



**SECTOR SKILLS COUNCIL FOR SCIENCE,
ENGINEERING AND MANUFACTURING
TECHNOLOGIES**

**EXPLOSIVES, MUNITIONS AND SEARCH
OCCUPATIONS**

NATIONAL OCCUPATIONAL STANDARDS:

**EXPLOSIVE SUBSTANCES AND ARTICLES (ESA)
FACILITIES MANAGEMENT (KEY ROLE 9)**

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Unit 9.1 Define explosives facilities requirement

Contexts

- Explosive event: protecting from and against internal explosive event; withstanding an external explosive event

Performance Criteria

You need to:

- work safely at all times, complying with health and safety, environmental and other relevant regulations and guidelines
- confirm the uses of the facility, and its associated explosives-related hazards
- identify the plant, equipment and facility layout requirement
- assess the siting options, and identify the optimum
- consult the relevant external authorities on your preliminary design and siting
- ensure that your specification meets the business and regulatory requirements
- obtain the necessary internal approval for your specification
- submit any associated safety documentation to obtain the necessary approvals

Knowledge Requirements

You need to know and understand:

- the health, safety and environmental and other statutory legislation, regulations, safe working practices and procedures governing explosives, and their implications for your area of work
- the relevance of personal protective equipment (PPE)
- the nature, characteristics, hazards and risks of the explosive substance and/or article
- the actions to be taken in response to an unplanned event
- your organisation's business objectives and activities
- the purpose for which the explosives facility is being designed
- security requirements
- when and why re-commissioning may be appropriate (eg change of use)
- the resources available, and any constraints attached to their use
- separation distance requirements
- the features of good explosives facility design
- which authorities should be consulted
- the requirements for obtaining approval from within your organisation
- the external licensing process and timetable

Unit 9.2 Ensure explosives facilities are fit for purpose

Contexts

- Maintenance and inspection: explosive site; equipment
- Recommendations to address: shortcomings; non-conformities; improvements

Performance Criteria

You need to:

- work safely at all times, complying with health and safety, environmental and other relevant regulations and guidelines
- ensure that your explosives facilities maintenance and inspection plans are complete, up to date and practicable
- ensure that your explosives facilities maintenance and inspection plans confirm the performance of the safety features specified in the design, and address any shortcomings and/or non-conformities
- communicate the requirements of your plans to those concerned
- confirm that the appropriate tools and equipment needed to carry out the checks are available
- ensure that competent people are carrying out the checks
- ensure that the explosives facilities maintenance and inspection plans are implemented correctly
- recommend or take appropriate remedial action in the event of failures within the limits of your authority
- ensure that all recommended actions have been carried out
- draft clear, concise inspection reports, in the appropriate format
- ensure that the current activities are covered by the licence
- take prompt corrective action in the case of encroachments

Knowledge Requirements

You need to know and understand:

- the health, safety and environmental and other statutory legislation, regulations, safe working practices and procedures governing explosives, and their implications for your area of work
- the relevance of personal protective equipment (PPE)
- the nature, characteristics, hazards and risks of the explosive substance and/or article
- the actions to be taken in response to an unplanned event
- your organisation's explosives safety management system
- the purposes for which the explosives facility will be used or is being used
- the original design of the building, and any changes from this
- when specialist assessment is required
- sources of information
- any specific conditions of the licence
- the safety features and requirements of the facility
- the information needed to draw up the explosives elements of the facilities inspection and maintenance plan
- who might be affected by the inspection and maintenance plan
- your level of authority
- reporting lines and procedures
- the licensing and safeguarding requirements and process

Unit 9.3 Conduct safety checks on explosives facilities

Contexts

- Inspection and maintenance: scheduled; unscheduled

Performance Criteria

You need to:

- a work safely at all times, complying with health and safety, environmental and other relevant regulations and guidelines
- b ensure that you are working to the correct explosives facilities maintenance and inspection plans
- c communicate the requirements of the plan and tasks to those concerned
- d confirm that the appropriate tools and equipment needed to carry out the checks are available, and use them correctly
- e implement the requirements of the explosives facilities maintenance and inspection plan correctly
- f recommend or take appropriate remedial action in the event of failures, within the limits of your authority
- g ensure that all recommended actions have been carried out
- h draft clear, concise inspection reports, in the appropriate format

Knowledge Requirements

You need to know and understand:

- i the health, safety and environmental and other statutory legislation, regulations, safe working practices and procedures governing explosives, and their implications for your area of work
- ii the relevance of personal protective equipment (PPE)
- iii the nature, characteristics, hazards and risks of the explosive substance and/or article
- iv the actions to be taken in response to an unplanned event
- v your organisation's explosives safety management system
- vi the safety features and requirements of the facility
- vii the requirements of the explosives facilities maintenance and inspection plan
- viii who might be affected by the tests being carried out
- ix your level of authority and competence
- x reporting lines and procedures

Unit 9.4 Develop and implement the explosives facility decommissioning plan

Contexts

- De-commissioning: explosive site; equipment
- Purpose: prior to change of use for another explosives use; prior to change of use for non-explosives use; for disposal

Performance Criteria

You need to:

- work safely at all times, complying with health and safety, environmental and other relevant regulations and guidelines
- ensure that the explosives decommissioning plan is complete and practicable
- use relevant information to inform the decommissioning plan (including historical information)
- ensure that the plan includes checks that all contaminants and hazards have been identified and will be suitably addressed
- obtain appropriate approval to the decommissioning plan
- communicate the requirements of the decommissioning plan to those concerned
- confirm that the appropriate tools and equipment needed to carry out the decommissioning tasks are used
- confirm that competent people carry out the decommissioning tasks
- ensure that the explosives decommissioning plan is implemented correctly
- report on the decommissioning tasks carried out, and the findings
- recommend or take appropriate remedial action in the event of problems, within the limits of your authority

Knowledge Requirements

You need to know and understand:

- the health, safety and environmental and other statutory legislation, regulations, safe working practices and procedures governing explosives, and their implications for your area of work
- the relevance of personal protective equipment (PPE)
- the nature, characteristics, hazards and risks of the explosive substance and/or article used in the facility
- the actions to be taken in response to an unplanned event
- your organisation's decommissioning process
- the purposes for which the explosives facility has been used
- the original specification to which the facility was designed, and any changes from this
- the next intended use of the facility or site
- how the facility or site has been affected by explosives and their residues
- the information needed to draw up the explosives elements of the decommissioning plan, and how this fits into the overall decommissioning plan
- the tools and equipment needed to carry out decommissioning tasks
- the competence of the people carrying out the decommissioning tasks
- your level of authority

Unit 9.5 Conduct decommissioning tasks on explosives facility

Contexts

- De-commissioning: explosive site; equipment
- Level of responsibility: conducting tasks yourself; supervising others

Performance Criteria

You need to:

- work safely at all times, complying with health and safety, environmental and other relevant regulations and guidelines
- confirm that you have the correct explosives decommissioning plan
- confirm that competent people are carrying out the decommissioning tasks
- confirm that the appropriate tools and equipment needed to carry out the decommissioning tasks are used
- ensure that all contaminants and hazards have been identified and removed
- ensure that the explosives decommissioning plan is implemented correctly
- report on the decommissioning tasks carried out, and the findings
- recommend or take appropriate remedial action in the event of problems, within the limits of your authority
- maintain appropriate records, in accordance with your organisation's procedures

Knowledge Requirements

You need to know and understand:

- the health, safety and environmental and other statutory legislation, regulations, safe working practices and procedures governing explosives, and their implications for your area of work
- the relevance of personal protective equipment (PPE)
- the nature, characteristics, hazards and risks of the explosive substances and/or articles used in the facility
- the actions to be taken in response to an unplanned event
- the de-commissioning plan
- the purposes for which the explosives facility has been used
- the original specification to which the facility was designed, and any changes from this
- how the facility or site has been affected by explosives and their residues
- how to collect and dispose of residues and products
- the tools and equipment needed to carry out decommissioning tasks
- the competence of the people carrying out the decommissioning tasks
- your level of authority
- the importance of documenting your actions and your rationale