

COGEL3 - SQA Unit Code B1AV 04

Control emergencies and critical situations



Overview

This unit is about controlling emergencies and critical situations.

The unit deals with the following:

- 1 Maintaining a state of readiness
- 2 Controlling critical situations
- 3 Coordinating the response to emergencies

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

Previous version:

Unit C5 National Occupational Standards in Well Services – Electric Logging – August 2001

Performance criteria

- You must be able to:*
- P1 effectively access current emergency procedures and report all anomalies
 - P2 identify all conditions which may affect the emergency response
 - P3 effectively hand over all safety critical information
 - P4 correctly take part in drills and exercises
 - P5 work safely in accordance with operational requirements
 - P6 identify developing and existing critical situations
 - P7 activate all relevant alarms and take actions appropriate to the situation
 - P8 effectively monitor the situation and minimise risks to personnel, process, plant and equipment
 - P9 report the critical situation correctly
 - P10 accurately identify and immediately take the actions required to make the situation safe
 - P11 activate all relevant alarms
 - P12 effectively communicate all relevant information and instructions
 - P13 clarify and act upon information received
 - P14 record critical information

Knowledge and understanding

You need to know and understand:

- K1 how to access and interpret the status of the appropriate equipment and systems
- K2 how to access and interpret the status of operations and simultaneous operations
- K3 how to access and interpret information on weather conditions
- K4 how to access and interpret information on the availability of key emergency response personnel
- K5 the operation of and potential implications of the Emergency Shutdown control systems
- K6 the operation of and potential implications of the Fire and Gas control systems
- K7 how to react appropriately
- K8 those who must be contacted and how to contact them

Additional Information

Scope/range related to knowledge and understanding

- 1 how to select, use and care for Personal Protective Equipment
- 2 the implications of statutory and organisational requirements
- 3 how to interpret operational requirements
- 4 emergency procedures for the installation
- 5 plant layout and its integration with other complex processes and systems
- 6 the internals of equipment and their function and operation
- 7 methods and consequences of isolation and depressurisation
- 8 functioning of remote process control
- 9 normal operating parameters and their tolerances
- 10 how to access and interpret drawings and manuals regarding the plant
- 11 the composition and properties of produced fluids and gases
- 12 the reactions taking place and the effect of changes to the physical and chemical properties
- 13 the effects of changes in ambient conditions on plant operation
- 14 the principles and effect of hydrocarbon hydrate formation, prevention and dispersion
- 15 the operation of and potential implications of the ESD control systems
- 16 the operation of and potential implications of the Fire and Gas control systems
- 17 the effect and potential implications of loss of any system and its reinstatement
- 18 consequences of emissions to the environment

Glossary

PPE (Personal Protective Equipment)

To include sight/hearing protection, gloves, footwear, hard hats, respirators

Statutory Requirements

E.g. HASAWA and COSHH

Operational requirements

E.g. relevant policies, procedures, instructions, codes of practice, standards, schedules

Functioning of remote process control

To include instrumentation and logic

Composition and properties of produced fluids and gases

To include toxicity, flammability, specific gravity (SG), temperature

How to access and interpret the status of the appropriate equipment and systems

To include detection, protection, communications, evacuation

How to react appropriately in relation to communicating and co-ordinating responses to emergencies

To include make safe, isolate, shutdown, evacuate the work area, informing connecting installations and others, do nothing, activate internal emergency response teams, inform duty personnel, inform adjacent facilities, activate ESD, account for people

COGEL3 - SQA Unit Code B1AV 04

Control emergencies and critical situations

Developed by Cogent

Version number 1

Date approved July 2010

Indicative review date July 2012

Validity Current

Status Original

Originating organisation Cogent

Original URN EL3

Relevant occupations Professional Occupations; Engineering Professionals; Engineering and manufacturing technologies; Engineering

Suite Electric Logging

Key words control, emergencies, state of readiness, response, critical, situations