Safety bulletin HELIDECK STRUCTURAL INTEGRITY



19/06/2024

Purpose

To inform title holders and operators ("duty holders") of increased safety risks at facilities arising from inadequate inspection, maintenance and repair of structures, particularly helidecks.

Scope

Structural integrity.

Hazard identification and controls

It is timely to remind industry participants that the Offshore Petroleum and Greenhouse Gas Storage Act 2006 requires titleholders to maintain in good condition and repair all structures and equipment that are in the title area. This obligation continues throughout the life of the structure or equipment.

NOPSEMA is aware of instances where the use of helidecks on offshore facilities has been impaired or deemed to be altogether unserviceable. In these cases, the helideck is normally taken out of service and transfer of personnel must be conducted via alternative means.

These alternative means have introduced different risks to members of the workforce and risk levels may have been temporarily heightened until other, more robust control measures were able to be established.

NOPSEMA considers that structural impairment due to corrosion is a common cause of these helideck issues. The structural integrity of the helideck and its support structure can be compromised due to a range of factors, the main ones being inadequate inspection, maintenance and repair practices, particularly as the facility enters late life.

Helideck support structures are generally difficult to inspect due to limited accessibility, complex design and location (overhang) on the facility. Inspection of these structures in most cases requires specialised personnel and equipment for inspection and access. A common corrosion mechanism at helidecks is galvanic (dissimilar metals) corrosion. Consequently, operators should ensure that inspections are of an adequate frequency and have the appropriate scope to identify galvanic corrosion.

Accessibility issues can also hamper repair efforts.

Repair work on helidecks located above the facility accommodation can be particularly challenging as the work must not interfere with resting / sleeping times of other members of the workforce.

For these reasons, it is essential that operators focus on preventative control measures such as ensuring coatings are in good condition to prevent corrosion of helideck support structures.

Safety bulletin



NOPSEMA expects that operators will take all reasonably practicable steps to ensure that structures are safe and without risk to health throughout the life of the facility.

Duty holders should identify critical infrastructure needed to support both operations and future decommissioning activities and ensure a suitable maintenance regime is in place.

The legislation

Section 9, Division 1, Part 2 of Schedule 3 of the Offshore Petroleum and Greenhouse Gas Storage Act 2006 describes relevant operator duties, including taking all reasonable steps to ensure that the facility is safe and without risk to the health of any person at or near the facility; and that all work and other activities carried out on the facility are carried out in a manner that is safe and without risk to the health of any person at or near the facility.

Section 572 of the Offshore Petroleum and Greenhouse Gas Storage Act 2006 describes titleholders' obligations to maintain in good condition and repair all structures and equipment that are in the title area and that is used in connection with the operations authorised by the permit, license lease or authority.

Related documents

NOPSEMA Guidance Note Ageing assets and life extension Document Number N-04300-GN1975 A783718.

The Regulator 2022 – Issue 2 "Keeping an eye on corrosion."

Contact

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