



**U.S. Chemical Safety and
Hazard Investigation Board**

BUDGET JUSTIFICATION

Fiscal Year 2018

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Fiscal Year 2018 Budget Request

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I. Introduction

As an independent, non-regulatory agency, the U.S. Chemical Safety and Hazard Investigation Board's (CSB) mission is to drive chemical safety change through independent investigations to protect people and the environment. To that end, the CSB conducts comprehensive, root cause investigations of high-consequence chemical incidents, which are often preventable with robust safety programs. The agency then makes recommendations aimed at preventing similar incidents from recurring. CSB investigations have collectively identified gaps in regulatory requirements, industry standards and guidance, workforce training and operations, emergency response and community planning that exacerbated the consequences of incidents and contributed to loss of life and property.

Throughout its nineteen year history, the CSB has initiated more than 130 deployments and issued approximately 800 recommendations related to chemical incidents that resulted in more than 200 fatalities, over 1,200 injuries, and environmental damage. The agency educates regulators, industry personnel, standards setting organizations, academia, and the American people to help make the chemical industry safer, while maintaining economic prosperity. As Dr. Trevor Kletz, an international authority on chemical process safety stated, "There's an old saying that if you think safety is expensive, try an accident. Accidents cost a lot of money. And, not only in damage to plant(s) and in claims for injury, but also in the loss of the company's reputation."

The CSB's vision is a "nation safe from chemical disasters." The agency shares its findings and knowledge to protect workers and the environment, as well as prevent costly chemical disasters. The CSB has published nearly one hundred investigative reports and produced sixty-eight video products to communicate its safety messages, which are reviewed and used by diverse audiences both domestically and internationally, so that others may benefit from the lessons learned from these tragedies. Of the over 800 recommendation that the CSB has issued, more than 625 (78%) have been closed. Of the closed recommendations, 540 (~86%) were successfully implemented, some of which exceeded CSB expectations. With an annual budget of \$11 million and a staff of 43, which has remained relatively flat for nine years, the CSB consistently has made an enormous impact on chemical safety.

The impact of the CSB's investigations and recommendations can be felt throughout the country in a wide variety of industries. The following examples of safety improvements were a direct result of the CSB's recommendations.

- The Occupational Safety and Health Administration implemented a national Special Emphasis Program to prevent the hazards of combustible dust.
- The California Department of Industrial Relations has drafted extensive revisions to its process safety management standards for refineries. The new standards would require employers to prevent and eliminate, to the greatest extent feasible, health and safety risks to employees.
- The Federal Emergency Management Agency worked with academic institutions in Texas to develop training programs for first responders addressing the hazards of fertilizer grade ammonium nitrate.

- Code and standards developing organizations have addressed safety gaps in national and international fire codes and fuel gas codes.
- The American Chemical Society developed guidance to identify, assess and control hazards in research laboratories. The Accreditation Board for Engineering and Technology, Inc. added a requirement for chemical process safety education in university curriculum for a broad range of engineering disciplines.
- BP formed an independent review panel, led by former Secretary James A. Baker III, to conduct a thorough review of the company's corporate safety culture and safety management systems. The lessons learned from the final report have been shared across the refining industry to prevent future incidents.

The costs of chemical disasters total in the hundreds of billions of dollars. To make the safety of Americans our number one priority, as the President proposes in the FY 2018 Budget Blueprint, it is critical that chemical safety lessons are learned and shared among diverse stakeholders that use hazardous chemicals. More specifically:

- A 2013 explosion at a fertilizer facility resulted in 15 fatalities and more than 260 injuries; \$230 million in insurance-related losses; and \$16 million in Federal disaster assistance; however, the company held only a \$1 million insurance policy.
- A 2012 explosion at a refinery resulted in medical treatment for 15,000 residents; \$2 million in fines and restitution; and \$447 million in increased gas prices passed onto California consumers.¹
- A 2010 explosion at an offshore drilling rig resulted in \$21 billion in settlements; \$13 billion in economic and medical claims from local businesses and residents; 11 workers killed and 17 injured; and four million barrels of oil spilled into the Gulf of Mexico.

If the CSB's many safety lessons prevent at least one catastrophic incident, the money saved by avoiding damage to a facility and the surrounding community, the avoidance of legal settlements, and the saving of human lives far outweigh the agency's \$11 million annual budget. Safety and prosperity are compatible. Strong safety programs are critical for the economic success of the many industries that use hazardous chemicals. Through its independent investigations, the CSB plays a unique role in fostering collaboration with industry, regulators, standards setting bodies and other professional organizations, thus emphasizing the CSB's vital role in driving critical chemical safety change in the United States.

¹ Gonzales, Dan, Timothy Gulden, Aaron Strong and William Hoyle. Cost-Benefit Analysis of Proposed California Oil and Gas Refinery Regulations. Santa Monica, CA: RAND Corporation, 2016. http://www.rand.org/pubs/research_reports/RR1421.html.

II Vision, Mission and Strategic Goals

Vision

A nation safe from chemical disasters.

Mission

Drive chemical safety change through independent investigations to protect people and the environment.

Strategic Goals

Goal 1 – Prevent recurrence of significant chemical incidents through independent investigations.

- 1.1. Select for investigations those incidents and hazards that are most likely to generate recommendations or findings with broad preventive impact.
- 1.2. Complete timely, high-quality investigations that determine the causes of incidents.
- 1.3. Develop and issue recommendations with broad preventive impact.

Goal 2 – Advocate safety and achieve change through recommendations, outreach, and education.

- 2.1. Pursue the implementation of recommendations, with focused effort on those designated as high-impact.
- 2.2. Identify and strategically promote key chemical safety issues.
- 2.3. Disseminate chemical safety information using a variety of high-visibility tools and products.

Goal 3 – Create and maintain an engaged, high-performing workforce.

- 3.1. Implement effective recruiting, targeted retention, and skills-based training and mentorship.
- 3.2. Encourage management development and leadership at all levels.
- 3.3. Strategically allocate resources across the organization.
- 3.4. Strengthen operational performance and project management efforts.

III. Budget Request

Budget Request Summary

The CSB requests a budget of \$11.629 million in fiscal year (FY) 2018 to accomplish its unique mission. This is an increase of \$629,000, or 5.72% above the \$11 million provided in the Consolidated Appropriations Act of 2017. This modest increase will allow the CSB to maintain its current investigations and safety advocacy capacity in FY 2018. To be successful, the CSB will require additional funding in several areas that are described in the object classification detail. The majority of the increase is related to full year funding for currently vacant positions, including one Board Member, a Technical Director to oversee the CSB's investigations and recommendations work, and the General Counsel. Second, the CSB will incur a 1.9% increase in expenses related to the cost of living allowance (COLA). Finally, the CSB is requesting minor increases in other spending categories to maintain its current level of operations.

The CSB's FY 2018 Budget Request is a relatively small federal investment to continue the agency's valuable work. Yet, the President's FY 2018 Budget Request proposes the elimination of the CSB and requests a \$9.4 million appropriation to provide for the CSB's orderly shutdown and rescission of the agency's \$844,000 no-year emergency fund. The CSB disagrees with this proposal and is using its bypass budget authority² to request a budget of \$11.629 million in FY 2018 to continue the execution of its critical safety mission to drive critical chemical safety change to protect people and the environment.

The CSB's mission is not duplicated by any other federal agency or entity. While other Federal agencies such as the Environmental Protection Agency (EPA) and the Occupational Safety and Health Administration (OSHA) have a rulemaking and enforcement role, Congress specifically mandated that the CSB be completely independent from these agencies. The legislative history states that the investigations conducted by EPA, OSHA and others "with dual responsibilities tend to focus on violations of existing rules and the cause of the accident almost to the exclusion of other contributing factors for which no enforcement or compliance actions can be taken. The purpose of an accident investigation... is to determine the cause or causes of an accident whether or not those causes were in violation of any current and enforceable requirement." Furthermore, no private sector organization is able to complete the work of the CSB's mission.

The President's *Budget Blueprint to Make America Great Again* states that, "A budget that puts America first must make the safety of our people its number one priority — because without safety, there can be no prosperity."³ The CSB continues to emphasize that good safety management systems are good business. The CSB requests an FY 2018 appropriation of \$11.629

² "Whenever the Board submits or transmits any budget estimate, budget request, supplemental budget request, or other budget information, [. . .] to the President, the Secretary of Labor, the Administrator, or the Director of the Office of Management and Budget, it shall concurrently transmit a copy thereof to the Congress. [. . .] No officer or agency of the United States shall have authority to require the Board to submit its budget requests or estimates [. . .] to any officer or agency of the United States for approval or review prior to the submission of such recommendations, testimony, comments or reports to the Congress." 42 U.S.C. §7412 (r)(6)(R).

³ *America First: A Budget Blueprint to Make America Great Again*. Office of Management and Budget. Washington, DC. 2017.

million to continue to perform root cause investigations, advocate for critical chemical safety improvements, and promote the safety of American workers, communities and businesses.

CSB Accomplishments

Investigations

The CSB's first strategic goal is to prevent recurrence of significant chemical incidents through independent investigations. Since January 2016, the CSB completed the following nine investigations:

- **Refinery Fire (Delaware City, DE):** On Sunday, November 29, 2015, an operator at the Delaware City Refining Company's (DCRC) Kellogg Alkylation Unit suffered second degree burns to his face and neck while performing de-inventorying activities on a vessel in preparation for the removal of a pipe spool from a connected process. This incident followed two previous incidents at the same facility that occurred in August 2015. The CSB's investigation report focused on the adequacy of written procedures and safety processes. **The final report was approved on April 11, 2017, and released at a news conference on May 18, 2017, in Wilmington, Delaware.**
- **Refinery Explosion and Catalyst Release (Torrance, CA):** On February 18, 2015, the ExxonMobil refinery in Torrance, California, released spent catalyst material into the surrounding community and the explosion resulted in four minor injuries and extensive property damage. The CSB's investigation focused on the technical cause of the equipment failure; organizational factors; process hazard analyses and mechanical integrity at the refinery; and the State of California's Process Safety Management revisions. **The final report was approved on March 28, 2017, and released at a news conference on May 3, 2017, in Torrance, California.**
- **Nitrous Oxide Explosion (Cantonment, FL):** On Sunday, August 28, 2016, a nitrous oxide trailer truck exploded at the Airgas manufacturing facility. The explosion killed the only Airgas employee present and heavily damaged the facility, halting nitrous oxide manufacturing at the Cantonment plant and leading to shortages for the medical, university, and food manufacturing industries. The plant has remained inoperable since the incident. **The final report was approved on March 16, 2017, and released at a news conference on April 20, 2017, in Pensacola, Florida.**
- **Olefins Plant Fire and Explosion (Geismar, LA):** On June 13, 2013, an explosion and fire occurred at the Williams Olefins plant during non-routine operational activities when the temperature of a liquid propane mixture confined within the reboiler increased, resulting in a dramatic pressure rise within the vessel. The reboiler shell catastrophically ruptured, causing a boiling liquid expanding vapor explosion (BLEVE) and fire, which killed two workers and injured 167 others, the majority of whom were contractors. The CSB's report highlighted the importance of using risk reduction strategies, establishing a strong organizational process safety culture, and developing a robust process safety management program. **The final report was approved on September 26, 2016, and released at a news conference on October 19, 2016, in Baton Rouge, Louisiana.**
- **Chemical Release and Disruption of Drinking Water Supply (Charleston, WV):** On the morning of January 9, 2014, an estimated 10,000 gallons of crude

methylcyclohexanemethanol (MCHM) mixed with propylene glycol phenyl ethers (PPH Stripped) were released into the Elk River when a 46,000-gallon storage tank located at the Freedom Industries site in Charleston, WV, failed, disrupting the drinking water supply for approximately 300,000 residents in nine counties. The CSB's report calls on aboveground storage tank facilities, government officials, drinking water utilities and public health agencies across the country to follow recommended best practices to prevent similar incidents. **The investigation report was approved at a public meeting on September 28, 2016, in Charleston, West Virginia.**

- **High Temperature Hydrogen Attack (Anacortes, WA):** Following the closure of all recommendations from the CSB's final investigation report into the heat exchanger failure at the Tesoro refinery in Anacortes, Washington, that fatally injured seven workers, the CSB determined that industry continues to lack sufficient guidance on high temperature hydrogen attack (HTHA). The CSB issued a safety alert that incorporates key findings from the 2014 investigation report to provide additional direction for the industry to prevent the mechanical failures from HTHA. **The Safety Alert was published on August 11, 2016.**
- **Sulfuric Acid Release (Martinez, CA):** On February 12, 2014, a release of an estimated 84,000 pounds of sulfuric acid at the Tesoro Refinery in Martinez, California, burned two workers. Less than a month later, on March 10, 2014, sulfuric acid sprayed and burned two contract workers during the removal of piping. Both incidents occurred in the refinery's alkylation unit where high-octane blending components are produced for gasoline. The CSB's case study examined previous incidents, gaps in safety standards, deviations from established procedures and practices, and past efforts to assess and strengthen site safety culture at the refinery. **The final report was released at a news conference on August 2, 2016, near Oakland, California.**
- **Deepwater Blowout and Explosion (Gulf of Mexico):** On April 20, 2010, a complex interplay of physical, operational, and organizational barriers failed, sending oil and gas from deep below the ocean floor onto the Deepwater Horizon drilling rig, triggering explosions and an ensuing fire that left 11 of the 126 workers dead and critically injured at least 17 others. Volumes III and IV of the CSB's investigation report included proposed safety recommendations to the U.S. Department of Interior's Bureau of Safety and Environmental Enforcement (BSEE), the American Petroleum Institute, the Ocean Energy Safety Institute, and the Sustainability Accounting Standards Board to prevent future offshore drilling incidents. **The final two volumes of the investigation report were released on April 20, 2016.**
- **Fertilizer Explosion and Fire (West, TX):** On April 17, 2013, the West Fertilizer fire and explosion in West, Texas, resulted in fifteen fatalities, including twelve fire fighters; more than 260 injuries; and an estimated \$230 million in community damage. The deadly fire and explosion occurred when approximately thirty tons of fertilizer grade ammonium nitrate (FGAN) exploded when heated by a fire at the storage and distribution facility. The CSB made recommendations to address a lack of awareness of hazardous chemicals and emergency preparedness. **The final report was released on January 28, 2016, in Waco, Texas.**

In addition to completing the nine chemical incident investigations described above, the CSB continues to complete field work and analysis on several major open investigations. In 2016 and 2017, the CSB deployed to seven new incidents and made significant progress in the completion of investigation reports. Since 2016, the agency has focused on the completion of more timely investigations to ensure that the critical safety messages can be shared to promote the prevention of catastrophic incidents. The CSB anticipates the completion of the following investigations in FY 2017.

- **Chemical Release and Fire (Baton Rouge, LA):** On November 22, 2016, an isobutane release and fire occurred in the sulfuric acid alkylation unit of the ExxonMobil Baton Rouge refinery in Louisiana. The fire seriously injured four workers when flammable isobutane vapor released from process piping. The isobutane reached an ignition source approximately one minute after the release while workers were trapped in the vapor cloud. **The CSB's final investigation report is anticipated in the summer of 2017.**
- **Catastrophic Pressure Vessel Rupture (St. Louis, MO):** On April 3, 2017, an overpressure within a steam condensate storage tank at the Loy-Lange Box Company launched the vessel into a neighboring dry cleaning facility and fatally injured one worker at the box company and three members of the public at the adjacent facility. **An assessment of the incident is anticipated for release in the summer of 2017.**
- **Hot Work Explosion (DeRidder, LA):** On February 8, 2017, three contractors were killed and seven contractors sustained injuries in an explosion at the Packaging Corporation of America facility in DeRidder, Louisiana. The fatally-injured contractors were conducting hot work activities near a 100,000-gallon atmospheric storage tank that contained a flammable atmosphere and ultimately exploded. **The CSB's final report is anticipated in the summer of 2017.**
- **Gas Plant Explosion (Pascagoula, MS):** A flammable gas release with multiple explosions and ensuing fire occurred at the Enterprise Products Pascagoula Gas Plant, in Moss Point, Mississippi on June 27, 2016. The incident occurred in a cryogenic process line that takes natural gas received from an offshore pipeline and separates it into natural gas liquids (NGLs) and residual natural gas. The NGLs and natural gas products are either commercially sold or transferred for further processing at different facilities. The site was shut down for nearly six months, and in its quarterly report to investors, the company cited at least \$14.2 million in losses due to site damage and fire response activities. There are numerous similar gas plant installations across the country in regions where oil and gas are produced, and the CSB's lessons learned will be shared across the industry. **A final investigation report is anticipated in the summer of 2017.**
- **Chlorine Release and Community Shelter-in-Place (Atchison, Kansas):** On April 12, 2017, the CSB released preliminary findings from its ongoing investigation of the toxic chlorine release from the MGPI Processing plant in Atchison, Kansas. On October 21, 2016, sulfuric acid was inadvertently unloaded from a tanker truck into a fixed sodium hypochlorite tank at the plant. The two materials combined to produce a mixture of chlorine gas that sent over 140 individuals, both workers and members of the public, to

area hospitals and resulted in shelter-in-place and evacuation orders for thousands of local residents. **A final report is anticipated in the fall of 2017.**

- **Hot Work Explosion (Nederland, TX):** On August 12, 2016, workers were conducting hot work on a section of piping in the oil and gas terminal that had not been fully evacuated of flammable hydrocarbons. A vent attached to the pipe section was not properly monitored and sparks from the hot work ignited vapors coming from the vent. The vapors flashed back into the pipe causing an overpressure and flash fire that injured seven contract workers, four severely. **The CSB's final investigation report is anticipated in the fall of 2017.**
- **Toxic Chemical Release (LaPorte, TX):** On November 15, 2014, approximately 24,000 pounds of highly toxic methyl mercaptan were released inside a chemical manufacturing facility, resulting in the deaths of four DuPont employees. The CSB held a public meeting in Houston, Texas, in September 2015, to discuss preliminary findings and release interim recommendations to DuPont for preventing of serious hazards prior to restarting the affected process. **The final report is anticipated for release in the fall of 2017.**

Recommendations Successes

The CSB's second strategic goal is to advocate for safety change through recommendations, outreach, and education. The implementation of CSB recommendations resulted in several significant safety improvements in FY 2016. As part of the West Fertilizer investigation, the CSB made recommendations to the Federal Emergency Management Agency (FEMA) to create a funding mechanism to provide training and curriculum development for first responders at ammonium nitrate incidents. On September 16, 2016, FEMA awarded two grants of \$1 million each to the Georgia Tech Research Institute (GTRI) and the International Association of Fire Fighters (IAFF) to develop and deliver HAZMAT training focused on FGAN hazards.

Following the 2012 catastrophic chemical release and fire at the Chevron Richmond Refinery in California, the CSB issued an urgent recommendation to Chevron USA to perform damage mechanism hazard reviews on all of its OSHA Process Safety Management covered process piping circuits and process equipment to strengthen the process hazard analyses for all of its U.S. refineries. In December 2016, Chevron USA implemented the CSB's recommendation by developing a standard process for the review of damage mechanisms by a multidisciplinary team in all of its U.S. refineries. This project may prevent future catastrophic incidents and loss of production at its four U.S. refineries, which process more than 900,000 barrels of oil per day.

Safety Advocacy and Outreach

In order to advance its strategic outreach program, the Board has added three new issues to its primary advocacy program, the *Drivers of Critical Chemical Safety Change*, since 2016. The goal of the program is to pursue implementation of changes that are most likely to achieve important national-level safety improvements. This advocacy program targets specific actions for Federal and state agencies, standards-setting bodies, and other groups to advance safety in

emergency planning and response, preventive maintenance, process safety management, and hot work practices.

Based on feedback from the communities affected by catastrophic incidents, the CSB broadened its outreach to wider audiences by offering several Spanish language products. The agency has translated its news releases of investigative findings and developed subtitles for its publicly available safety videos. The first Spanish language news releases included the lessons learned from the massive explosion and fire at the Caribbean Petroleum terminal facility near San Juan, Puerto Rico, and the fatal methyl mercaptan release at the DuPont pesticide manufacturing plant near Houston, Texas. To date, the CSB has released twelve safety videos with Spanish subtitles and translated nine news releases and eight safety digests into Spanish.

The CSB safety videos are available for viewing and to download on the agency's website and YouTube account. Since January 2016, the CSB released two full length safety videos and a computer-generated animation to broadly disseminate lessons learned from three completed investigations. These videos include "Dangerously Close" on the fatal FGAN explosion at West Fertilizer in West, Texas; "Blocked In" on the explosion and fire at the Williams Olefins facility in Geismar, Louisiana; and the animation of the 2015 explosion at the ExxonMobil Refinery in Torrance, California. CSB videos have been viewed more than 6.6 million times on YouTube, and the agency's page has more than 20,000 followers.

Organizational Excellence

The CSB's third strategic goal is to create and maintain an engaged, high-performing workforce. The recently-approved *FY 2017-2021 Strategic Plan* serves as a blueprint for CSB priorities to examine emerging chemical safety hazards and help drive chemical safety improvements. With this plan, the agency will judiciously allocate limited resources to achieve the strategic goals and to promote accountability for its safety mission. Through the successful implementation of the Strategic Plan, the agency will increase its flexibility to reach broader audiences, deliver innovative and persuasive safety products to drive chemical safety improvements, and become a premier Federal resource for chemical safety knowledge.

Over the past two years, the CSB has placed a special emphasis on organizational efficiency and health, building trust internally and externally, and increasing productivity within the organization. In the 2016 Federal Employee Viewpoint Survey (FEVS), the CSB was one of the top five most improved small agencies in employee engagement. In the 2016 results, a total of 36 items reflected a significant positive change of more than 5%, including the satisfaction with executive management, agency progress toward meeting its goals and objectives, and communication. Overall, the Employee Engagement Index increased by 14%. The CSB continues to strive for increased employee engagement and organizational efficiencies.

FY 2018 Budget Request

The CSB is requesting a budget of \$11.629 million in FY 2018 to execute its unique safety mission. Approximately 91% of the funds requested in FY 2018 will be distributed into four main budget object classification codes: personnel compensation, personnel benefits, rent, and other services. Of the requested \$11.629 million, compensation costs, including fringe benefits, account for \$8.322 million – or 71.6% of the total agency budget. To procure mandatory services provided by other government agencies, such as payroll, personnel, accounting, and occupational health services, and other non-governmental contractors, the CSB requests \$1.62 million – or 13.9% of the agency’s budget. Finally, \$795,750 – or 6.8% – is requested for rent, which includes office space in Washington, DC, and Denver, Colorado.

The requested funding will allow the CSB to maintain program activities that support its three strategic objectives.

- **Investigations.** The CSB evaluates three to five chemical incidents every day across the country, and initiates investigations where broad chemical safety learning is possible. To complete these investigations, the agency identifies the root causes of chemical incidents, issues recommendations for safety change and shares findings broadly across industries that use hazardous chemicals. Investigations are transparent. The CSB continues to conduct on-scene press briefings and public hearings to share findings, obtain additional facts and hear concerns from members of the community. Investigative materials are available on the agency’s website.
- **Advocacy and Outreach.** The agency continues to engage stakeholder groups and collaborate with recommendations recipients – including government entities, safety organizations, trade associations, corporations, labor organizations, emergency response organizations, and educational organizations – to implement the Board’s safety recommendations. The CSB continues to release safety videos and other products, in both English and Spanish, to ensure that valuable safety lessons are available to broad audiences to maximize their preventive impact.
- **Operational Excellence.** Finally, the CSB strives for continual improvement to promote organizational efficiency. In FY 2018, the CSB will continue efforts to improve management metrics and accountability to ensure that investigations are completed in a timely manner and resources are strategically allocated.

Conclusion

The CSB’s FY 2018 budget request for \$11.629 million will allow the CSB to execute its unique mission to determine the root causes of catastrophic chemical incidents and share safety lessons to prevent the loss of life, injuries, and damage to surrounding communities that results from these preventable incidents. Safety and prosperity are not incompatible, and strong safety programs are critical for the economic success of industries that use hazardous chemicals. The \$11.629 million requested to fund the agency is a small investment in comparison to the billions of dollars associated with catastrophic chemical incidents. The continued funding of the CSB is an investment in the safety and security of the American people. Without funding for the U.S.

Chemical Safety Board, its critical mission will be entirely lost. No other organizations, public or private, are able to conduct truly independent, non-regulatory investigations that can also hold Federal and state regulators or other parties accountable. The CSB urges Congress to fund its continued operations to ensure a nation safe from chemical disasters.

IV. Budget by Object Classification Category

The U.S. Chemical Safety and Hazard Investigation Board (CSB) requests \$11.629 million for FY 2018. The funding requested will enable the CSB to achieve its core mission, as required by the Clean Air Act Amendments of 1990. The proposed budget for FY 2018 by budget object classification code is shown in the table below with a comparison to the FY 2017 estimated costs. A narrative explanation of the amount requested for each budget object classification code follows.

Budget Object Classification Code Table
Fiscal Years 2017 and 2018

Budget Object Codes		Projected FY 2017*	Requested FY 2018	Change FY 2017-2018	
				\$	%
11	Personnel Compensation	\$5,570,996	\$6,314,960	\$743,964	13.35%
12	Personnel Benefits	1,795,805	2,007,191	211,386	11.77%
	Subtotal Personnel Costs	7,366,801	8,322,151	955,350	12.97%
21	Travel	448,800	448,800	-	0.00%
22	Transportation of Things	-	-	-	0.00%
23.2	Space Rental Payments	781,497	795,750	14,253	1.82%
23.3	Communications, Utilities and Misc.	211,776	172,600	(39,176)	(18.50%)
24	Printing and Reproduction	30,000	25,000	(5,000)	(16.67%)
25	Other Services	1,779,104	1,621,459	(157,645)	(8.86%)
26	Supplies and Materials	247,022	208,551	(38,471)	(15.57%)
31	Equipment	135,000	35,000	(100,000)	(74.07%)
	Total	\$11,000,000	\$11,629,311	\$629,311	5.72%
	FTEs	46	46	-	0.00%

* Public Law No: 115-31.

Budget Object Classification Code Detail

11.0 Personnel Compensation

Change FY 2017-FY 2018

<u>FY 2017</u>	<u>FY 2018</u>	<u>Amount</u>	<u>%</u>
\$5,570,996	\$6,314,960	\$743,964	13.35%

The budget request for FY 2018 includes \$6,314,960 to fund direct payroll costs for five board members and 41 staff members. This object class includes promotions and step increases to retain and advance entry and intermediate level employees and a 1.9% increase in the Cost of Living Allowance (COLA).

12.0 Personnel Benefits

Change FY 2017-FY 2018

<u>FY 2017</u>	<u>FY 2018</u>	<u>Amount</u>	<u>%</u>
\$1,795,805	\$2,007,191	\$211,386	11.77%

CSB personnel benefits include the government's contributions to the CSRS and FERS retirement programs; life and health insurance programs; the student loan repayment program; the Transit Subsidy Program; and the Thrift Savings Plan. The FY 2018 request reflects benefits for five board members and 41 staff members.

21.0 Travel

Change FY 2017-FY 2018

<u>FY 2017</u>	<u>FY 2018</u>	<u>Amount</u>	<u>%</u>
\$448,800	\$448,800	\$0	0.0%

The CSB does not anticipate changes in travel costs for FY 2018.

22.0 Transportation of Things

The CSB does not anticipate employee relocation shipment costs in FY 2018.

23.2 Space Rental Payments

Change FY 2017-FY 2018

<u>FY 2017</u>	<u>FY 2018</u>	<u>Amount</u>	<u>%</u>
\$781,497	\$795,750	\$14,253	1.82%

This request includes \$675,000 for office space rental for the headquarters office in Washington, D.C., and \$97,750 for the rental of office space for the Western Regional Office in Denver, Colorado. These projected rent costs are based on FY 2018 estimates provided by the General Services Administration (GSA) and the lessor of the headquarters office building in Washington, D.C. This budget object class includes the costs for meeting room space for investigation and outreach activities.

23.3 Communications, Utilities and Miscellaneous Charges

Change FY 2017-FY 2018

<u>FY 2017</u>	<u>FY 2018</u>	<u>Amount</u>	<u>%</u>
\$211,776	\$172,600	(\$39,176)	(18.50%)

Communication and postage costs are projected to be \$172,600 in FY 2018. These costs include \$68,300 for internet usage in the Washington, DC, and Denver, Colorado offices; \$49,000 for cell phones and wireless broadband usage; \$34,000 for telephone services in the Washington, DC and Denver, Colorado, offices; and \$12,000 for postage and express mail. Other costs are related to building security and the continuity of operations.

24.0 Printing and Reproduction

Change FY 2017-FY 2018

<u>FY 2017</u>	<u>FY 2018</u>	<u>Amount</u>	<u>%</u>
\$30,000	\$25,000	(\$5,000)	(16.67%)

The CSB anticipates a minor decrease in printing costs for FY 2018.

25.0 Other Services

Change FY 2017-FY 2018

<u>FY 2017</u>	<u>FY 2018</u>	<u>Amount</u>	<u>%</u>
\$1,779,104	\$1,621,459	(\$157,645)	(8.86%)

A total of \$1,621,459 is requested for services in FY 2018. Requirements in this BOC fall into two basic categories: interagency agreements for services provided by other Federal agencies and contractual services provided by non-Federal sources. Additional information on each category is provided in the following paragraphs.

Services Provided by Other Federal Agencies. A total of \$565,648 is requested for services provided by other Federal agencies. These services include \$155,750 for personnel and payroll services provided by the Interior Business Center (IBC) in the Department of the Interior; and \$338,045 for financial, travel, and procurement services provided by the Bureau of the Fiscal Service (BFS) in the Department of the Treasury. The remaining funds will be used for other Interagency Agreements with Federal Occupational Health for investigator physical examinations and respirator fit testing, incident notification provided services by the U.S. Coast Guard's National Response Center (NRC), HSPD-12 compliance, Employee Assistance Program (EAP) support and other government-provided services.

Other Contractual Services. The CSB procures a variety of services to support its mission, including expert consultants for investigations and testing (\$416,000), support for the public affairs, communications and safety video production function (\$300,000), information technology software maintenance (\$65,650), website hosting (\$19,771), court reporting and transcription services for witness interviews (\$25,000), and training (\$50,000). The CSB anticipates a net decrease in the cost of these services as agency personnel assume functions currently performed by a temporary services contractor and organizational consultant and training costs are reduced.

26.0 Supplies and Materials

Change FY 2017-FY 2018

<u>FY 2017</u>	<u>FY 2018</u>	<u>Amount</u>	<u>%</u>
\$247,022	\$208,551	(\$38,4713)	(15.57%)

The amount of \$208,551 is requested for supplies and materials in FY 2018, including books and reference materials (\$88,500), subscriptions (\$64,551), general office supplies (\$10,000), information technology supplies and software (\$28,000), and other supplies.

31.0 Equipment

Change FY 2017-FY 2018

<u>FY 2017</u>	<u>FY 2018</u>	<u>Amount</u>	<u>%</u>
\$135,000	\$35,000	(\$100,000)	(74.1%)

The CSB anticipates a net decrease in equipment costs for FY 2018, because the agency does not have any significant equipment replacements planned for the year.

V. Additional Tables

**CSB Appropriations by Fiscal Year
(Dollars in Millions)**

Salaries & 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	9.11	0.00	9.11
2008	9.26	0.00	9.26
2009	10.20	0.00	10.20
2010	11.15	0.00	11.15
2011	10.78	0.00	10.78
2012	11.13	0.00	11.13
2013	11.20	0.00	11.20
2014	11.00	0.00	11.00
2015	11.00	0.00	11.00
2016	11.00	0.00	11.00
2017 ^a	11.00	0.00	11.00
2018 ^b	11.63	0.00	11.63

^a Public Law No: 115-31

^b Requested

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 9/30/2014	On Board 9/30/2015	On Board 9/30/2016	Projected FY 2017	Requested FY 2018
GS-4	0	0	0	0	0
GS-5	0	0	0	0	0
GS-7	0	2	0	0	0
GS-8	0	0	0	0	0
GS-9	0	2	2	1	1
GS-11	0	0	1	3	3
GS-12	3	4	5	4	4
GS-13	12	8	5	6	6
GS-14	9	10	14	15	15
GS-15	9	12	10	9	9
Executive	2	4	4	5	5
SES	2	1	0	3	3
Totals	37	43	41	46	46

Recommended Appropriations Language

CHEMICAL SAFETY AND HAZARD INVESTIGATION BOARD *Federal Funds*

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, \$11,629,311. Provided, That notwithstanding any other provision of law, the individual appointed to the position of Inspector General of the Environmental Protection Agency (EPA) shall, by virtue of such appointment, also hold the position of Inspector General of the Board: Provided further, That notwithstanding any other provision of law, the Inspector General of the Board shall utilize personnel of the Office of Inspector General of EPA in performing the duties of the Inspector General of the Board, and shall not appoint any individuals to positions within the Board.