

COGPOH20

Prepare and shut down remote integrated process systems



Overview

This unit is about preparing for and carrying out the shut down of remote integrated process systems.

This unit deals with the following:

- 1 Prepare for integrated process system shut down
- 2 Shut down the integrated process system

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 PTC3.3 Processing Operations Hydrocarbons NOS – November 2006

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Performance criteria

You must be able to:

- P1 effectively obtain operational instructions
- P2 accurately determine shut down time and make appropriate preparations for shut down
- P3 effectively brief relevant personnel on shut down procedures
- P4 accurately identify real and potential hazards and protect against them
- P5 ensure all information supplied and recorded is accurate, complete and legible
- P6 work safely in accordance with operational requirements and associated **Safe Systems of Work**
- P7 accurately input and set shut down settings, process variables and services
- P8 safely shut down the process system
- P9 effectively protect against shut down hazards
- P10 effectively monitor shut down and correct faults and problems as appropriate
- P11 isolate plant and utilities from operating sources

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Knowledge and understanding

You need to 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 equipment internals and their function
- K6 functioning of process control including instrumentation and logic
- K7 methods of limitations of depressurisation/pressurisation, blowdown, temperature, relief systems, drains, flares, vents
- K8 sources of information and interpretation of drawings and manuals regarding the plant
- K9 all relevant sources of energy to prime movers
- K10 properties of purging media and its effects on systems
- K11 composition and properties of feedstock (to include toxicity, flammability, specific gravity and temperature)
- K12 effects of emergency shut down control systems
- K13 effects of fire and gas control system
- K14 isolation devices and methods of installation
- K15 how to access and interpret (oral and written) shut down instructions
- K16 how to access and interpret operational instructions (to include sequence of shut down, recommended rate of shut down)
- K17 the real and potential shut down hazards (to include standby equipment operational, vents, noise, heat)
- K18 how to input and set shut down settings, process variables and services
- K19 how to isolate plant and utilities from operating sources

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Additional Information

Scope/range

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.

- 1 **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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Suite Processing Operations Hydrocarbons

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