

COGPOH2 - SQA Unit Code F22D 04

Monitor and maintain health, environment and safety systems



Overview

This unit is about monitoring and maintaining Health and Safety systems and understanding the Safe Systems of Work requirements.

This unit deals with the following:

- 1 Administer the Safe Systems of Work process
- 2 Maintain the necessary conditions for an effective and safe working environment

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 C2 Processing Operations Hydrocarbons – November 2006

Performance criteria

- You must be able to:*
- P1 consult and seek advice on permit to work requirements from relevant personnel
 - P2 verify information received and give appropriate advice based on that information
 - P3 effectively disseminate requirements relating to work activities to relevant personnel
 - P4 correctly identify, note and react to factors likely to affect operations
 - P5 effectively and correctly record all relevant operations and services information completely
 - P6 work safely in accordance with operational requirements and associated **Safe Systems of Work**
 - P7 determine if the working conditions and the use of resources satisfy current legislation
 - P8 effectively maintain all relevant maintenance procedures
 - P9 effectively maintain all relevant Health, Environment and Safety procedures
 - P10 deal effectively with accidents and incidents
 - P11 accurately identify and take appropriate action on potential or actual breaches of requirements
 - P12 identify and make appropriate recommendations to relevant personnel on improving conditions
 - P13 effectively maintain appropriate and clear (written and computer based) records
 - P14 effectively communicate with all relevant personnel
 - P15 take appropriate action to improve system efficiency

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 safe working practices appropriate to the location
- K3 emergency procedures of plant
- K4 handover and reporting procedures
- K5 plant layout and its connection with other systems
- K6 functioning of process control including instrumentation and logic
- K7 normal plant conditions and the tolerances within which they operate
- K8 methods of depressurisation/pressurisation (to include blowdown and temperature)
- K9 sources of information and interpretation of drawings and manuals regarding the plant
- K10 all relevant sources of energy to prime movers
- K11 blowdown and relief systems and their limitations
- K12 properties of purging media
- K13 composition and properties of feedstock (to include toxicity, flammability, specific gravity (SG), temperature)
- K14 procedure for entry into confined spaces
- K15 drain systems associated with the plant and their limitations
- K16 flare/vent systems associated with the plant and their limitations (to include capacity and radiation)
- K17 effects of emergency shutdown control system
- K18 effects of fire and gas control system
- K19 effects of loss of any utility and its reinstatement
- K20 consequences of emissions to the environment
- K21 how to select, use and care for Personal Protective Equipment (PPE) to include sight/hearing protection, coveralls, gloves, footwear, hard hats, respirators
- K22 the implications of statutory (e.g. HASAWA and COSHH) and organisational requirements
- K23 how to interpret operational requirements (e.g. policies, procedures, instructions, codes of practice, standards, schedules)
- K24 how to interpret and implement organisational policy, practices and procedures
- K25 how to interpret and implement health, environment, hygiene and safety legislation
- K26 how to interpret and implement employment and other legal requirements, industry specific legislation, approved codes of practice, customer requirements
- K27 how to deal with differing types of communication (to include oral, written, computer based, visual/pictorial)

Monitor and maintain health, environment and safety systems

- K28 how to deal with different types of information (to include work activity briefing provided to others, clarification of operational instructions, work activity recording and delegation to others, handovers)
- K29 how to interpret and maintain conditions relating to the work environment, equipment, materials, procedures, special needs
- K30 how to interpret and implement relevant legislation (e.g. health, environment, hygiene and safety legislation, industry specific legislation, approved codes of practice, organisational policies, practices and procedures, environmental legislation)
- K31 how to access and interface with the relevant personnel (to include line managers, staff representatives, colleagues, customers, suppliers, those for whom you have responsibility)

Additional Information

Scope/range

Candidates must prove competence across the following items as appropriate to the workplace and Evidence Specification:

- 1 individual operation
- 2 team operation
- 3 consideration of H2S and other toxic substances
- 4 maintaining communication
- 5 reacting to on-site emergencies

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.

COGPOH2 - SQA Unit Code F22D 04

Monitor and maintain health, environment and safety systems

Developed by Cogent

Version number 1

Date approved June 2009

Indicative review date July 2011

Validity Current

Status Original

Originating organisation Cogent

Original URN POH2

Relevant occupations Engineering and manufacturing technologies; Manufacturing technologies; Process, Plant and Machine Operatives; Plant and Machine Operatives

Suite Processing Operations Hydrocarbons

Key words monitor, maintain, health, environment, safety, systems, working environment