

COGFPSO31

Contribute to the control and monitoring of the inert gas systems



Overview

This unit is concerned with ensuring that a safe and efficient contribution is made by the FPSO/FSU Deck Operator to the operation control and monitoring of the Inert Gas Systems and the necessary assistance is provided for planning, preparation and implementation of inerting/purging and gas freeing operations.

This unit deals with the following:

- 1 Contribute to the control and monitoring of inert gas systems

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 MDO31 National Occupational Standards in FPSO/FSU – April 2005

COGFPSO31

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Performance criteria

- You must be able to:*
- P1 assist in the operation of the inert gas system as required
 - P2 monitor and report inert gas operations during the crude oil discharge operation as appropriate
 - P3 contribute to the planning, preparation and implementation of inerting/purging and gas freeing operations for cargo tanks as appropriate
 - P4 report cargo tank atmosphere suitability prior to introduction of hydrocarbons following gas free operation
 - P5 assist with the control of the inert gas pressure in cargo system as required

COGFPSO31

Contribute to the control and monitoring of the inert gas systems

Knowledge and understanding

You need to know and understand:

- K1 the function/operation of the inert gas system during routine storage/prior to discharging/during discharge operations
- K2 inerting and purging procedures, through dedicated topline/bottom cargo lines
- K3 gas freeing operations utilising fixed and portable equipment
- K4 how to use fixed and portable measuring equipment
- K5 inert gas system components and layout
- K6 inert gas characteristics
- K7 function and operation of inert gas primary and secondary relief systems
- K8 reporting procedures for inert gas operations
- K9 how to select, use and care for PPE (to include sight/hearing, protection, gloves, footwear, hard hats, respirators)
- K10 the implications of statutory (e.g. HASAWA and COSHH) and organisational requirements
- K11 how to interpret operational requirements (e.g. relevant policies, procedures, instructions, codes of practice, standards, schedules) to include station bill and emergency procedures
- K12 how to locate and identify associated process equipment using P + ID's and Process Flow Diagrams as appropriate
- K13 the layout/function/operation of: process flows, ballast system, cargo system, crude oil washing, inert gas system, crude off-loading and metering, FPSO/FSU mooring system, instrument and plant air, vessel cooling water, diesel system, hydraulic system, fire and gas system, using P + ID's and Process Flow Diagrams as appropriate
- K14 how to manually initiate the deluge systems, the various fire suppression systems and fixed and portable fire fighting systems
- K15 the geography of the installation
- K16 the safety measures that need to be put in place and all the safety practices/procedures which must be adhered to
- K17 how to effectively establish and maintain effective fixed/mobile communications between the relevant internal/external personnel
- K18 how to carry out positive reporting of designated actions, assigned tasks, safety measures and checks ensuring reports are clear, accurate and complete
- K19 how to carry out effective handovers between shifts and maintain continuity
- K20 the procedures necessary to carry out effective trouble shooting
- K21 the location, function and operation of ESD systems using P & ID's as appropriate
- K22 the location of process high pressures, high temperatures and the relevant safety measures

COGFPSO31

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- K23 the permit to work system
- K24 the emergency procedures relevant to the cargo handling system
- K25 the emergency procedures relevant to the ballast control system
- K26 the emergency procedures relevant to shuttle tanker operations

COGFPSO31

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Suite Floating Production & Storage Offload (FPSO)

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