



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

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Vent Gas Migrates Through Cable Entrance Hole, Motor Control Center Explodes

On an offshore platform, the compressor failed to start, resulting in low pressure gas being vented into a line common to the skimmer tanks installed below the MCC room. Gas was discharged from the atmospheric vents of the skimmer tanks, migrated along the structure beams, through an opening, into the Motor Control Center. The gas detector alarmed and the door was opened to ventilate the gas. However, the opening of the door created a chimney affect. Gas in the MCC was trapped in the electrical panels and the subsequent actuation of a pump relay ignited the gas causing an explosion that blew out doors, fixtures, and the walls of the building.

The MMS recommends the following to operators:

- Seal all openings into buildings, living quarters, and MCC rooms, including the electric cable inlets, to prevent gas migration. Inspect all buildings and rooms periodically to ensure no undocumented openings have been created during maintenance work.
- Install flow safety valves in the low-pressure vent line from the skimmer, or pipe low-pressure blow-down in such a way as to prevent gas from discharging at the atmospheric vents on the skimmer.

—MMS—GOMR—
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