MMS Safety Alert

U.S. Department of the Interior
Minerals Management Service
Gulf of Mexico OCS Region

Safety Alert No. 214
July 15, 2003

Contact: Jack Williams
(504) 731-3012

Flash Fire and Explosion from Inadequately Vented Production Vessel

A work crew initiated a confined space entry into a low-pressure separator to sample undisturbed sand and sludge behind the weir. While the sample was being retrieved, a flash explosion ignited in the vessel, exiting the open hatch. The explosion injured four workers, one of whom was blown off the platform. An MMS investigation produced panel **Report MMS 2003-046**, available at www.gomr.mms.gov/homepg/offshore/safety/acc_repo/accindex.html

The explosion was caused by the failure to open both hatches, ventilate, and continuously ventilate the vessel during entry, despite extensive pre-job procedural reviews. In addition, a gas detector was not deployed throughout the entire area of entry. These procedural failures occurred in part because of no managerial double-check of the actual operation. The injuries were caused by the explosion's impact on personnel inside the vessel and immediately outside the open hatch. One man struck the guardrail cyclone fence material, springing it loose from its frame, before falling into the water. No flotation aids were thrown to him.

The MMS recommends to Operators the following actions:

- The operators should emphasize proper confined space entry procedure in the pre-job safety meetings and have a second party confirm the procedures are being followed;
- Personnel not involved in a particular confined space entry should be made aware of the potential danger areas immediately outside any open hatchway of a vessel;
- Work crews should be reminded in safety meetings of the location of emergency flotation devices and the need to access them first in a man-overboard situation;
- Operators should review guard barrier ability to contain standard impacts, especially in the vicinity of major production equipment, vessels, and work areas.

—MMS—GOMR—
www.gomr.mms.gov

Visit our Safety Information Website