

COGFPSO22

Contribute to tank entry, inspection and maintenance activities



Overview

This unit is concerned with ensuring that a safe and efficient contribution is made by the FPSO/FSU Deck Operator to the planning operation and monitoring, so that safe tank entry activities can take place, where practical, during ongoing Cargo and Marine operations.

This unit deals with the following:

- 1 Tank entry, inspection and maintenance activities

During this work you must take account of the relevant worksite operational requirements, procedures and safe working practices AS THEY APPLY TO YOU.

Previous Version:

Unit MDO22 National Occupational Standards in FPSO/FSU – April 2005

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Performance criteria

- You must be able to:*
- P1 contribute to pre-planned washing and tank entry activities to enable co-ordination and integration to take place with ongoing cargo and marine operations
 - P2 validate vessel, process, tank status and tank priorities
 - P3 obtain full authorisation prior to enclosed space entry
 - P4 confirm isolation requirements
 - P5 ensure the necessary panel inhibits are activated and recorded
 - P6 maintain communications with relevant personnel
 - P7 establish and monitor tank atmospheres throughout washing, entry and inspection operations
 - P8 ensure tank washing operations are completed in accordance with tank entry requirements
 - P9 ensure tank entry, for inspection and maintenance, is carried out in accordance with operational procedures and guidelines
 - P10 ensure inspection and maintenance is carried out in accordance with requirements
 - P11 monitor operations for potential abnormal situations report and respond to them as appropriate

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Knowledge and understanding

You need to know and understand:

- K1 the procedures necessary for washing and tank entry pre-planning activities to be co-ordinated and integrated with ongoing cargo and marine operations
- K2 how to validate vessel, process, tank status and tank priorities
- K3 the precautions to avoid electrostatic generation
- K4 the procedures necessary to obtain full authorisation prior to enclosed space entry (to include cargo tank, ballast tank, water tank, diesel tank, polymer tank, process vessel/tank, pressure vessel)
- K5 how to confirm isolation requirements
- K6 how the necessary panel inhibits are activated, ensured and recorded
- K7 the procedures necessary to monitor tank atmospheres throughout washing, entry and inspection operations (to include oxygen analyser, tank scope, explosimeter)
- K8 how to establish the tank entry requirements and washing operations necessary (to include crude oil washing, hot water washing, inerted, purged, gas-freed)
- K9 the operational procedures and guidelines for inspection and maintenance
- K10 how to monitor operations for potential abnormal situations and safely and effectively report and respond to them as appropriate
- K11 how to maintain effective communication with relevant personnel (e.g. control room operators, operators and technicians) as appropriate
- K12 how to select, use and care for PPE (to include sight/hearing, protection, gloves, footwear, hard hats, respirators)
- K13 the implications of statutory (e.g. HASAWA and COSHH) and organisational requirements
- K14 how to interpret operational requirements (e.g. relevant policies, procedures, instructions, codes of practice, standards and schedules)
- K15 how to locate and identify associated process equipment using P + ID's and Process Flow Diagrams as appropriate
- K16 the structure/function/operation of: process flows, ballast system, cargo system, crude oil washing, inert gas system, cargo heating system, cargo metering, cargo offloading system, mooring system, bunkering systems – polymers potable water, lube oil diesel, instrument and plant air, vessel cooling water, diesel system, hydraulic system using P + IDs and Process Flow Diagrams as appropriate
- K17 the safety measures that need to be put in place and all the safety practices/procedures which must be adhered to
- K18 how to effectively maintain communications between all operators patrolling the plant and the Control Room

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- K19 how to carry out positive reporting of designated actions, assigned tasks, safety measures and checks ensuring reports are clear, accurate and complete
- K20 how to carry out effective handovers between shifts and maintain continuity
- K21 the procedures necessary to carry out effective trouble shooting
- K22 the location, function and operation of ESD systems using P & ID's as appropriate
- K23 the location of process high pressures, high temperatures and the relevant safety measures
- K24 the permit to work system
- K25 the emergency procedures relevant to the marine and storage systems

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