



# U. S. Chemical Safety and Hazard Investigation Board

## RECOMMENDATION STATUS CHANGE

### SUMMARY

<b>Report:</b>	Macondo Blowout and Explosion
<b>Recommendation Number:</b>	2010-10-I-OS-R8
<b>Date Issued:</b>	April 20, 2016
<b>Recipient:</b>	Department of the Interior - Bureau of Safety and Environmental Enforcement
<b>New Status:</b>	Closed—Acceptable Action
<b>Date of Status Change:</b>	March 14, 2024

#### Recommendation Text:

*Expand upon the principles of the BSEE Safety Culture policy and establish a process safety culture improvement program for responsible parties as defined in R11(a) that periodically administers process safety culture assessments and implements identified major accident prevention improvements. The process safety culture improvement program shall include a focus on items that measure, at a minimum, willingness to report incidents and near-misses, effectiveness of workforce participation efforts, organizational drift from safety policies and procedures, and management involvement and commitment to process safety.*

#### 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<sup>1</sup>; 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; 11 of those recommendations were issued to the Department of the Interior's Bureau of Safety and Environmental Enforcement (DOI-BSEE), the offshore industry regulator. 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

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<sup>1</sup> The injury numbers presented here match those reported to the US Coast Guard as required by 33 C.F.R. § 146.30 on form CG-2692 Report of Marine Accident, Injury or Death. The 17 physical injuries represented here reflect the individuals that received immediate hospitalization as a result of the incident.

The actual number of injured from the Macondo incident is somewhat ambiguous, as a number of additional individuals sought medical treatments in the weeks following the blowout. In December 2014, Transocean noted 63 bodily injury claims pending in the state and federal courts in Louisiana and Texas.

specific to CSB Recommendation No. 2010-10-I-OS-R8 (R8) from volume three of the investigation report.

#### B. Response to the Recommendation

DOI's response to this recommendation was provided by DOI-BSEE. During 2020, DOI-BSEE provided a response with a detailed description of their actions to implement R8. DOI-BSEE stated that they worked with Center for Offshore Safety (COS) to develop the SEMS Maturity Index self-measurement tool (See *COS-3-03 Guidelines for SEMS Maturity Self-Assessment*<sup>2</sup>). Additionally, DOI-BSEE developed and implemented a Bureau Manual Chapter<sup>3</sup> that describes the DOI-BSEE policy and approach to SEMS oversight and enforcement which directs DOI-BSEE inspectors to make culture observations, such as awareness of hazards, communication flow, willingness to report near-misses, and levels of management involvement. DOI-BSEE updated their eInspection Form to include safety culture questions. Upon review of DOI-BSEE's responses and supporting documentation, it was determined that the recommendations requirements had been met.

#### C. Board Analysis and Decision

Based upon the information above, the Board voted to change the status of CSB Recommendation No. 2010-10-I-OS-R8 to "Closed - Acceptable Action."

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<sup>2</sup> Available at <https://www.centerforoffshoresafety.org/-/media/COS/COSReboot/SEMS%20Good%20Practices/COS-3-03%20Guidelines%20for%20SEMS%20Maturity%20Self-Assessments%20First%20Edition.pdf> (Accessed February 26, 2024)

<sup>3</sup> Available at <https://www.bsee.gov/sites/bsee.gov/files/645-mc-sems-manual-chapter-signed-2-26-19.pdf> (Accessed February 26, 2024)