SAFETY ALERT

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BSEE Safety Alert No. 441
USCG Safety Alert No. 05-22

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BSEE & USCG Identify Delayed T-Time Execution, Poor Operational Decisions, and Equipment Breakdowns as Contributors to a Drillship’s Unsuccessful Attempt to Avoid Hurricane Ida

This Joint Safety Alert addresses an extreme weather event involving a Mobile Offshore Drilling Unit (MODU) conducting well operations in the Gulf of Mexico. The MODU, with 115 personnel onboard, lost 11 marine riser joints and a lower marine riser package (LMRP) and polluted the Gulf of Mexico with 88 barrels of miscellaneous fluids in its failed attempt to evacuate the area and evade Hurricane Ida.

The Bureau of Safety and Environmental Enforcement (BSEE) Gulf of Mexico Region and the United States Coast Guard 8th District Outer Continental Shelf Officer in Charge, Marine Inspection (D8 OCS OCMI) initiated separate investigations into this event.

The BSEE investigation concluded that the operator and contractor representatives failed to promptly start the Temporary Abandonment (TA) procedures. The T-Time[1] calculations were in the red level when the operator and contractor made a “joint decision” to suspend well operations. For several hours the TA was delayed as the operator and contractor jointly decided to conduct a crew change during an operation and reduced staffing and time constraints. Over-torqued bolts and equipment breakdowns prevented the drill crew from retrieving the marine riser and LMRP, causing further delays. In his duty as Ultimate Work Authority, the MODU’s Captain

[1] T-time is the time needed to secure well safely, pull riser, prepare the ship for transit, and evacuate/evade the weather event.
stopped work so the crew could make storm preparations, such as placing covers on riser hatches. The captain and marine crew maneuvered the MODU with 12 riser joints and LMRP still hanging under the moonpool at speeds between 1 and 3.5 knots. Still, they could not evade Category 2+ hurricane-force wind and high/rough seas. The riser subsequently broke just below the rotary sending 11 riser joints and LMRP to the seafloor.

The Coast Guard and BSEE are issuing this Safety Alert jointly because they share jurisdiction on the Outer Continental Shelf and wish to highlight the importance of risk-based operational planning and preparation when addressing extreme weather events.

Therefore, the USCG and BSEE strongly recommend that operators and contractors consider:

- Evaluating all considerations and associated risks and not set well operational T-Times under “optimal” conditions. These should be documented and discussed with the operations team.

- Determining the “decision time” to safely secure should start with the potential of an extreme weather event. The decision to continue well operations should not depend on a forecast track to the asset location. Don’t wait on a definitive weather forecast to react.

- Documenting contingencies for when MODUs cannot evade/evacuate extreme weather conditions. Ensure contingencies are documented in Hurricane Plans or Extreme Weather Plans. Identify search and rescue assets available to conduct a mass evacuation of personnel.

- Reviewing all approved Bridging Documents and Extreme Weather Plans before hurricane season to verify which plan takes precedence and reflects actual company operations and practices. Also, discuss documents with involved personnel, and identify and correct any training gaps.

- Reporting any challenges during attempts to evade and not follow an Extreme Weather Plan to evacuate non-essential personnel to the United States Coast Guard 8th District Command Center at D8CCwatch@uscg.mil and OCScorrespondence@uscg.mil. Or call 1-855-485-3727 (1-855-GULFSAR) per Marine Safety Information Bulletin (MSIB) 21-02. The MSIB is updated annually at the beginning of hurricane season. Industry should review the updated MSIB each year for current guidance.

- Identifying non-essential personnel and communicating that the intent is not to evacuate during extreme weather conditions.

- Suspending all well operations and crew changes safely when Hurricane or Extreme Weather Plans have been initiated.
• Contacting BSEE as instructed in **NTL 2021-G01 Incident, Oil Spill, and Permit Request Notification Instructions**. (BSEE does not consider calls to personnel outside of the directions of this guidance document as notification.)

• Meeting with peer operators and contractors and developing best practices for MODUs to safely suspend well operations with extreme weather conditions, including consistent procedures to evacuate/evade. Share procedures with all personnel to promote conversations around this matter.

• Documenting all Stop Work Authority actions on Well Activity Reports Significant Events submitted in eWell per 30 Code of Federal Regulations (CFR) 250.743.

• Reviewing **BSEE Safety Alert #415**, “Inadequate Preparations in Advance of Inclement Weather Results in Excessive Rig Damage and Risk to Personnel.”

• Reviewing **MSIB 21-02**, “Hurricane Season and Reporting Requirements,” and **USCG Safety Alert 07-21**, titled “Unexpected Heavy Weather Dangers: Weather Will Change, Whether You Are Ready Or Not!”

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**USCG:** This Safety Alert is provided for informational purposes only and does not relieve any domestic or international safety, operational, or material requirements. The Office of Investigations and Analysis distributes it.

**BSEE:** This Safety Alert is a tool used to inform the offshore oil and gas industry of the circumstances surrounding a potential safety issue. It also contains recommendations that could assist avoiding potential incidents on the Outer Continental Shelf.

**Category:** Weather, Personnel Safety