BSEE Identified Grating and Open Hole Hazards During Risk Based Inspections

A BSEE inspector conducts a grating and open hole hazards inspection.

BSEE inspected 42 facilities in the Gulf of Mexico Region over a multiday period in July 2019 due to recent incidents associated with grating and open holes on offshore oil and natural gas facilities. This risk-based inspection was conducted to help reduce the likelihood of future grating and open hole incidents on the U.S. Outer Continental Shelf.

At the completion of the inspections, BSEE reviewed the results and conducted additional reviews of Safety and Environmental Management System specific items (e.g., standard operating procedures, emergency drills and hazard communication). As a result of the risk-based inspection, BSEE issued incidents of noncompliance (INCs) associated with workplace safety conditions to 22 of the 42 inspected facilities (52%). The following items are a summary of BSEE’s findings related to grating and open hole issues and associated factors:

- The overwhelming majority of the facility orientations did not address known hazards at the facility associated with grating and open holes;
The majority of the 42 inspected facilities did not have standard operating procedures for opening or removing hatch covers. Additionally, BSEE identified multiple well hatch covers that were not labeled, labeled incorrectly, or not secured to prevent personnel from accessing the covers inadvertently;

The majority of the inspected facilities had access to hard barricades; however, inspection teams found temporary barricades made of caution tape, ratchet straps and cable. Some hard barricades were not properly secured. The temporary barricades did not comply with facility open hole policies;

Outside of Level I inspections, the majority of operators that were part of the Risk Based Inspection did not have implemented grating inspection programs conducted by a qualified/certified inspector that focused on integrity, fasteners, and supporting structural members;

Work orders related to grating and open hole issues were being generated at the facility level; however, for the majority of the work orders there was no process to prioritize the work and some work orders were open for over 12 months.

The majority of inspected facilities did not provide training on critical, injury-related incident response equipment, such as stokes litters. Inspectors also found unusable emergency equipment;

Check-in programs had inconsistent or undocumented periodic personnel communication. Further, BSEE did not identify any consistent technology or practice in place to track, or locate, personnel who fall from the platform into the water;

Stop Work Authority (SWA) and Ultimate Work Authority (UWA) were implemented at every facility inspected; however, there is an opportunity for improvement by ensuring that (1) personnel are aware of that fact that they have no fear of reprisal when utilizing SWA and (2) the person with UWA is clearly identified during orientation and on signs at the facility; and

Some “Reporting Unsafe Work Condition” signs did not conform with recommendations provided in BSEE Safety Alert 357.

Therefore, BSEE recommends that operators consider the following:

- Review facility orientation policy and ensure all potential grating and open hole hazards are communicated to personnel boarding the facility;
- Review the inventory of well hatch covers and develop standard operating procedures for opening, removing, identifying and securing hatches;
- Review the open hole policy and ensure that, at a minimum, barricades (1) have a middle and top rail; (2) are at least 42-inches in height; and (3) are capable of withstanding a load of 200 pounds;
A Safety Alert is a tool used by BSEE 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.

- Conduct an inventory of hard barricades available at facilities. If hard barricades are not available, procedures should be developed and implemented that (1) require that an open hole attendant is positioned at open holes, (2) communicate known open hole/grating risks to facility personnel, and (3) verify that any temporary barricades will prevent the flow of personnel into a hazardous area until a hard barricade is available;

- Develop a regular frequency of operator inspections focused on the integrity of decks, grating, and structural and support beams on your facility. If an area of marginal or suspect strength is identified, ensure that it is clearly marked, appropriate mitigation actions are taken, and employees are informed of those zones;

- Evaluate open work orders associated with grating and prioritize those that are critical to the safety of offshore personnel. If work orders cannot be addressed in the near future due to construction crew or vessel availability, operators should ensure the area of concern is appropriately barricaded;

- Review BSEE Safety Bulletin No. 18, published on July 8, 2019, which discusses hoisting issues. Also, develop and implement an inspection protocol for emergency response and control measures equipment.

- Develop and implement check-in procedures for employees, contractors and subcontractors working alone on offshore facilities. Additionally, evaluate technologies that can aid in the detection and location of people in distress.

- Review BSEE Safety Alert No. 357, published on July 1, 2019, which describes proper posting of signage for employees wishing to report unsafe work conditions to BSEE;

- Consider informing offshore personnel of the BSEE!Safe Initiative to ensure offshore workers are informed when BSEE releases safety information; and

- Consider adding a “no fear” clause regarding Stop Work Authority to Job Safety Analysis forms and ensure that every orientation identifies the person with Ultimate Work Authority.

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