

Safety Alert

BOEM

U.S. Department of the Interior
Bureau of Ocean Energy Management,
Regulation, and Enforcement
Gulf of Mexico OCS Region

Safety Alert No. 288
07 July 2010

Contact: Glynn T. Breaux
(504) 736-2560

Pipe Handling Operations Result in Fatality

Recently a fatality occurred during pipe handling operations on a deepwater drilling unit. A rig employee's head was caught between the pipe handler's lower travel assembly and a vertical support stanchion (pinch/crush point of 4 inches) as the pipe handler was being traversed across the pipe bay to the catwalk to retrieve a joint of pipe. The deceased was acting as a spotter for the pipe handler operator at the time of the incident and the pipe handler operator did not observe the incident due to his obstructed view of the spotter.

The BOEM (formally MMS) investigation revealed that unidentified crush points existed between the lower travel assembly and the vertical support stanchions of the trolley system. It was concluded in part, from the investigation that the pipe handler operator failed to confirm an "all clear" with the spotter and failed to exercise his Stop Work authority when he lost site of the spotter. The Lessee/Operator failed to provide the necessary additional oversight to ensure that the pipe handler operation was conducted in accordance with their lifting policy. The drilling company's line management also failed to:

- Provide a more formalized training program to include the hazards associated with the operation of the pipe handler.
- Identify the specific pipe handler operational tasks, hazards and respective mitigations in order to develop and implement guidelines for personnel working around the strong-back area.
- Provide additional onsite supervision to both the Operator and Spotter during the pipe handler operation.
- Properly implement their Management of Change policy with respect to new personnel in new positions. The company's Management of Change policy was also identified as being too complex to implement.

Therefore, BOEM recommends the following to Lessees/Operators and their Drilling Contractors for any type of overhead trolley beam mounted crane (trolley crane) operation, including but not limited to a pipe handler:

- Inspect trolley crane operations with the intent to identify all potential hazards and mitigations (including pinch/crush points), and communicate these findings with all necessary personnel.
- Review Stop Work authority programs with their personnel, while stressing the importance of the individual's responsibilities and authority to exercise Stop Work as necessary.
- Review trolley crane training programs to ensure that the program covers not only the proper operation of the equipment, but also includes the limitations, capabilities and potential hazards. If

the training includes onsite hands-on training, the verification/certification should be done by senior facility management.

- Review the Management of Change policy for clarity and to ensure the program recognizes and manages changes, conditions and inactions in a given situation or unexpected events.
- Install and maintain safety barriers (signage, red zones, tiger striping, temporary barrier tape, handrails, etc.) to prevent access to the trolley crane's traversing path.
- Clear the trolley crane's path of general storage. Telephone, intercoms or stored items located under the trolley crane should be removed and relocated to a safer area.
- Consider the feasibility of installing cameras or mirrors in areas where the trolley crane operator's view is obstructed.
- Consider the feasibility of re-engineering the trolley crane to possibly eliminate any additional Spotter involvement.
- Conduct pre-tour meetings for all tours, including short change crews. The short change crew involves multiple employees filling new roles and/or not working on their normal crew shift.

--BOEM--GOMR--