



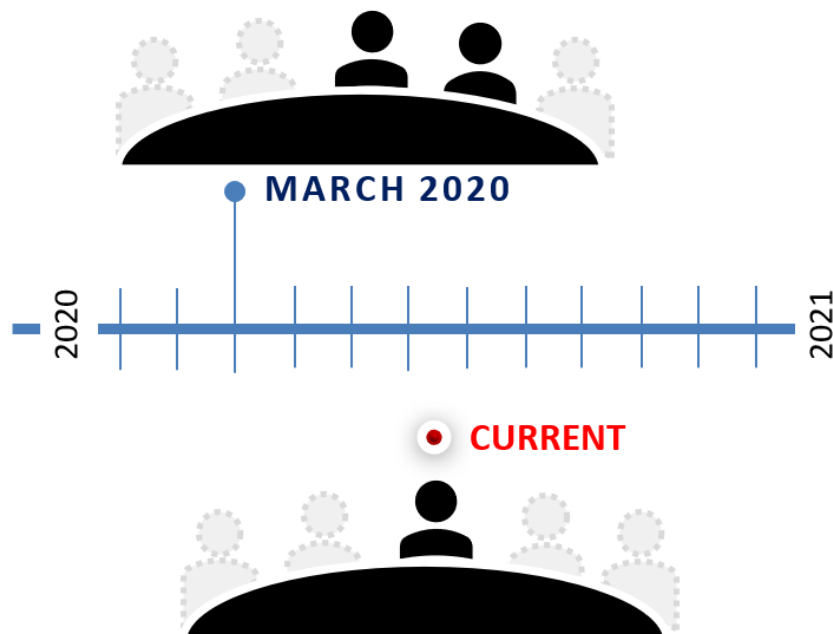
U.S. ENVIRONMENTAL PROTECTION AGENCY

OFFICE OF INSPECTOR GENERAL

FY 2020

U.S. Chemical Safety and Hazard Investigation Board

Management Challenges



Report Contributors:

Eric Lewis
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Abbreviations

C.F.R.	Code of Federal Regulations
CSB	U.S. Chemical Safety and Hazard Investigation Board
EPA	U.S. Environmental Protection Agency
FY	Fiscal Year
OIG	Office of Inspector General
U.S.C.	United States Code

Cover Image: The Clean Air Act provides for five board members for the CSB, but as of June 2020, the board consisted of only the chairperson. (EPA OIG image)

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At a Glance

What Are Management Challenges?

According to the GPRM Modernization Act of 2010 (GPRM stands for *Government Performance and Results Act*), major management challenges are programs or management functions within or across agencies that have greater vulnerability to waste, fraud, abuse, and mismanagement, and where a failure to perform well could seriously affect the ability of an agency or the federal government to achieve its mission or goals.

Per the Reports Consolidation Act of 2000, each fiscal year the Office of Inspector General is to identify major management challenges for the U.S. Chemical Safety and Hazard Investigation Board. In FY 2020, we examined whether the two management challenges we identified in FY 2019—as detailed in Report No. [19-N-0156](#), issued May 20, 2019—were addressed. We also sought to identify any new challenges.

This report addresses the three CSB goals:

- Prevent recurrence of significant chemical incidents.
- Advocate safety and achieve change.
- Create and maintain an engaged, high-performing workforce.

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[List of OIG reports.](#)

Fiscal Year 2020 U.S. Chemical Safety and Hazard Investigation Board Management Challenges

Based on our continuous audit, evaluation, and investigative work, we have determined that the two management challenges we identified in FY 2019 have not been addressed. We also identified a new challenge for FY 2020 related to the coronavirus pandemic—that is, the SARS-CoV-2 virus and resultant COVID-19 disease. This new challenge affects all government agencies.

Unaddressed management challenges will impede the ability of the CSB to function effectively.

Management Challenge (Continuing): Accomplishment of CSB Mission Is Impaired Until New Board Members Are Selected

The Clean Air Act Amendments of 1990 authorized the creation of the CSB and established a board of five members, including a chairperson, that is responsible for major budgeting decisions, strategic planning and direction, general Agency oversight, and approval of investigation reports and studies. In March 2020, the U.S. Senate confirmed a new CSB chairperson. Due to term expirations and resignations of the other board members, the chairperson was, as of June 2020, the only remaining board member.

Having only one member impairs the function of the CSB, as all functions rest with that one member. CSB Order 028, *Executive and Administrative Functions of the Board*, delineates executive and administrative functions of the board, including specific authorities of the chairperson and duties of the board as a whole. The Order does not explicitly address a situation when the only member of the board is the chairperson. Regardless, workload limitations arising from one board member attempting to perform the work of five affect the accomplishment of the board's technical responsibilities, including accident reconstruction, safety engineering, human factor identification, toxicology reviews, and air pollution regulation assessments.

Management Challenge (Continuing): CSB Has Not Developed Policy on Board Member Responsibilities

In FY 2018, we reported multiple instances when a board member acted inconsistently with established practices or inappropriately provided information to outside entities. The CSB previously agreed to develop new policy, but per the Agency's general counsel, the board decided that a Senate-confirmed chairperson should approve any changes to policy affecting the board.

Management Challenge (New): CSB Must Continue Operations During the Coronavirus Pandemic

The CSB must rely on its internal controls to continue operations to the extent practicable and to safely return employees to work at CSB facilities.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

THE INSPECTOR GENERAL

July 6, 2020

Katherine Lemos, Ph.D.
Chairperson
U.S. Chemical Safety and Hazard Investigation Board
1750 Pennsylvania Avenue NW, Suite 910
Washington, D.C. 20006

Dear Dr. Lemos:

Enclosed is the Office of Inspector General's fiscal year 2020 management challenges report. The Reports Consolidation Act of 2000 requires our Office to report what we consider to be the most serious management and performance challenges facing the U.S. Chemical Safety and Hazard Investigation Board. We used audit, evaluation, and additional analysis of CSB operations to arrive at the issues presented.

The two challenges that we identified in FY 2019 remain. The first challenge, *Accomplishment of CSB Mission Is Impaired Until New Board Members Are Selected*, has an elevated urgency due to the May 2020 resignation of the only remaining board member besides the chairperson. The second challenge, *CSB Has Not Developed Policy on Board Member Responsibilities*, is unaddressed because the board has been unwilling to complete the agreed-upon corrective actions without a chairperson confirmed by the U.S. Senate. For FY 2020, we also added a new challenge, *CSB Must Continue Operations During the Coronavirus Pandemic*, as the CSB must address the challenges posed by the SARS-CoV-2 virus and resultant COVID-19 disease.

You are not required to provide a written response to this final report. Should you choose to provide a response, we will post your response on the OIG's public website. Your response should be provided as an Adobe PDF file that complies with the accessibility requirements of Section 508 of the Rehabilitation Act of 1973, as amended. The response should not contain data that you do not want to be released to the public; if your response contains such data, you should identify the data for redaction or removal along with corresponding justification. We will post this report to our website at www.epa.gov/oig.

Sincerely,

A handwritten signature in blue ink that reads "Sean W O'Donnell".

Sean W. O'Donnell

Enclosure

cc: Thomas Goonan, General Counsel, CSB
Anna Brown, Director of Administration and Audit Liaison, CSB

Background

The U.S. Chemical Safety and Hazard Investigation Board was created under the Clean Air Act Amendments of 1990 and is the independent federal Agency charged with investigating chemical incidents and hazards.¹ The CSB examines all aspects of chemical incidents, including the cause (for example, equipment failure) and root cause (for example, why the equipment failed). According to the CSB's [website](#), the Agency's mission is to "drive chemical safety change through independent investigation to protect people and the environment."

The CSB began operations in fiscal year 1998 and is headquartered in Washington, D.C. There is also a CSB field office in Denver, Colorado, and employees work remotely from other locations. The Clean Air Act Amendments of 1990 provide for an Agency board that "shall consist of 5 members, including a Chairperson." The board members are appointed by the president and confirmed by the U.S. Senate. The board's chairperson serves as the chief executive officer and administrator.

The board is responsible for major budgeting decisions, strategic planning and direction, general Agency oversight, and approval of Agency investigation reports and studies. Board members may also participate in accident investigations. Individual board members oversee the investigation and report writing for each incident examined by the CSB. The board must approve all report findings, determinations of root cause, and safety recommendations. According to the CSB's [website](#), the board's recommendations serve as the Agency's principal tool for achieving positive change; however, compliance with CSB recommendations is voluntary.

The CSB's 2017–2021 Strategic Plan set three goals:

1. Prevent recurrence of significant chemical incidents through independent investigations.
2. Advocate safety and achieve change through recommendations, outreach, and education.
3. Create and maintain an engaged, high-performing workforce.

CSB FY 2019 ACTIVITY

The "CSB Performance and Accountability Reports" [webpage](#) contains CSB performance information. The CSB's "Completed Investigations" [webpage](#) contains information about completed CSB investigations. The CSB released the following three reports in FY 2019:

1. **Enterprise Pascagoula Gas Plant Explosion and Fire in Moss Point, Mississippi.** A major loss of containment resulted in the release of methane, ethane, propane, and several other hydrocarbons, which then ignited, initiating a series of fires and explosions. The

¹ 42 U.S.C. § 7412(r)(6).

probable cause was the failure of a brazed aluminum heat exchanger due to thermal fatigue. The site was shut down for almost six months, and Enterprise incurred \$10.4 million in cost for fire response activities and \$7.1 million in noncash losses. ([Report](#) issued February 2019.)



Enterprise Pascagoula Gas Plant.
(CSB photo)

2. **Pryor Trust Fatal Gas Well Blowout and Fire in Pittsburg County, Oklahoma.** The CSB found that a blowout rig fire occurred due to the failures of both the primary and secondary barriers. The fire killed five workers. ([Report](#) issued June 2019.)



Pryor Trust Gas Well. (CSB photo)

3. **DuPont La Porte Facility Toxic Chemical Release in La Porte, Texas.** The CSB found that approximately 24,000 pounds of highly toxic methyl mercaptan were released from an insecticide production unit. The CSB identified flawed engineering and a lack of adequate safeguards as causes for the release. The release killed three operators and a shift supervisor. ([Report](#) issued June 2019.)



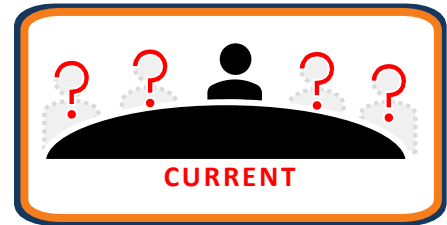
DuPont La Porte Facility. (CSB photo)

CHALLENGE: Accomplishment of CSB Mission Is Impaired Until New Board Members Are Selected

BACKGROUND

According to the Clean Air Act Amendments of 1990, the CSB governing body shall have the following composition and responsibilities:

- Five members, including a chairperson, appointed by the president and confirmed by the U.S. Senate.
- Investigate (or cause to be investigated), determine, and report to the public in writing the facts, conditions, circumstances, and cause of any accidental release resulting in a fatality, serious injury, or substantial property damage.



The chairperson and the other four board members govern the CSB. After a prior chairperson resigned in June 2018, the board members internally selected an interim executive authority, as the president did not select or install an interim chairperson. This interim executive authority served until the Senate confirmed a chairperson on March 23, 2020.

By April 2020, due to board member term expirations, the governing body had three vacancies and consisted only of the new chairperson and one other board member. According to the CSB's director of Administration, the other board member resigned in May 2020, leaving the CSB governing body with four vacancies. Until new board members are appointed and confirmed, the board will consist of only the chairperson.

CHALLENGE

The governing body must obtain a quorum to meet its mission and goals because CSB staff do not have the initial authority to carry out board functions, including budgeting, planning, oversight, and approval of investigations. CSB regulatory language at 40 C.F.R. § 1600.5(a) provides the process to establish a quorum; however, the regulatory language lacks clarity. For example, it leaves open whether a single board member may constitute a quorum.²

² If a quorum of one is permissible, then under the current circumstances the chairperson would necessarily be exercising both the executive and administrative duties reserved for the chairperson and the authorities of the board. However, the U.S. Government Accountability Office's *Standards for Internal Control in the Federal Government*, GAO-14-704G, issued September 10, 2014, provides for the segregation of duties. It states that management divides or segregates key duties and responsibilities among different people to reduce the risk of error, misuse, or fraud. This segregation includes the authorization, processing, recording, and review of transactions, as well as the handling of any related assets, so that no one individual controls all key aspects of a transaction.

CSB Order 028, *Executive and Administrative Functions of the Board*, establishes functions for the CSB chairperson separate from the other board members. The chairperson exercises the executive and administrative functions of the board. The board as a whole, however, must approve investigation reports; safety studies; regulations, rules, and orders; budgets and budget submissions; operating budgets; contracts and expenditures over \$50,000; strategic plans; and statements to Congress and the president.

Having a quorum of one, even if permissible, impairs the CSB mission for reasons of both workload management and separation of duties. The Clean Air Act provides for five technically qualified board members who perform specified duties.³ Specifically, board members serve as the principal spokespersons at accident sites and conduct community meetings, hearings, and boards of inquiry during accident investigations. Following the board's approval of accident investigation reports, board members play a significant role in advocating the adoption of the Agency's recommendations by industry, labor, government, and others. Board members regularly participate in conferences, in safety forums, and on committees, and they meet with leaders of other federal agencies. A single board member is unlikely to have all the technical qualifications or time to perform the required board duties, and CSB staff cannot assume board-specific duties. Therefore, even if a single member is permitted to form a quorum, the CSB's work will be impaired.

Based on the time taken to approve previous nominees, it is unlikely that even one new member, let alone four, will be selected, nominated, and confirmed in the near term. For example, it took nine months from the time the president nominated the new chairperson in July 2019 until she was confirmed by the Senate in March 2020. This span does not include the time taken by the administration to identify a nominee. The average time taken to confirm prior board members from the time they were nominated was 10.5 months, not including the time needed to identify qualified individuals for nomination.

Congress has documented its support for the CSB mission to the administration. In an August 2018 letter to the White House chief of staff, the chairs of the House Committee on Oversight and Government Reform and the Subcommittee on the Interior acknowledged the management challenges facing the CSB and urged the administration to select new board members to improve CSB management. In an October 2018 letter to the White House chief of staff, the chairs of the Senate Committee on Environment and Public Works and of the Subcommittee on Clean Air and Nuclear Safety also acknowledged the management challenges facing the CSB and urged the administration to fill the governing body vacancies. The Senate Committee on Environment and Public Works letter also noted that:

³The Clean Air Act requires that board members be appointed based on technical qualification; professional standing; and demonstrated knowledge in the fields of accident reconstruction, safety engineering, human factors, toxicology, or air pollution regulations.

- The CSB has investigated chemical accidents at industrial facilities since 1998.
- The CSB has issued corrective measures to the facilities and made recommendations to the U.S. Environmental Protection Agency, the U.S. Department of Labor’s Occupational Safety and Health Administration, and other agencies.
- Congress has continued to fund the Agency with broad bipartisan support.
- Until Congress decides to eliminate the Agency, it is imperative that the president and not CSB members select the CSB leader.
- The president should nominate someone from outside the Agency to be the chairperson.

The nomination and March 2020 confirmation of the new chairperson addressed the last two issues.

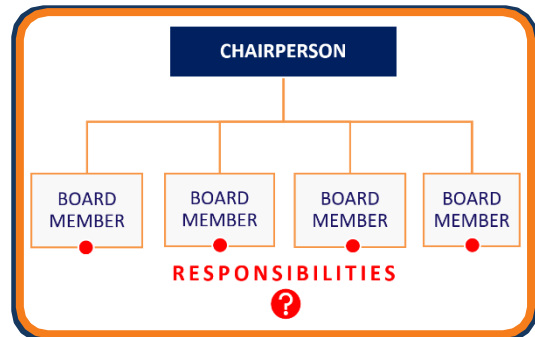
WHAT REMAINS TO BE DONE

The necessary actions for resolving this management challenge lie outside of the CSB’s control. For the CSB to complete its mission and goals under its current authority, the president should nominate and the Senate should confirm new members as soon as possible.

CHALLENGE: CSB Has Not Developed Policy on Board Member Responsibilities

BACKGROUND

The Clean Air Act requires that board members be appointed based on technical qualification; professional standing; and demonstrated knowledge in the fields of accident reconstruction, safety engineering, human factors, toxicology, or air pollution regulations. The statute permits removal of a board member for inefficiency, neglect of duty, or malfeasance in office. Unless removed, board members serve fixed terms of five years.



CSB Order 028, *Executive and Administrative Functions of the Board*, establishes the chairperson’s executive and administrative functions, including the authority to preside over all personnel matters and to supervise and authorize CSB official communications, except those that require full board approval.⁴

CHALLENGE

As identified in the Office of Inspector General’s *FY 2018 U.S. Chemical Safety and Hazard Investigation Board Management Challenges* report, Report No. [18-N-0208](#), issued June 4, 2018, board members and managers said that there were multiple instances in FY 2018 when a board member acted inconsistently with CSB Order 028. For example, a board member publicized budget information before it was presented to Congress, attempted to share information with one stakeholder before sharing it with all stakeholders, and made comments on a proposed rule before a CSB position was developed.

CSB Order 028 states that the chairperson possesses the following authority over official communications:

1. “Authority to supervise and authorize the response to all inquiries from Congress, the media, and the public concerning the Board and/or the CSB, except as specifically excluded by this Order.”
2. “Authority to supervise the preparation of all official statements and other communications concerning, or on behalf of, the Board and/or the CSB, except as specifically excluded by this Order.”

⁴ For access to CSB orders, see the *Records Details* [website](#).

3. “Authority to make and/or authorize all statements, written communications, and pronouncements on behalf of the Board and/or the CSB, except as specifically excluded by this Order.”

Communication exclusions give the board as a whole, not a single board member, authority to approve and transmit the budget and to approve but not transmit statements to Congress and the president. Therefore, certain board-level communications, at minimum, should have full board approval.

The CSB told the OIG that there had been no new incidents of improper communications from board members. Several people we interviewed—including board members, the former acting general counsel, and the senior advisor—attributed this development to better communication among staff and the board members.

The lack of additional incidents in FYs 2019 and 2020 is a positive sign for the board; however, policy is still needed to define the roles of the board members. The CSB’s authorizing legislation does not create a supervisory role for the chairperson with respect to the other board members. Without the explicit authority for the chairperson to hold board members accountable, an environment exists that enables behaviors that impede the CSB’s mission and lowers morale among CSB career staff.

Although this management challenge was originally identified in FY 2018, new policy had not been developed as of June 2020. Per the CSB’s general counsel, the board decided that a Senate-confirmed chairperson should approve any changes to policy affecting the board.

WHAT REMAINS TO BE DONE

To follow up on this management challenge, the board agreed to take the following actions:

1. Finalize board member roles and responsibilities in an official policy, including internal enforcement guidelines for situations in which board member behavior deviates from official policy.
2. Improve onboarding materials for new members to include clear policy on expectations, roles, and responsibilities.

These actions should be addressed by the chairperson and the governing body as a whole.

CHALLENGE: CSB Must Continue Operations During the Coronavirus Pandemic

BACKGROUND

During the coronavirus pandemic (that is, the SARS-CoV-2 virus and resultant COVID-19 disease), the CSB must continue to conduct root cause investigations of chemical accidents at fixed industrial facilities. The CSB also needs to modify its practices to accommodate a scenario in which social distancing and additional personal protective equipment are advised. Traveling and working with others are key components of a CSB response. For example, after a CSB team reaches a chemical incident site, investigators conduct detailed interviews of witnesses, such as plant employees, managers, and neighbors. Chemical samples and equipment obtained from accident sites are sent to independent laboratories for testing. CSB investigators also examine company safety records, inventories, and operating procedures to understand the circumstances of an accident. In addition, the Agency is authorized to conduct investigations of general chemical accident hazards, regardless of whether an accident has occurred.

CHALLENGE

Risks to CSB Mission Achievement: Safe and Successful Program Operations

Maintaining safe and effective operations during the coronavirus pandemic presents a key operational challenge for the CSB. Although the CSB has not suspended deployments to chemical incidents as a result of the coronavirus pandemic, it is planning to limit future deployments to high-consequence incidents only and to locations that can be reached through local travel—for example, by personal vehicle. Since March 13, 2020, no incidents have warranted deployment.

In the event of a high-consequence incident, the CSB will need to safely deploy staff with proper training and to identify adequately staffed independent laboratories that can perform required tests. The CSB also needs to develop mitigating measures and methods to handle less-than-high-consequence incidents.

Risks to CSB Operations: Maintaining a Safe and Productive Workforce

In the midst of possible deployment limitations, the CSB also faces an investigative staffing shortage. The CSB chairperson announced an effort to hire additional investigators to assist with ongoing investigations. As the coronavirus pandemic persists, the CSB faces the challenge of eventually returning its workforce to federal office spaces. This goal requires successful implementation of cleaning, social distancing, and continued protection protocols. As of June 2020, the CSB did not yet have a plan to return employees to federal office space.