically, Denver investigators conducted short, focused deployments to five selected fires and explosions that involved hot work, such as welding or torch-cutting, near flammable storage tanks. Investigators also relied on the work of other investigative agencies to gather information on other hot-work accidents, following up on a specific recommendation of the GAO. The overall result is a detailed safety bulletin on hot work hazards, which the CSB plans to issue in early 2010.

To improve its incident screening and surveillance program – and to implement another key recommendation of the GAO from 2008 – in June 2009 the CSB issued an advance notice of proposed rulemaking for an incident reporting regulation, as required by the CSB’s authorizing statute. The notice described four options for possible rulemaking. The CSB received numerous public comments and is currently analyzing those comments and developing a proposed reporting rule. The CSB also took numerous steps to remedy data quality issues its existing incident screening data, which were identified by the GAO, and has implemented a new secure database system for collecting and accurately documenting incidents.

The CSB released four computer-animated safety videos, based on CSB investigative findings and recommendations. Among these was a 30-minute video on the deadly hazards from combustible dust accumulations at industrial workplaces – the hazard that killed 14 workers and injured dozens of others at the Imperial Sugar plant in Savannah, Georgia, in 2008. CSB safety videos, which have been viewed online millions of times and distributed worldwide on DVD, were recognized in 2009 by awards from noted educational and professional organizations and have been touted by academia and industry as very useful tools in raising safety awareness.

The CSB also developed a new video tool – short video safety messages directly from the CSB chairman – released on YouTube and the CSB’s newly redesigned and improved website. The first five safety messages in 2009 – which covered topics such as plant winterization, pressure vessel safety, and maintaining safety during the recession, garnered more than 160,000 hits on YouTube. The CSB also began work on an educational video about the hazards of oil and gas storage tanks, following a tragic explosion in October 2009 that killed two Mississippi teenagers – one of a series of such accidents across the country in oil-producing states.

Finally, the year saw a significant step forward for implementing a major CSB recommendation, as U.S. Secretary of Labor Hilda Solis announced plans in April to begin rulemaking on a comprehensive combustible dust regulatory standard. The action followed a November 2006 safety recommendation from a CSB study that identified 281 combustible dust fires and explosions over a 25-year period. Later in 2009 the Labor Department issued an advance notice of proposed rulemaking and held public meetings on the subject. The actions followed a sustained advocacy effort by the Board, which included testimony at House and Senate hearings.

---

5 U.S. Government Accountability Office Report GAO-08-864R.
and numerous appearances before the news media and stakeholder organizations, all designed to prevent additional worker deaths from preventable dust explosions.

**Proposed Funding for FY 2011**

To continue its highly influential chemical safety investigations and studies, the Board requests funds to expand the Office of Investigations by establishing a new regional office to be located in the Houston area, near many of the country’s largest oil and petrochemical sites. The CSB also seeks funds to cover the full-year cost of two anticipated appointments to the Board, which will bring the Board to five sitting members for the first time since August 2007. Finally, the CSB seeks funds for a director of operations, as suggested by the GAO in a 2008 audit report, and for additional positions required to support increased investigative activity and to meet statutory responsibilities. Finally, the CSB requests funding for needed IT equipment modernization and for additional positions required to support additional offices and investigations.

**CSB’s Plan to Close the Investigative Gap**

A 2008 GAO report pointed to an “investigative gap” which was defined as “the difference between the number of accidents [the CSB] investigates and the accidents that meet statutory criteria triggering CSB’s responsibility to investigate.” The GAO recommended that the CSB “develop a plan to address the investigative gap and request the necessary resources from Congress to meet [the] CSB’s statutory mandate,” i.e. to investigate “any accidental release resulting in a fatality, serious injury or substantial property damages.”

By the time the GAO report was issued, the CSB was already well on its way to establishing its first regional office in Denver. The Denver office is now staffed with one five-person investigative team; the team is currently investigating accidents in Colorado, Utah, Wisconsin, Texas, and elsewhere. Recruiting investigators in Denver proved to be much easier and faster than recruiting in Washington, DC, which has a higher cost-of-living and a shortage of qualified applicants with backgrounds in the petrochemical industry. Compared to DC-based job postings, Denver-based postings have elicited at least 2-3 times the number of applications.

Another benefit of the regional office approach is the ability to respond more quickly to accidents in more states. The CSB’s experience over more than ten years indicates that rapid response is critical to protecting accident sites from alteration, securing crucial physical evidence and witness testimony, and developing good working relationships with other agencies, response organizations, and companies. Still further advantage of a regional approach is the development of ongoing relationships and exchanges of information with state and local officials, regulators, and stakeholders around the country.

---

6 U.S. Government Accountability Office Report GAO-08-864R.
7 Historically, the need to deploy teams from a single location (Washington, DC) located in the eastern time zone has added up to 24 hours to the time when CSB investigators arrive on site. In some cases this resulted in the loss, alteration, or removal of evidence before investigators could arrive.
Despite the modest growth of the CSB’s investigative program, the investigative gap remains. Under the improved screening program implemented in 2009, the CSB identified 237 chemical accidents that were considered “high consequence,” i.e. resulting in deaths, in-patient hospitalizations, property damage in excess of $500,000, large evacuations, or other specific and significant harm.\(^8\) Thirty-two of these accidents resulted in one or more fatalities. The CSB sent teams to the sites of seven fatal accidents and eight other serious but non-fatal accidents.

The CSB believes that the regional office approach is a key method to decrease the investigative gap. The Denver office demonstrates the ability to hire qualified candidates outside of the DC area, and the ability to deploy more rapidly to accident sites in the central part of the U.S. The Houston area in Texas is a logical choice for the next CSB regional office. Among the 237 high-consequence accidents recorded in 2009, there were 34 that occurred within a 500-mile radius of Houston.

Historically since 1998, the CSB has conducted 13 investigations of major accidents in Texas alone – approximately 20% of the CSB’s total cases. These 13 investigations include the CSB’s largest and most influential case, the BP refinery disaster in Texas City, as well as many other investigations at large, strategic petrochemical sites. The CSB currently has ongoing investigations at three Texas oil refineries, a major Texas chemical site, and a Texas-based university; we are also continuing to gather information on any health impacts from a major chemical fire in Bryan, Texas, in July 2009 which resulted the evacuation of two cities.

The projected cost in FY 2011 for opening a five-person CSB investigative office in the Houston area is approximately $765,000. The figure includes one-time costs (such as relocation and recruitment, furniture and computers, and safety equipment) as well as partial-year compensation costs. For FY 2012 and succeeding years, we estimate the annual cost of maintaining and operating the Houston office at $1.02 million.

The GAO’s 2008 report also noted that another strategy to close the CSB investigative gap is to conduct a significant number of brief investigations that involve either a very short-term commitment of CSB investigators or relying more heavily upon investigative work by other organizations, such as emergency responders. Since August 2008, the new Denver office has successfully adopted this approach by performing short investigations of multiple serious accidents involving welding near storage tanks, leading to the development of a new safety bulletin and recommendations for better practices. The safety bulletin relies on a series of very short-term CSB deployments as well as reports of other agencies, such as fire departments and the EPA, for those cases the CSB did not or could not investigate.

Building upon this example, the CSB requests funding in 2011 to establish a new three-person investigative team that is primarily focused on conducting short-term investigations or assessments and issuing brief products, such as safety alerts or outreach materials. The CSB anticipates that a team focused exclusively on shorter investigations – those which do not involve

\(^8\) While these accidents are likely within the CSB’s investigative jurisdiction, the CSB is not asserting that all 237 necessarily warrant independent federal investigations. Even under the proposed expansion, the CSB would continue to focus on a subset of high-priority cases.
extensive equipment testing, witness interviews, or document collection – could be deployed to at least 12 accident sites each year.

The results of these short investigations will include (a) identification of major safety issues that warrant a full-scale investigation and commitment of additional resources; (b) identification of well-known, recurrent issues that can be discussed in brief reports or outreach products; (c) collection of safety information that can be used in future agency reports and studies; (d) verification and improvement of the quality of data used to screen incidents; and (e) establishing contacts with other investigative organizations (such as state and local agencies) whose reports the CSB could gather and analyze.

The CSB believes that the costs of the Houston office and the additional team can be readily justified in comparison to the economic and human cost of the accidents we investigate. Even a single major accident at a large site can result in immense costs to society. For example, the recent combustible dust explosion at the Imperial Sugar plant in Savannah, Georgia, not only killed 14 workers, but cost $345 million in property and economic losses that were ultimately paid by the company’s insurers. These costs are, of course, ultimately borne by other productive businesses through higher premiums and by consumers. Similarly, frequent accidents at America’s 150 oil refineries result in unplanned outages and shutdowns that can and have destabilized regional gasoline markets – costs which are also paid by consumers at a time of economic hardship.

The CSB is the only federal agency that is completely focused and dedicated to the prevention of these chemical accidents. CSB investigations are unique in their depth, thoroughness, and independence. Each investigation is an opportunity to produce findings, recommendations, and information to save lives by preventing future accidents – accidents that may also cost jobs, damage neighborhoods, disrupt regional economies, and permanently shutter important factories and refineries.

In addition to funding for a Houston regional office and additional investigative team, the CSB seeks needed resources for:

- Full-year funding for two presidentially appointed, Senate-confirmed Board members, bringing the Board to the full strength and diversity, as required by the authorizing statute ($145,000 increase).
- Full-year funding for a director of operations to overseeing the agency’s investigative and technical programs, as recommended by the GAO ($177,000 increase).
- An in-house expert on blast and explosion modeling, a skill the CSB has struggled to acquire through contracts ($128,000 increase).
- Funding for critical staff positions to support increased investigative activity and to meet agency information management responsibilities ($191,000 increase).9

---

9 The requested funding is required to pay for the full-year costs for three positions required to support unprecedented legal and information management demands on the CSB, which are anticipated to increase even further as the agency expands its activities. For example, on one recent day alone, the CSB issued seven subpoenas.
• A human resources specialist needed to comply with new Office of Personnel Management (OPM) procedures ($50,000 increase).  

• Needed modernization of IT equipment, e.g. to provide video conferencing capabilities among the CSB’s offices around the country ($328,000).  

Without the phased expansion of the CSB investigative program, the investigative gap identified by the GAO and others will persist and will not be reduced. Inevitably there will continue to be serious accidents – many causing fatalities, life-threatening injuries, or catastrophic damage – 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.

As recommended by the GAO, the CSB is now proceeding with the process to develop an accident reporting rule, as required by federal law under the Clean Air Act Amendments of 1990, which established the Board. Specifically, the law requires that the CSB:

… establish by regulation requirements binding on persons for reporting accidental releases into the ambient air subject to the Board’s investigatory jurisdiction. Reporting releases to the National Response Center, in lieu of the Board directly, shall satisfy such regulations. The National Response Center shall promptly notify the Board of any releases which are within the Board's jurisdiction.

The Board notes that to implement and enforce a reporting rule across the country may have significant long-term budget impacts; the CSB currently has approximately one full-

---

10 At present, nearly all HRM responsibilities are handled by one senior-level employee at the CSB, with limited assistance from an outside service provider. Additional help is needed in this function for several reasons. First, a junior level HR Specialist is necessary to support anticipated growth in the CSB’s investigative staff, including anticipated recruitment and the retention of highly specialized technical staff. Second, OPM has imposed requirements on all agencies over the past two years requiring additional reporting while limiting the effective use of outside service providers. The net result of these changes is a dramatic workload increase for the CSB’s single employee focused on human capital planning and management. Finally, the CSB simply needs backup in the HRM function to ensure continuity of operations in the event of an emergency.

11 The requested funding supports a number of agency Information Technology (IT) initiatives established under the agency’s Information Resources Management Plan—the five year strategic plan for IT investments. Lack of funding will negatively impact the investments already underway. These initiatives include new investments in collaborative technologies and telecommunications systems, such as a video conferencing and Web 2.0 technologies. As the agency expands operations to regional offices, these technologies facilitate staff collaboration on investigations and other agency business. In addition, the funding is needed to continue the maintenance and expansion of existing programs, such as the agency electronic records program and investments in advanced field investigation information technology.
time equivalent (FTE) focused on incident screening and data collection, and the CSB spends less than $20,000 per year on contract support for this function.

As the CSB proceeds through the public rulemaking process, it will provide additional information to Congress and the OMB about the estimated costs of the reporting system.

**Future Issues with Possible Budgetary Impacts**

Rental of office space is a major component of the CSB budget, accounting for approximately $842,000 in FY 2009. For more than ten years, the CSB headquarters has been located in commercial office space in downtown Washington, DC. At the end of FY 2010, the agency’s ten-year lease (which provides space at slightly below current market rates) is set to expire. The existing lease has an option to renew for an additional five years, and the CSB is negotiating to exercise this option. However, the CSB cannot project FY 2011 rental costs with complete precision until it completes these negotiations. Further, in the event the CSB is unable to negotiate satisfactory terms, the agency may be obliged to relocate its headquarters office within Washington, DC. The CSB’s FY 2010 operating budget includes an allowance for relocation costs. The CSB will keep the relevant Congressional committees and the Office of Management and Budget informed of the status of its leasing arrangements and costs.

**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 existing funds without drawing down the emergency fund. Should the need arise for the Board to draw upon the fund due to an emergency circumstance, the agency will immediately inform Congress and the Office of Management and Budget.
Appendix A: 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, $12,709,000: Provided, that the Board shall hereinafter qualify as a “public health authority” under the medical privacy requirements of the Health Insurance Portability and Accountability Act of 1996 (“HIPAA”) (Pub. L. No. 104-191, 110 Stat. 196 (1996)) and its implementing privacy regulations (45 CFR Part 164) and is authorized to collect and receive protected health information as a public health authority under HIPAA.12

---

12 New language requested to clarify the CSB’s authority to gather information on chemical accident victims from hospitals and other medical providers. As the CSB screens and investigates more accidents, it has encountered significant problems in collecting needed information for evaluating the seriousness of the accidents and the kinds of exposures that potentially occurred. The Board will communicate separately with its authorizing and appropriations committees on this subject and the need for the requested language.
Appendix B: 25 Fatal Chemical Incidents the CSB Did Not Investigate in 2009

1. February 4, 2009, Eagle Lake, Texas: An explosion of combustible vapor killed a welding company employee during work on a tanker truck.

2. April 11, 2009, Torrance, California: A maintenance worker was fatally burned in the coking unit of a major Los Angeles-area refinery.

3. April 22, 2009, Franklin, Texas: An explosion at a gas well killed an employee of a servicing contractor.

4. April 27, 2009, Sigurd, Utah: A trucking company worker was killed when a waste oil tank exploded.

5. April 30, 2009, Waterford, Michigan: A contract worker was killed while using a cutting tool near an underground gasoline storage tank.

6. May 13, 2009, Linden, New Jersey: An industrial gas company employee was killed when an oxygen tank exploded.

7. May 13, 2009, Louisville, Kentucky: Two maintenance contractors at a cold storage company were killed by the release of a reported 4,000 pounds of toxic anhydrous ammonia gas from the refrigeration system.

8. June 10, 2009, Waconia, Minnesota: A propane explosion at a farm supply company killed a teenage employee.


10. June 19, 2009, Stanton, Nebraska: Toxic gases inside a grain pit killed one worker and critically injured another at an agricultural co-op.

11. June 20, 2009, Lumber Bridge, North Carolina: An ammonia release killed a worker and injured others at a major poultry-processing facility with 2,500 employees.

12. June 29, 2009, Queens, New York: Three workers, including a father and son, were killed by hydrogen sulfide gas released from a waste pit at a recycling company. Reports indicate one worker was overcome and fell into the pit, while the two other victims died attempting rescue.

13. July 2, 2009, Fulton, Mississippi: An explosion involving naphtha solvent killed one and injured others at a plant that manufactures copper piping.
14. **July 5, 2009, Ocracoke, North Carolina:** Four employees of a fireworks company were killed and another was injured in an explosion, reportedly while assembling fuses inside a truck filled with fireworks.

15. **July 7, 2009, Houston, Texas:** A worker was killed by an explosion while standing above a tanker truck that was being cleaned of flammable material, when flammable vapor contacted an undetermined ignition source.

16. **July 28, 2009, McArthur, Ohio:** A blast at an explosives manufacturing company reportedly injured eight employees, including one who died more than a month later from burns.

17. **July 30, 2009, Cleveland, Ohio:** An accident at a magnesium processing facility caused fatal burns and other injuries to an employee.

18. **September 3, 2009, Clairton, Pennsylvania:** One contractor was killed and another injured by an explosion in a large cryogenic vapor-condensing unit at a major coke oven gas facility.

19. **September 10, 2009, Guernsey, Ohio:** A release of highly toxic hydrogen sulfide from a gas well killed one worker and seriously injured another.

20. **September 18, 2009, Syracuse, New York:** An explosion of a flammable substance killed a welder who was using a torch to cut apart 55-gallon drums.

21. **October 18, 2009, Columbus, Wisconsin:** An explosion killed a worker at a printing plant when a grinding tool ignited flammable vapor from a solvent-based cleaning process.

22. **November 16, 2009, Rosemount, Minnesota:** Two truck drivers were killed by a release of anhydrous ammonia from a transfer line between an ammonia terminal facility and a tanker truck.

23. **November 20, 2009, Escatawpa, Mississippi:** An explosion of solvent fumes killed two workers and injured others while they were preparing surfaces for painting inside a tugboat under construction.

24. **December 4, 2009, Texas City, Texas:** A boiler explosion killed one worker and injured two others at a major Gulf Coast oil refinery.

25. **December 29, 2009, Elkhart Lake, Wisconsin:** The explosion of a burning dumpster at a metal foundry killed one firefighter and sent eight others to the hospital; reports indicate that the dumpster may have contained water-reactive aluminum wastes.
### Appendix C: Fiscal Year 2009-2011 Salaries & Expenses

*(Dollars in Thousands)*

<table>
<thead>
<tr>
<th></th>
<th>FY 2009 Actual</th>
<th>FY 2010 Budget(^1)</th>
<th>FY 2011 Request</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Personnel Compensation &amp; Benefits</strong></td>
<td>$5,542</td>
<td>$6,205</td>
<td>$7,964</td>
</tr>
<tr>
<td><strong>Contractors</strong></td>
<td>270</td>
<td>332</td>
<td>277</td>
</tr>
<tr>
<td><strong>Fixed Costs</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rent, Communications, &amp; Utilities</td>
<td>904</td>
<td>938</td>
<td>985</td>
</tr>
<tr>
<td>Interagency Services</td>
<td>826</td>
<td>605</td>
<td>665</td>
</tr>
<tr>
<td>Maintenance</td>
<td>43</td>
<td>54</td>
<td>57</td>
</tr>
<tr>
<td><strong>Total Fixed Costs</strong></td>
<td><strong>1,773</strong></td>
<td><strong>1,597</strong></td>
<td><strong>1,707</strong></td>
</tr>
<tr>
<td><strong>Variable Costs</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Travel &amp; Transportation</td>
<td>364</td>
<td>608</td>
<td>752</td>
</tr>
<tr>
<td>Rent, Communications, &amp; Utilities</td>
<td>86</td>
<td>90</td>
<td>88</td>
</tr>
<tr>
<td>Printing</td>
<td>26</td>
<td>42</td>
<td>48</td>
</tr>
<tr>
<td>Other Services</td>
<td>986</td>
<td>1,494</td>
<td>1,291</td>
</tr>
<tr>
<td>Supplies</td>
<td>185</td>
<td>158</td>
<td>144</td>
</tr>
<tr>
<td>Equipment</td>
<td>325</td>
<td>21</td>
<td>438</td>
</tr>
<tr>
<td><strong>Total Variable Costs</strong></td>
<td><strong>1,972</strong></td>
<td><strong>2,413</strong></td>
<td><strong>2,761</strong></td>
</tr>
<tr>
<td><strong>Total Costs</strong></td>
<td>$9,557</td>
<td>$10,547</td>
<td>$12,709</td>
</tr>
</tbody>
</table>

\(^1\) Excludes a one-time appropriation of $600,000 in FY 2010 for a study on the industrial use of methyl isocyanate by the National Academy of Sciences.
Appendix D: Analysis of Change FY 2010 to FY 2011

Salaries & Expenses
(Dollars in Thousands)

FY 2010 Continuing Appropriation (Salaries & Expenses)\(^1\) $10,547

Summary of Adjustments to Base and Built-In Changes

**Personnel Cost Increases**\(^2\)
New Positions Filled During FY 2011 .................................................. 643
Full Year Cost for Positions Filled During FY 2010 .......................... 562
Recruitment & Relocation ................................................................. 297
Retention Programs ........................................................................ 132
Estimated Cost of January 2011 Pay Increase and Pay Adjustments\(^3\) ................................................................. 125
**TOTAL INCREASE** .................................................................. 1,759

**Contractors Cost Increases/Decreases**
Public Affairs Consultant ................................................................. (60)
Administrative Consultants .................................................................. 5
**TOTAL INCREASE** .................................................................. (55)

**Fixed Cost Increases**
Rent, Communications, & Utilities .................................................. 47
Interagency Services ......................................................................... 60
Maintenance ..................................................................................... 3
**TOTAL INCREASE** .................................................................. 110

**Variable Cost Increases/Decreases**
Travel & Transportation ................................................................. 144
Rent, Communications, & Utilities ................................................. (2)
Printing ........................................................................................... 6
Other services ............................................................................... (203)
Supplies ......................................................................................... (14)
Equipment ..................................................................................... 417
**TOTAL INCREASE** .................................................................. 348

**Total Adjustments to FY 2009 Salaries & Expenses** ..................... 2,162

**Total FY 2011 Appropriation Request** ....................................... $12,709

---

1 Excludes a one-time appropriation of $600,000 in FY 2010 for a study on the industrial use of methyl isocyanate by the National Academy of Sciences.
2 Benefits are calculated at 28.18 percent of base pay based on historic data.
3 FY 2011 pay increase estimated at 2.10 percent of base pay, plus payroll adjustments.
Appendix E: Significant Adjustments to Analysis of Change FY 2010-2011

Personnel Costs: The FY 2011 budget for personnel costs reflects an increase of $1,759,000 in order to:

- Partially fund the following new positions for FY 2011:

<table>
<thead>
<tr>
<th>Description</th>
<th># Positions</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Investigators for a new Houston office 13</td>
<td>5</td>
<td>$174,243</td>
</tr>
<tr>
<td>Investigators for a new assessment team 14</td>
<td>3</td>
<td>251,199</td>
</tr>
<tr>
<td>Investigator/Blast Expert 14</td>
<td>1</td>
<td>127,500</td>
</tr>
<tr>
<td>Legal Assistant/Paralegal 14</td>
<td>1</td>
<td>43,137</td>
</tr>
<tr>
<td>Information Assurance Specialist 14</td>
<td>1</td>
<td>47,254</td>
</tr>
</tbody>
</table>

  **Totals**                                              11                    $ 643,333

- Provide full year costs for the following positions filled during FY 2010 (thus only partial year funding was required for FY 2010):

<table>
<thead>
<tr>
<th>Description</th>
<th># Positions</th>
<th>FY 2011 Increase</th>
</tr>
</thead>
<tbody>
<tr>
<td>Board Members</td>
<td>2</td>
<td>145,184</td>
</tr>
<tr>
<td>Director of Operations</td>
<td>1</td>
<td>177,165</td>
</tr>
<tr>
<td>Recommendation Specialist</td>
<td>1</td>
<td>15,735</td>
</tr>
<tr>
<td>Incident Screener</td>
<td>1</td>
<td>31,146</td>
</tr>
<tr>
<td>Attorney Advisor</td>
<td>1</td>
<td>101,065</td>
</tr>
<tr>
<td>Procurement Specialist</td>
<td>1</td>
<td>41,600</td>
</tr>
<tr>
<td>Human Resources Specialist</td>
<td>1</td>
<td>50,171</td>
</tr>
</tbody>
</table>

  **Totals**                                              8                     $ 562,066

- Provide recruitment cost for seven investigative and two administrative positions of $70,000 and relocation cost of $227,000 to relocate two staff to the new Houston office for a total increase of $297,000.

- Provide funding for programs to retain and advance entry level employees. Specifically, $132,000 to provide for structured promotion of qualified individuals.

13 Office would be opened in July 2011
14 Position(s) to be filled in January 2011
• Provide for the projected January 2011 pay increase and miscellaneous payroll adjustments totaling $125,000.

**On-Site Contractors:** The decrease of $55,000 is a result of reduced funding for a public affairs consultant and other minor adjustments.

**Rent, Communications, & Utilities:** In anticipation of the new DC office lease we are projecting an increase of $30,000, an increase of $14,000 for the new Houston office along with an increase in communication cost of $3,000.

**Interagency Services:** The increase of $60,000 is a result of an increase of $47,000 for our interagency agreement with the Bureau of Public Debt for our accounting, procurement, and travel services, an increase of $10,000 for the agreement with Federal Occupational Health for physicals and the AED program, and other minor agreement adjustments.

**Travel:** The net increase of $144,000 is a result of an increase of $137,000 for travel related to hiring, funding for investigative travel for additional incidents of $116,000, and a decrease of $112,000 in transportation costs related to the FY 2010 office relocation, and other miscellaneous travel.

**Other Services:** The decrease of $203,000 is mostly result of unallocated FY 2010 funds resulting from staffing realignment and other miscellaneous adjustments.

**Equipment:** The increase of $417,000 is a result of funding for the IT Capital Plan of $317,000, and equipment/furniture for the new Houston office of $100,000.
### Appendix F: CSB Appropriations by Fiscal Year

(Dollars in Millions)

**Salaries & Expenses**

<table>
<thead>
<tr>
<th>Fiscal Year</th>
<th>One-Year Funds</th>
<th>Two-Year Funds</th>
<th>Total Funds</th>
</tr>
</thead>
<tbody>
<tr>
<td>1998</td>
<td>$4.00</td>
<td>$0.00</td>
<td>$4.00</td>
</tr>
<tr>
<td>1999</td>
<td>6.50</td>
<td>0.00</td>
<td>6.50</td>
</tr>
<tr>
<td>2000</td>
<td>7.97</td>
<td>0.00</td>
<td>7.97</td>
</tr>
<tr>
<td>2001</td>
<td>4.99</td>
<td>2.49</td>
<td>7.48</td>
</tr>
<tr>
<td>2002</td>
<td>5.34</td>
<td>2.50</td>
<td>7.84</td>
</tr>
<tr>
<td>2003</td>
<td>7.31</td>
<td>0.50</td>
<td>7.81</td>
</tr>
<tr>
<td>2004</td>
<td>8.20</td>
<td>0.00</td>
<td>8.20</td>
</tr>
<tr>
<td>2005</td>
<td>9.03</td>
<td>0.00</td>
<td>9.03</td>
</tr>
<tr>
<td>2006</td>
<td>9.06</td>
<td>0.00</td>
<td>9.06</td>
</tr>
<tr>
<td>2007</td>
<td>9.11</td>
<td>0.00</td>
<td>9.11</td>
</tr>
<tr>
<td>2008</td>
<td>9.26</td>
<td>0.00</td>
<td>9.26</td>
</tr>
<tr>
<td>2009</td>
<td>10.20</td>
<td>0.00</td>
<td>10.20</td>
</tr>
<tr>
<td>2010&lt;sup&gt;a&lt;/sup&gt;</td>
<td>10.55</td>
<td>0.00</td>
<td>10.55</td>
</tr>
<tr>
<td>2011&lt;sup&gt;b&lt;/sup&gt;</td>
<td>12.71</td>
<td>0.00</td>
<td>12.71</td>
</tr>
</tbody>
</table>

<sup>a</sup> Excludes a one-time appropriation of $600,000 in FY 2010 for a study on the industrial use of methyl isocyanate by the National Academy of Sciences.

<sup>b</sup> Request

**Emergency Fund**

<table>
<thead>
<tr>
<th>Fiscal Year</th>
<th>New Funding</th>
<th>Amount Spent to Date</th>
<th>Total Available</th>
</tr>
</thead>
<tbody>
<tr>
<td>2004</td>
<td>$0.44</td>
<td>$0.00</td>
<td>$0.44</td>
</tr>
<tr>
<td>2005</td>
<td>0.40</td>
<td>0.00</td>
<td>0.84</td>
</tr>
</tbody>
</table>

<sup>c</sup> 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.
## Appendix G: CSB Personnel Data

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>GS-7</td>
<td>7</td>
<td>3</td>
<td>4</td>
<td>4</td>
<td>2</td>
<td>6</td>
</tr>
<tr>
<td>GS-9</td>
<td>3</td>
<td>4</td>
<td>1</td>
<td>2</td>
<td>7</td>
<td>7</td>
</tr>
<tr>
<td>GS-11</td>
<td>2</td>
<td>4</td>
<td>6</td>
<td>5</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>GS-12</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>7</td>
<td>8</td>
</tr>
<tr>
<td>GS-13</td>
<td>2</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td>GS-14</td>
<td>11</td>
<td>8</td>
<td>10</td>
<td>9</td>
<td>9</td>
<td>12</td>
</tr>
<tr>
<td>GS-15</td>
<td>8</td>
<td>10</td>
<td>9</td>
<td>9</td>
<td>9</td>
<td>10</td>
</tr>
<tr>
<td>Executive</td>
<td>3</td>
<td>4</td>
<td>4</td>
<td>3</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>SES</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td><strong>38</strong></td>
<td><strong>38</strong></td>
<td><strong>40</strong></td>
<td><strong>38</strong></td>
<td><strong>45</strong></td>
<td><strong>56</strong></td>
</tr>
</tbody>
</table>