

COGPEM05 - SQA Unit Code FP30 04

Prepare work areas for the maintenance of process plant and equipment



Overview

This unit is about your competence in preparing the work area in order to carry out the maintenance of process plant and equipment. You will be involved in activities such as clearing materials and equipment from the worksite, providing service supplies and completing isolations. You will be following your organisation's safe working practices and working within the work permit procedures. This unit is common to the Mechanical, Electrical and Instrumentation & Control disciplines.

This unit deals with the following:

- 1 Prepare work areas for the maintenance of process plant and equipment

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:

Adapted from Unit C2.5 of Process Engineering Maintenance NOS – version February 2004. This unit is a contextualised version of a unit produced by the OSC Eng Engineering Competence Standards which was originally designated ECS 2.11.

COGPEM05 - SQA Unit Code FP30 04

Prepare work areas for the maintenance of process plant and equipment

Performance criteria

You must be able to:

- P1 work safely at all times, complying with health and safety and other relevant regulations and guidelines
- P2 ensure that the work environment is suitable for the work activities to be undertaken
- P3 ensure that all necessary service supplies are connected and ready for use
- P4 prepare the work areas so that they are ready for the engineering activities to be carried out
- P5 make sure that required safety arrangements are in place to protect other workers from activities likely to disrupt normal working
- P6 report completion of preparations in line with organisational procedures
- P7 deal promptly and effectively with problems within your control and report those that cannot be resolved

Prepare work areas for the maintenance of process plant and equipment

Knowledge and understanding

You need to know and understand:

- K1 you must have a working knowledge and understanding of what your responsibilities are in respect of Health, Safety and Environment. This should include the limits of your personal responsibility, your legal responsibility for your own health and safety and the health and safety of others
- K2 you must have a working knowledge of the relevant regulations and the safe working practices and procedures required within your work area
- K3 you must have an appreciation of what the work area preparation requirements and methods are. This could be expected to include the location and whether condition of work environments is appropriate in terms of: layout, accessibility, isolations, safety and security
- K4 you must have a working knowledge of the potential problems and consequences of not preparing work areas correctly in relation to hazards which may occur
- K5 you must have an appreciation of the connection and operation of the applicable supply services and connection procedures related to the equipment relevant to the industry, including pneumatic, electrical and hydraulic tools
- K6 you must have an appreciation of your responsibilities with regard to the reporting lines and procedures in your working environment

Prepare work areas for the maintenance of process plant and equipment

Additional Information

Scope/range related to performance criteria

- 1 The level and extent of responsibility will involve you being responsible for ensuring the preparations are carried out safely by following company defined procedures. You will be accountable for the integrity of the work and ensuring the work is recorded in a formal manner. Authorisation for proceeding with the work will be given by authorised signatories within the Permit to Work system
- 2 The type of work area to be prepared would include:
 - 2.1 Chemicals manufacturing and petroleum sites
 - 2.2 Controlled operational areas
 - 2.3 Offshore installations
- 3 The type of work area preparations could involve ensuring that the location and condition of work environments are appropriate in terms of:
 - 3.1 Layout
 - 3.2 Security
 - 3.3 Safety
 - 3.4 Isolations (where relevant)
 - 3.5 Accessibility
- 4 The type of work area protection and safety requirements will take into account any hazards due to the particular working conditions that could also include:
 - 4.1 Working on access structures (scaffold)
 - 4.2 At height
 - 4.3 Inside systems and plant
 - 4.4 Adverse weather conditions
 - 4.5 Confined spaces
 - 4.6 In shafts

Scope/range related to knowledge and understanding

The Knowledge and Understanding levels expressed indicate the minimum level of knowledge and understanding sufficient to perform your role in a manner that would normally be associated with the minimum acceptable performance of a competent person undertaking your role.

The expression “an appreciation” is intended to indicate a level of knowledge and understanding equating to:

- 1 An awareness of the existence, the scope and the background to the content covered by the knowledge and understanding statement
- 2 How and where to find further detail and information that you will need
- 3 Having obtained the information, you will be expected to check your interpretation and then to be able to apply it to your situation

Prepare work areas for the maintenance of process plant and equipment

The expression "working knowledge and understanding" indicates you are able to:

- 4 Identify and apply relevant information, procedures and practices to your usual role in your expected working environments needing only occasional recourse to reference materials
- 5 Describe, in your own words, the principles underlying your working methods. This does not mean the ability to quote "Chapter and verse". Rather you must know what supporting information is available, how and where to find it and from whom to seek further guidance and information confirm any additional required detail
- 6 Interpret and apply the information obtained to your role, your working practice and in your expected working environment

COGPEM05 - SQA Unit Code FP30 04

Prepare work areas for the maintenance of process plant and equipment

Developed by Cogent

Version number 1

Date approved May 2010

Indicative review date May 2012

Validity Current

Status Adapted

Originating organisation Cogent

Original URN C2.5

Relevant occupations Engineering Professionals; Engineering and manufacturing technologies; Manufacturing technologies

Suite Process Engineering Maintenance

Key words Preparation, maintenance, work areas, plant, equipment