

COGPOHCR7 - SQA Unit Code D7SA 04

Facilitate the maintenance of process plant and equipment



Overview

This unit is about facilitating the maintenance of plant and equipment.

This unit deals with the following:

1. Co-ordinate the isolation of plant and equipment for maintenance
2. Co-ordinate the de-isolation of plant and equipment for maintenance

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 PTC3.4 Processing Operations Hydrocarbons NOS – November 2006

Performance criteria

- You must be able to:*
- P1 Effectively obtain instructions and plan and organise work of self and others correctly.
 - P2 Ensure that the relevant parts of the Safe Systems of Work system are operated effectively.
 - P3 Effectively co-ordinate plans and preparations.
 - P4 Relevant personnel are briefed and work allocated to optimise effectiveness of preparation.
 - P5 Effectively maintain your work area to be clean and hazard free.
 - P6 Ensure information supplied and recorded is accurate, complete and legible.
 - P7 Work safely in accordance with operational requirements and associated **Safe Systems of Work**.
 - P8 Effectively de-isolate plant and equipment.
 - P9 Monitor de-isolation and minimize risks to personnel, environment, process, plant and equipment.
 - P10 Effectively carry out leak detection tests and confirm the plant and equipment safe to return to service.

Knowledge and understanding

You need to know and understand:

Within the limits of your responsibility you must demonstrate that you know and understand:

- K1 How to use "Safe Systems of Work" processes to identify hazards and mitigate or reduce risks to as low as reasonable practicable (ALARP).
- K2 How to select, use and care for Personal Protective Equipment (PPE) to include sight/hearing protection, coveralls, gloves, footwear, hard hats, respirators.
- K3 The implications of statutory (e.g. HASAWA and COSHH) and organisational requirements.
- K4 How to interpret operational requirements (e.g. policies, procedures, instructions, codes of practice, standards, schedules).
- K5 The limits of your own responsibilities.
- K6 Safe working practices appropriate to the location.
- K7 Plant layout and its integration with other processes and systems.
- K8 The effects of equipment internals upon integrated process system operation.
- K9 Functioning of remote process control including instrumentation and logic.
- K10 Normal operating parameters and their tolerances.
- K11 Sources of information and interpretation of drawings and manuals regarding the integrated process systems.
- K12 All relevant sources of energy to prime movers.
- K13 Properties of purging media and its effects upon integrated process systems.
- K14 Composition and properties of feedstock (to include toxicity, flammability, specific gravity and temperature).
- K15 Procedures for entry into confined spaces.
- K16 Reactions taking place, conditions and effects of changes (to include chemical and physical properties).
- K17 Effects and operation of emergency shut down control system.
- K18 Effects and operation of fire and gas control system.
- K19 Isolation devices and methods of installation.
- K20 How to access and interpret instructions (to include process system specification, production schedule, covering different plant and equipment).
- K21 How to access, interpret and communicate operational requirements (to include processes, arrangement of work area, downtime, maintenance rota).
- K22 How to deal with oral and written information (e.g. work activity briefing provided to others, clarification of operational instructions, work activity recording).
- K23 The factors impacting upon optimising performance (to include layout, tools and equipment required, purging medium required).

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- K24 How to identify hazards (to include spillages, uncontrolled emissions, extreme weather conditions).
- K25 The principles of de-isolation.
- K26 How to access and interpret instructions (to include safety, downtime, integration of processes).
- K27 How to deal with oral and written information (to include reinstatement completion details, work activity details).

Additional Information

Scope/range related to performance criteria

Candidates must prove competence across the following items (or “systems”) as appropriate to the workplace and Evidence Specification:

1. wells
2. oil storage/discharge process
3. gas process
4. oil/gas process and export
5. water injection
6. metering
7. utilities

In addition, the following terms in bold relate directly to those shown in **bold** in the Performance Statements.

Safe Systems of Work must include processes or systems that incorporate Hazard Identification, Risk Assessment, Permit to Work and any other associated systems.

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