

U. S. Chemical Safety and Hazard Investigation Board RECOMMENDATIONS STATUS CHANGE SUMMARY

Report:	Macondo Blowout and Explosion
Recommendation Number:	2010-10-I-OS-R9
Date Issued:	April 20, 2016
Recipient:	Sustainability Accounting Standards Board (SASB)
New Status:	Closed – Acceptable Alternative Action
Date of Status Change:	April 15, 2019

Recommendation Text:

Update, strengthen, and finalize the SASB's provisional Oil & Gas Exploration & Production Sustainability Accounting Standard by enhancing standard NR0101-18. Expand recommended coverage of "Process Safety Event rates for Loss of Primary Containment of greater consequences" in accordance with the findings of this report. Specifically, this expanded coverage shall:

- a) Recommend the disclosure of additional leading and lagging indicators and emphasize the greater preventive value of disclosure of a company's use of leading indicators to actively monitor the health and performance of major accident safety barriers and the management systems for ensuring their effectiveness. Specifically add:
 - 1. Indicators addressing the health of safety barriers to be communicated to the workforce, and to shareholders in required SEC disclosures, and also to be made readily available to the regulator.
 - 2. Guidance emphasizing and promoting the concept that personal safety metrics such as those captured in NR0101-17 (total recordable injury rate, fatality rate, near-miss frequency rate) are important but separate from leading and lagging process safety performance indicators, which better correlate to major accident prevention.
- b) Accomplish this communication within NR0101-18.
- c) Supplement this effort within the SASB's Oil & Gas Exploration & Production Research Briefs, based on the findings of this report as well other current safety scholarship that demonstrates the lack of correlation between personal safety efforts and process safety and major accident prevention initiatives.

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; the uncontrolled release of oil and gas (hydrocarbons) from the 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 others¹, 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.

As a part of its investigation, the U.S. Chemical Safety and Hazard Investigation Board (CSB) analyzed the current regulatory oversight of U.S. offshore oil and gas operations. The CSB determined that few specific data points relevant to a company's health, safety, and environmental operations are specifically required for disclosure to shareholders of companies trading in the U.S. under regulations promulgated by the Securities and Exchange Commission (SEC) pursuant to the Securities and Exchange Act of 1933 or 1934, Sarbanes-Oxley, Dodd-Frank, or any other existing financial law or regulation. As the Sustainability Accounting Standards Board (SASB)² has created health, safety, and emergency management reporting standards for both onshore and offshore operations, the Board voted to issue a recommendation to the SASB.

B. Response to the Recommendation

In June of 2016, SASB began the process of modifying its_Oil & Gas Exploration & Production Sustainability Accounting Standard. SASB published the final standard on their website on November 8, 2018, along with an accompanying "Basis for Conclusions" document that outlines the new standard's rationale, supporting analysis, market input and benefits.

C. Board Analysis and Decision

While the SASB's new standard for the Oil & Gas – Exploration & Production Sector does not add additional leading and lagging indicators to actively monitor major accident safety barriers and the management systems for ensuring their effectiveness, it does require reporting a description of process safety related management systems, including safety barriers, used to identify and mitigate catastrophic and tail-end risks in periodic mandatory filings with the SEC, such as the Form 10-Q, Form S-1, and Form 8-K. The new SASB standard also emphasizes and promotes the concept that personal safety metrics are important but separate from process safety performance indicators by requiring them to be reported as separate metrics.

Based on the above analysis, the Board voted to change the status of CSB Recommendation No. 2010-10-I-OS-R9 to: "Closed – Acceptable Alternative Action."

¹ 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. [*Form 10-K Annual Report*, 2014, pp 100, http://phx.corporateir.net/External.File?item=UGFyZW50SUQ9NTcxMDc3fENoaWxkSUQ9MjcyMzk1fFR5cGU9MQ==&t=1">http://phx.corporateir.net/External.File?item=UGFyZW50SUQ9NTcxMDc3fENoaWxkSUQ9MjcyMzk1fFR5cGU9MQ==&t=1">http://phx.corporateir.net/External.File?item=UGFyZW50SUQ9NTcxMDc3fENoaWxkSUQ9MjcyMzk1fFR5cGU9MQ==&t=1">http://phx.corporateir.net/External.File?item=UGFyZW50SUQ9NTcxMDc3fENoaWxkSUQ9MjcyMzk1fFR5cGU9MQ==&t=1">http://phx.corporateir.net/External.File?item=UGFyZW50SUQ9NTcxMDc3fENoaWxkSUQ9MjcyMzk1fFR5cGU9MQ==&t=1">http://phx.corporateir.net/External.File?item=UGFyZW50SUQ9NTcxMDc3fENoaWxkSUQ9MjcyMzk1fFR5cGU9MQ==&t=1">http://phx.corporateir.net/External.File?item=UGFyZW50SUQ9NTcxMDc3fENoaWxkSUQ9MjcyMzk1fFR5cGU9MQ==&t=1">http://phx.corporateir.net/External.File?item=UGFyZW50SUQ9NTcxMDc3fENoaWxkSUQ9MjcyMzk1fFR5cGU9MQ==&t=1">http://phx.corporateir.net/External.File?item=UGFyZW50SUQ9NTcxMDc3fENoaWxkSUQ9MjcyMzk1fFR5cGU9MQ==&t=1">http://phx.corporateir.net/External.File?item=UGFyZW50SUQ9NTcxMDc3fENoaWxkSUQ9MjcyMzk1fFR5cGU9Mgc3fENoaWxkSUQ9MjcyMzk1fFR5cGU9Mgc3fENoaWxkSUQ9MjcyMzk1fFR5cGU9Mgc3fENoaWxkSUQ9Mgc3fENoaWxkSUQ9Mgc3fENoaWxkSUQ9Mgc3fENoaWxkSUQ9Mgc3fENoaWxkSUQ9Mgc3fENoaWxkSUQ9Mgc3fENoaWxkSUQ9Mgc3fENoaWxkSUQ9Mgc3fENoaWxkSUQ9Mgc3fENoaWxkSUQ9Mgc3fENoaWxkSUQ9Mgc3fENo

² SASB is an independent 501(c)(3) organization that issues sustainability accounting standards that guide public companies in the disclosure of material sustainability information in statutory filings.