

COGDO13 - SQA Unit Code H38D 04

Commissioning downstream operations



Overview

This unit is about your contribution to the starting-up process.

This unit deals with the following:

- 1 Complete pre start-up checks and tests
- 2 Start up plant and equipment to achieve normal operating conditions
- 3 Manage abnormal start-up conditions

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

Previous Version:

Adapted from Unit 13 of Refinery Field Operations NOS – version April 2005

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Performance criteria

- You must be able to:*
- P1 obtain the appropriate authorisation and documentation for start-up
 - P2 correctly identify control systems
 - P3 co-ordinate checks with the appropriate people
 - P4 complete each test and check within the defined limits
 - P5 commission each stage of the plant according to start-up procedures
 - P6 implement a logical scanning routine and responded appropriately to alarms
 - P7 achieve normal operating conditions and specifications within the defined timescale
 - P8 identify any abnormalities
 - P9 report the abnormality to the appropriate personnel for action
 - P10 identify the potential impact of the abnormality and informed relevant people
 - P11 provide clear and timely instructions to field operators
 - P12 prioritise problems and co-ordinated appropriate additional assistance
 - P13 correct the abnormality and minimised wastage
 - P14 communicate all relevant information to the appropriate personnel
 - P15 complete all relevant documentation
 - P16 work safely in accordance with operational requirements

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Knowledge and understanding

You need to know and understand:

- K1 the implications of statutory (e.g. HASAWA and COSHH) and organisational requirements
- K2 how to interpret operational requirements (e.g. policies, procedures, instructions, codes of practice, standards, schedules)
- K3 how (to include face to face, telephone, radio, electronically) and when to communicate information (to include reporting of abnormalities, notification of completion of start-up checks) with the appropriate people
- K4 the process principles
- K5 the operating principles of control systems, trip systems and logic sequences
- K6 how to access and interpret the plant manuals
- K7 the start-up procedures
- K8 how to work with and within the Permit to Work system
- K9 how to access, interpret and progress start-up documentation and authorisation
- K10 how to correctly identify control systems and co-ordinate checks
- K11 how to access, interpret and progress the relevant records (to include readings, checklist, logs)
- K12 the principles, purpose and significance of commissioning
- K13 how to implement a logical scanning routine
- K14 what the normal conditions are and how to achieve them
- K15 how to minimise waste during start-up
- K16 how to identify abnormalities
- K17 how to identify the potential impact of the abnormality
- K18 how to prioritise problems
- K19 how to identify the need for additional assistance and the nature of that assistance

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Additional Information

Scope/range

Checks and tests relevant to the work area under your control e.g.:

- 1 Function tests on loops
- 2 Alarms
- 3 Overrides
- 4 Interlocks
- 5 Verification checks on status of plant and equipment involved
- 6 Checks on availability of utilities
- 7 Confirmation of process line-ups
- 8 Relevant documentation

Managing the abnormalities that arise within your work area e.g.

- 9 Instrument
- 10 Mechanical
- 11 Utility
- 12 Logic and safety systems
- 13 Process

Taking the remedial action appropriate to your work area e.g.

- 14 Taking direct control by remote operation of equipment
- 15 Coordinating the actions of others
- 16 Correcting pre start-up conditions

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