



U.S. Chemical Safety and Hazard Investigation Board

OFFICE OF GENERAL COUNSEL

Memorandum

To: Board Members

From: Steven Messer
Acting General Counsel

Steven
Messer

Digitally signed by Steven
Messer
Date: 2025.06.20
12:39:39 -04'00'

Cc: Charles Barbee
Adam Henson
Leadership Team

Subject: Board Action Report – Notation Item 2025-59 | Recommendation to the Department of the Interior - Bureau of Safety and Environmental Enforcement (DOI-BSEE) (2010-10-I-OS-R11) from the Macondo Blowout and Explosion investigation (2010-10-I-OS)

Date: June 20, 2025

On June 18, 2025, the Board approved Notation Item 2025-59, thereby designating Recommendation 2010-10-I-OS-R11 to the Department of the Interior - Bureau of Safety and Environmental Enforcement (DOI-BSEE) from the Macondo Blowout and Explosion investigation (2010-10-I-OS) with the status of Closed – Acceptable Alternative Action.

Voting Summary – Notation Item 2025-59

Disposition: APPROVED

Disposition date: June 18, 2025

	Approve	Disapprove	Calendar	Not Participating	Date
S. Johnson	X				6/18/2025
S. Owens	X				6/18/2025
C. Sandoval	X				6/18/2025



U. S. Chemical Safety and Hazard Investigation Board

RECOMMENDATION STATUS CHANGE

SUMMARY

Report:	Macondo Blowout and Explosion
Recommendation Number:	2010-10-I-OS-R11
Date Issued:	April 17, 2016
Recipient:	Department of the Interior - Bureau of Safety and Environmental Enforcement
New Status:	Closed – Acceptable Alternative Action
Date of Status Change:	June 18, 2025

Recommendation Text:

Revise and augment the offshore safety regulations, including the SEMS Rule (C.F.R. 250 subpart S), and issue guidance as it relates to those revisions/augmentations, to:

- a. *Establish clear and consistent safety and environmental management responsibilities to prevent major accidents for the companies having primary control over the hazardous activities being undertaken (e.g., the owner/drilling contractor for a non-production installation and the leaseholder/operator for the production installation);*
- b. *Require all responsible parties as defined in R11(a) to develop documentation for each hazardous operation/facility it maintains primary control over, where the documentation demonstrates the party's systematic analysis that risks posed by all identifiable major accident hazards are reduced to As Low As Reasonably Practicable (ALARP) or similar risk-reduction target. The documentation shall include:*
 1. *Identification of major hazards and the barriers and safety management systems controls (including augmented SEMS elements) that will be used to reduce risk to ALARP or similar risk reduction target;*
 2. *Use of the hierarchy of controls to the greatest extent feasible in establishing safety barriers and controls;*
 3. *Identification of safety critical elements and tasks to establish and maintain safety barriers and controls, in fulfillment of R1 (See Volume 2);*
 4. *Demonstrate use of established qualitative, quantitative and semi-quantitative methods in determining (1) the barriers and safety management systems necessary to achieve ALARP risk reduction levels and (2) the performance requirements of those barriers and controls (e.g., reliability, functionality, and availability) to ensure their effectiveness;*
 5. *Identification of all US and international standards that have been applied, or will be applied, in relation to the facility, hazardous operation, or equipment used on/in connection with the operation for which required documentation is submitted. Should the responsible party wish to use standards other than well-recognized US or international consensus safety standards developed by a representative committee of diverse stakeholders, a detailed technical justification that those standards achieve risk-reduction to ALARP must accompany submitted documentation. The regulator may challenge or reject the technical justification. Remove from the US offshore safety regulatory scheme the provisions that allow companies to substitute requirements to use*

the best available and safest technology with a showing of compliance with BSEE regulations.

- c. *Require responsible parties as defined by R11(a) to fully implement all aspects of the documentation stipulated in R11(b) and establish a documented process to verify that all methods to manage, reduce, and control those hazards are effectively maintained throughout the lifecycle of the operation/facility.*

Board Status Change Decision:

A. Rationale for Recommendation

On April 20, 2010, a multiple-fatality incident occurred at the Macondo oil well approximately 50 miles off the coast of Louisiana in the Gulf of Mexico during temporary well-abandonment activities on the Deepwater Horizon (DWH) drilling rig. Control of the well was lost, resulting in a blowout which is the uncontrolled release of oil and gas (hydrocarbons) from a well. On the rig, the hydrocarbons found an ignition source. The resulting explosions and fire led to the deaths of 11 individuals; serious physical injuries to 17 others; the evacuation of 115 individuals from the rig; the sinking of the Deepwater Horizon; and massive marine and coastal damage from approximately 4 million barrels of released hydrocarbons.

The U.S. Chemical Safety and Hazard Investigation Board (CSB) produced a four-volume investigation report and issued 16 recommendations; 2 of those recommendations were issued to the Department of the Interior's (DOI) Bureau of Safety and Environmental Enforcement (DOI-BSEE). The other 9 recommendations intended for the offshore industry regulator, BSEE, were issued to DOI who, in turn, delegated responsibility to address the recommendations to BSEE, now referred to as DOI-BSEE in this status change summary. As a part of the investigation, the CSB looked at the regulatory environment and the role that DOI-BSEE plays in it. This status change summary is specific to CSB Recommendation No. 2010-10-I-OS-R11 (R11) from volume four of the investigation report.

B. Response to the Recommendation

DOI ensured responsiveness specific to the Macondo recommendations. In addition to correspondence, the CSB and DOI-BSEE have had several electronic and in-person meetings to discuss all of the Macondo recommendations including R11. DOI-BSEE has implemented several rulemakings and risk identifying projects since the Macondo incident; all with the goal of increasing safety and preventing environmental damage in the offshore oil and gas industry.

C. Board Analysis and Decision

In discussions between the CSB and DOI-BSEE it could not be substantiated that the regulatory changes proposed by the recommendation to require 'safety case' regime methodologies would result in a higher level of overall safety or that Safety and Environmental Management System (SEMS) (a post-Macondo regulatory requirement), if properly implemented, would not have prevented the Macondo incident.

However, DOI-BSEE has done a tremendous amount of work toward addressing the intent of R11. DOI-BSEE implemented several initiatives following the Macondo incident, several of which address a majority of the objectives envisioned by the Board and provide an equivalent level of safety. These include rulemakings, incorporating by reference many standards and guidance documents that establish responsible parties as well as documentation and recordkeeping requirements intended to prevent major accidents from occurring. The Center for Offshore Safety, (COS)¹, one of DOI-BSEE's primary stakeholders, has also taken several actions to implement parts of this recommendation on behalf of DOI-BSEE that augment and provide additional guidance regarding their SEMS requirements.

The five DOI-BSEE significant rulemakings are: the initial BSEE regulations which implemented a mandatory SEMS program; the 'increased safety measure' rule that specifically address subsea and surface blowout preventers, well casing and cementing, secondary intervention, unplanned disconnects, recordkeeping, and well plugging; the SEMS II rule which added stop work authority and ultimate work authority; the 2019 WCR which significantly revised safety equipment requirements and included 'real time monitoring'; and the revised 2019 WCR which further strengthened BOP requirements. All of the rulemakings included established responsible parties and had significant documentation and recordkeeping requirements that DOI-BSEE demonstrated addressed a majority of the objectives envisioned by the Board for R11 and provide an equivalent level of safety.

Upon comprehensive review, the Board concurs that DOI-BSEE, as well as COS, developed and implemented acceptable alternatives to the original recommendation language that meet the objectives or a majority of the objectives envisioned by the Board. As such, the Board voted to change **CSB Recommendation No. 2010-10-I-OS-R1** to: **"Closed – Acceptable Alternative Action."**

¹ COS fact sheet: https://www.centerforoffshoresafety.org/-/media/COS/COSReboot/COS_Fact%20sheet.pdf