

Fixed well control equipment

What happened?

NOPSEMA has identified several instances on Mobile Offshore Drilling Units (MODU) where thickness checks of the Mud Gas Separator (Poor Boy De-gasser), fixed choke and kill pipework, and diverter pipework, were either not being conducted or being conducted with the measurements not being verified as in tolerance.

Why did this happen?

Most MODU operators refer to the American Petroleum Institute (API) standards ^[1] which provide recommended and required maintenance schedules for well control equipment, including comprehensive 5 year inspection and overhaul requirements by original equipment manufacturers.

NOPSEMA has found that the following three pieces of equipment do not receive correspondingly rigorous oversight in the selected standards:

- Mud Gas Separator/Poor Boy De-Gasser,
- Fixed Choke and Kill pipework from the Moonpool to the rig floor
- Diverter pipework.

As all of the above systems are fixed equipment on the MODU and not readily able to be removed for overhaul or inspection, they are routinely overlooked with respect to a rigorous inspection regime such as 5 year recertification.

What could go wrong?

Failure of any of these three systems could result in a Major Accident Event including equipment failure under pressure, failure to control a blowout resulting in fire and explosion and loss of life.

Key lessons

Operators should review their maintenance schedule and routines for this equipment to ensure they are inspected and maintained in good condition and that these maintenance routines are regularly audited for compliance.

The legislation

Operators of a facility should refer to their general and specific duties as defined in Schedule 3 Part 2 Division 1 Clause 9 of the *Offshore Petroleum and Greenhouse Gas Storage Act 2006*:

(1)(a) to take all reasonably practicable steps to ensure that: the facility is safe and without risk to the health of any person at or near the facility

(2)(c) to take all reasonably practicable steps to ensure that any plant, equipment, materials and substances at the facility are safe and without risk to health;

Contact

For further information email alerts@nopsema.gov.au and quote Alert 72. NOPSEMA safety alerts are published at www.nopsema.gov.au/safety/safety-alerts.

[1] API Standard 53 Well Control Equipment Systems for Drilling Wells. API Standard 16C choke and kill systems API Standard 64 Diverter Equipment Systems.