

**CHEMICAL SAFETY AND HAZARD INVESTIGATION BOARD**

**BUDGET JUSTIFICATION**

**FISCAL YEAR 1999**

**FEBRUARY 1998**

## OVERVIEW

The Chemical Safety and Hazard Investigation Board's (Board) FY99 budget request is derived from and supports the Board's organizational and operating strategy set forth in its formal business plan.

Receipt of the requested funds will permit continuation and completion of the work initiated in the first year of the Board's existence, consistent with the Board's carefully phased growth plan. The funds will enable the Board to hire and provide support (e.g., equipment, space) to the additional staff needed to increase operational capabilities and expand the investigative program, thereby permitting the Board to realize in FY00 its goal of full functionality.

In preparing the operating cost estimates included in the business plan, and shown without modification on the following pages, the Board used figures for individual items (e.g., cost per square foot of rental space) that it used in 1995 to prepare its first (FY96) budget request. These figures were used because Congress requested in August 1997 that the Board provide, that same month, a three-year estimate of projected expenses. As a result of this time constraint, it was not possible to conduct the extensive research needed to update the earlier estimates and adjust them for inflation or to reflect actual (and conceivably higher) 1997 costs. While the Board recognizes that its cost estimates likely are inaccurate and need to be updated, it has not had the time to do so and, therefore, has not changed the projected FY99 budget request shared with Congress in August.

However, even in view of the probable underestimation of costs, the Board believes it can operate in FY99 at the requested appropriation level because of its strategies for containing overhead costs.

To put planned FY99 operations into perspective, an in-progress summary of FY98 operations is provided. Additionally, the detailed rationale for each object category comprising the budget is shown, including for each object category both the expected results in FY99 and the basis on which the level of requested resources was developed.

<b>OBJECT CATEGORY</b>	<b>ALLOCATED FUNDING LEVEL</b>
Personnel Compensation	\$ 2,562,000
Personnel Benefits	\$ 414,000
Rental Payments to GSA	\$ 184,000
Rental Payments to Others	-----
Communications, Utilities, Miscellaneous	\$ 230,000
Supplies and Materials	\$ 35,000
Travel and Transportation (of people)	\$ 132,000
Transportation (of things)	\$ 12,000
Printing and Reproduction	\$ 173,000
Consulting Services	\$ 58,000
Other Services	\$ 2,940,000
Purchases from Other Agencies	-----
Equipment	\$ 230,000
Insurance Claims and Indemnification	\$ 30,000
	\$ 7,000,000
	(30 FTEs)

## REVIEW OF CSB'S FY98 OPERATIONS

### Available Resources

Appropriation: \$4 million

FTE Staffing Level: 20 (includes 5 Board members)

### Key Operating Assumptions

Universe of annual non-catastrophic accidents is 6500 (per EPA's ERNS database)

Universe of annual catastrophic accidents is 330 (per EPA's AHE database)

Annual number of major catastrophic accidents is 10 - 15, with average of 2 deaths per accident

Only major catastrophic accidents (i.e., ones involving immediate deaths) will be investigated

Accident investigation and report preparation together will cost \$200,000

Accident reports will be ready for Board review 60 days after date of accident

Accident reports will be issued within 6 months of date of accident

### Projected Accomplishments

#### Administrative outputs:

- multi-year operating plan;
- structured organizational components ready to be implemented;
- internal policies and procedures, appropriate interagency agreements, and requisite issuances in the Federal Register;
- orientation and technical training materials for both regular and adjunct Board personnel;
- formal outreach program to Board stakeholders.

#### Technical outputs:

- development of accident investigation procedures and reporting requirements;
- analysis of key agencies' regulations and programs pertaining to accident prevention and identification of areas justifying further examination;
- multi-year research plan;
- capability requirements for a "build or buy" chemical accident analysis laboratory;
- baseline analysis and formalized relations with sources of available accident information;
- design for and limited developmental work on a comprehensive chemical accident database;
- file of accident reports prepared by others for subsequent review and use in populating chemical accident database;
- one Congressionally-mandated report.

**Accident-related outputs:**

- 5 - 10 Board-prepared investigation reports on major catastrophic accidents;
- participation in limited number of investigations conducted by others;
- analysis and evaluation of limited number of reports resulting from investigations conducted by others;
- limited number of safety recommendations.

## SUMMARY OF CSB'S FY99 OPERATIONS

### Requested Resources

Appropriation: \$7 million

FTE Staffing Level: 30 (includes 5 Board members)

### Key Operating Assumptions

Universe of annual non-catastrophic accidents is 6500 (per EPA's ERNS database)

Universe of annual catastrophic accidents is 330 (per EPA's AHE database)

Annual number of major catastrophic accidents is 10 - 15, with average of 2 deaths per accident

All major catastrophic accidents (i.e., ones involving immediate deaths) will be investigated

Accident investigation and report preparation together will cost \$200,000

Accident reports will be ready for Board review 60 days after date of accident

Accident reports will be issued within 6 months of date of accident

### Projected Accomplishments

#### Administrative/Technical outputs:

- minimally staffed organizational components;
- 5 fully-operational investigative teams;
- functioning data collection operation;
- functioning public docket operation;
- functioning chemical accident analysis laboratory;
- one baseline oversight report focused on federal government's accident prevention programs;
- data-populated and tested beta version of comprehensive chemical accident database;
- one Congressionally-mandated report.

#### Accident-Related outputs:

- 13 - 19 Board-prepared investigation reports on major catastrophic accidents;
- participation in limited number of investigations conducted by others;
- analysis and recordation of data from 10% (33) of reports prepared by others on their investigations of non-major catastrophic accidents;
- analysis and recordation of data from 5% (325) of reports prepared by others on their investigations of non-catastrophic accidents;
- limited number of safety recommendations.

## SUPPORTING DETAILS (FY99 BUDGET)

**OBJECT CATEGORY:** Personnel Compensation

**FUNDING LEVEL:** \$ 2,562,000

**RATIONALE:**

1. Staffing level of 29 permanent FTEs (regular), plus 1 permanent
  2. Average annual salary of \$85,400
  3. Senior staff will constitute bulk of FTEs, impacting average annual salary level
  4. Full staffing (30 FTEs) achieved by end of 1st quarter of FY

### ACCOMPLISHMENTS:

#### Administrative/Technical outputs:

- minimally staffed organizational components;
- 5 fully-operational investigative teams;
- functioning data collection operation;
- functioning public docket operation;
- functioning chemical accident analysis laboratory;
- one baseline oversight report focused on federal government's accident prevention programs;
- data-populated and tested beta version of comprehensive chemical accident database;
- one Congressionally-mandated report.

#### Accident-Related outputs:

- 13 - 19 Board-prepared investigation reports on major catastrophic accidents;
- participation in limited number of investigations conducted by others;
- analysis and recordation of data from 10% (33) of reports prepared by others on their investigations of non-major catastrophic accidents;
- analysis and recordation of data from 5% (325) of reports prepared by others on their investigations of non-catastrophic accidents;
- limited number of safety recommendations.

### DISCUSSION:

Senior staff will both personally prepare products and serve as project managers for work performed under contract or with the assistance of public/private organizations

**OBJECT CATEGORY:** Personnel Benefits

**FUNDING LEVEL:** \$ 414,000

**RATIONALE:**

1. Calculated at 16% of salary for amount of time a person is employed in a full-time capacity during FY (average annual benefits for person employed for entire FY is \$12,000)

**ACCOMPLISHMENTS:** Not Applicable  
**DISCUSSION:** Not Applicable

**OBJECT CATEGORY:** Rental Payments to GSA

**FUNDING LEVEL:** \$ 184,000

**RATIONALE:**

1. Calculated at approximately 160 square feet per person at an annual charge of \$40 per square foot, or \$8,000 per person
2. All employees will be based in metropolitan Washington, D.C. or Baltimore, MD area and located in a modern, privately-owned building

**ACCOMPLISHMENTS:** Provides office, storage and meeting space

**DISCUSSION:** Not Applicable

**OBJECT CATEGORY:** Rental Payments to Others

**FUNDING LEVEL:** Included in amount shown under "Rental Payments to GSA"

**RATIONALE:**

1. May need to rent space to hold meetings if office space is inadequate, but all attempts will be made to locate and use meeting space available at no cost through other federal agencies

**ACCOMPLISHMENTS:** Not Applicable

**DISCUSSION:** Not Applicable

**OBJECT CATEGORY:** Communications, Utilities, Miscellaneous

**FUNDING LEVEL:** \$ 230,000

**RATIONALE:**

1. Per person telephone charges are calculated based on \$50 one-time charge for purchase of equipment, \$20 per month line charge, and 1 hour per day (260 workdays per year) commercial charges at \$.25 per minute (total per person is \$ 4,140)
2. 29 FTEs need telephones for the entire FY
3. Per person modem charges are calculated on same basis as are telephone charges, but usage is estimated to total only 30 minutes per day and cost of equipment is not included as it is part of the purchase cost of a computer and, hence, is included under object category "Equipment" (total per person is \$330)
4. Phone lines to be installed for facsimile machines and LAN
5. Pagers and voice mail system to be used

**ACCOMPLISHMENTS:** Not Applicable

**DISCUSSION:** Not Applicable

**OBJECT CATEGORY:** Supplies and Materials

**FUNDING LEVEL:** \$ 35,000

**RATIONALE:**

1. Average per person cost of \$500 per year for 29 FTEs
2. Supplies include Board forms, computer supplies and software
3. Data tapes needed to populate accident/research database will be acquired

**ACCOMPLISHMENTS:** Not Applicable

**DISCUSSION:** Not Applicable

**OBJECT CATEGORY:** Travel and Transportation (of people)

**FUNDING LEVEL:** \$ 132,000

- RATIONALE:**
1. Board investigators (4 FTEs) assigned to major investigations each will spend five weeks on travel
  2. Board members (5) each will travel 10 times a year
  3. Senior Board staff (6) each will travel 7 times a year
  4. Each trip will cost an average of \$1,200, with transportation totalling \$500 and subsistence and miscellaneous expenses totalling \$700
  5. Employee commuting subsidies will be provided
  6. Local travel within metropolitan Washington, D.C. area will occur
- ACCOMPLISHMENTS:** 5 - 10 major investigations will be conducted, hearings may be conducted, review of contractors' work will be performed, meetings with states and industry will be held and attended
- DISCUSSION:** Funds available and nature of accidents that occur will determine the number of investigations that actually can be performed.
- OBJECT CATEGORY:** Transportation (of things)
- FUNDING LEVEL:** \$ 12,000
- RATIONALE:**
1. Special equipment may be required at an accident investigation location
  2. Evidence from an accident may need to be sent elsewhere for analysis
- ACCOMPLISHMENTS:** Not Applicable
- DISCUSSION:** Not Applicable
- OBJECT CATEGORY:** Printing and Reproduction
- FUNDING LEVEL:** \$ 173,000
- RATIONALE:**
1. Most Board products to be disseminated electronically (on-line or on disk), minimizing use of paper
  2. Preparation and duplication of electronically-delivered products will need to occur
- ACCOMPLISHMENTS:** Board investigation reports, safety studies, research reports, general informational pamphlets, Federal Register documents
- DISCUSSION:** Not Applicable
- OBJECT CATEGORY:** Consulting Services
- FUNDING LEVEL:** \$ 58,000
- RATIONALE:**
1. Investigative expertise may be required in instances when Board staff are unable to provide capabilities called for in a particular accident situation; industry experts may be used in development/review of accident investigation procedures
- ACCOMPLISHMENTS:** Successfully completed investigations; comprehensive and appropriate investigative procedures
- DISCUSSION:** Given the limited number of Board investigators, it may be necessary to augment the FTE cadre if an accident investigation requires additional personnel resources; development of accident investigation procedures should involve consideration of existing successful



practices in the chemical and non-chemical arenas.

**OBJECT CATEGORY:** Other Services

**FUNDING LEVEL:** \$ 2,940,100

**RATIONALE:**

1. Assistance will be obtained, as necessary and appropriate, to help develop Board products (e.g., database structure; investigative manual; technical training; baseline research)
2. Board will need to use laboratory services provided by other entities, most likely government ones
3. Computers and office equipment will require maintenance contracts
4. Outsourcing for certain staff assistance, most notably that involving Administrative Law Judges, and administrative (e.g., personnel; financial) services, will be needed due to limited on-board staff available to perform these functions
5. Field operations (e.g., hearings and investigations) will require locally-acquired personnel services in lieu of the more expensive alternative of sending Board staff (e.g., clerical and courier assistance)
6. Field operations will require rental of office equipment (e.g., furniture; copiers) in instances when it is not possible to work out of existing, already-equipped facilities
7. At least one automobile for official use by Board members will be acquired

**ACCOMPLISHMENTS:** Laboratory analyses of evidence permitting completion of investigations, assurance of operational capability of equipment, conduct of hearings, availability of requisite administrative support, conduct of necessary research, effective outreach program

**DISCUSSION:** Not Applicable

**OBJECT CATEGORY:** Purchases from Other Federal Agencies

**FUNDING LEVEL:** Included in amount shown under "Other Services"

**RATIONALE:**

1. May need investigative and analytical (laboratory) assistance, assistance in creating and conducting Board teleconferences, information management services and reimbursable administrative services

**ACCOMPLISHMENTS:** Not Applicable

**DISCUSSION:** Not Applicable

**OBJECT CATEGORY:** Equipment

**FUNDING LEVEL:** \$ 230,000

**RATIONALE:**

1. \$8,000 per person for office furniture, computer and printer
2. Copying machines, scanners, large-capacity electronic digitizing and storage devices, local area network, and meeting and teleconferencing equipment will be acquired for Board use

**ACCOMPLISHMENTS:** Not Applicable

**DISCUSSION:** \$ 36,000 of total represents start-up expenses attributable to hiring of Board employees needing furniture and computers

**OBJECT CATEGORY:** Insurance Claims and Indemnification

**FUNDING LEVEL:** \$ 30,000

**RATIONALE:** 1. Board employees will be entering private property and also may  
injured while performing duties under dangerous conditions

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**ACCOMPLISHMENTS:** Not Applicable

**DISCUSSION:** Not Applicable