

COGTRM12

Work safely in transportation of radioactive material environments



Overview

This unit is for you if you work in a transportation of radioactive material environment. It covers how you need to conduct your day-to-day work in a healthy and safe way. This involves:

- 1 workplace health and safety policies
- 2 personal presentation
- 3 legal and workplace environmental procedures
- 4 reporting procedures
- 5 maintaining your own and others' safety while working

This unit deals with the following:

- 1 minimise the risks to health and safety in the workplace
- 2 minimise the risks to the environment in the workplace

Radioactive material can potentially cause harm to people, property and the environment, so it is vitally important that you take all necessary safety measures.

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 1.14 of Chemical, Pharmaceutical and Petro-Chemicals Operations NOS – version May 2005

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Performance criteria

- You must be able to:*
- P1 ensure that you carry out your working practices in accordance with legal requirements
 - P2 ensure that you follow the most recent workplace policies for your job role
 - P3 rectify those health and safety risks within your capability and job responsibility limits
 - P4 pass on any suggestions for reducing risks to health and safety within your job role to the responsible persons
 - P5 ensure that your personal conduct around the workplace does not endanger the health and safety of yourself or other persons
 - P6 work safely at all times
 - P7 ensure that your personal presentation at work assures the health and safety of yourself and others, meets any legal duties, and is in accordance with workplace health and safety policies
 - P8 ensure that you follow the up-to-date legal requirements and workplace environmental procedures for your job role
 - P9 control those environmental hazards within your capability and job responsibility limits
 - P10 report promptly environmental hazards which you are unable to deal with
 - P11 report suggestions for limiting risks to the environment within your job role to the responsible/appropriate person
 - P12 follow the correct procedures for the handling and disposal of radioactive material and products hazardous to the environment
 - P13 follow suppliers'/manufacturers' instructions and working practices for the safe use and storage of radioactive materials/products and equipment

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Knowledge and understanding

You need to know and understand:

- K1 your legal duties for health and safety in the workplace
- K2 your duties for health and safety as defined by any specific legislation covering your job role
- K3 what are safe working practices for your own job role
- K4 your scope and responsibility in rectifying risks
- K5 what the workplace procedures are for handling risks with which you are unable to deal
- K6 methods of identifying risks including direct observation, examining records, or interview
- K7 the particular health and safety risks which may be present in your own job role and the precautions you must take
- K8 what the specific organisational health and safety policies are covering your job role
- K9 the importance of dealing with or promptly reporting risks
- K10 whom to report risks to, and methods of reporting them
- K11 where to find expert advice and guidance
- K12 why it is important to follow instructions accurately
- K13 the importance of your personal conduct in maintaining the health and safety of yourself and others
- K14 what the suppliers' and manufacturers' instructions are for the safe use of equipment, radioactive material and products
- K15 what the importance is of your personal presentation in maintaining health and safety of yourself and others
- K16 what the specific workplace environmental procedures are which cover your job role.
- K17 what your responsibilities are for the environment as defined by any specific legislation covering your job role
- K18 your own responsibility for rectifying hazards to the environment
- K19 your own limitations, job responsibilities and capabilities
- K20 who to report to with hazards which you are unable to deal with
- K21 suppliers/manufacturers and workplace instructions for the use and storage of radioactive materials and products hazardous to the environment and for the use of equipment
- K22 what substances and processes might be categorised as hazardous to the environment
- K23 what the procedures are for the correct disposal of radioactive material

Additional Information

Glossary

Operational and regulatory requirements

The organisation's procedures, local management instructions, operating procedures, guidelines, codes of practice, regulations, legislation

Participants in transportation of radioactive material

Consignor, consignee, carrier, packer, loader/unloader, driver, Dangerous Goods Safety Adviser, Radiation Protection Adviser

Principles of safe transport of radioactive material

To protect persons, property and the environment from the effects of radiation by means of:

- 1 Containment of the radioactive contents
- 2 Control of external radiation levels
- 3 Prevention of criticality
- 4 Prevention of damage caused by heat

Procedures

Specifications of how to carry out work activities in a manner that will ensure the required outcomes if the procedure is followed accurately

All workplace policies, practice and procedures should be specified

Personal protective equipment (PPE)

Equipment or work wear to protect the worker from radiation and other hazards

Resources

A range of resources which are used in any activity. These could include:

- 1 Information, documentation and specifications
- 2 Manufacturer/supplier data for equipment and materials
- 3 Materials
- 4 Tools
- 5 Equipment

Responsible/Appropriate Person

Person/s who has the expertise in and/or responsibility for the areas of work affected by the procedure. This is likely to include colleagues with production, safety, health, environment and quality specialism's

Other Persons

This refers to everyone covered by the Health and Safety at Work Act

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including: visitors, members of the public, colleagues, contractors, clients, customers, participants in transportation of radioactive material

Hazard/Risk

The Health and Safety Executive (HSE) have defined two important concepts as follows:

- 1 A hazard is something with the potential to cause harm
- 2 A risk is the likelihood of a hazard's potential being realised

The hazards covered by this unit relate to:

- 1 Radioactive material
- 2 The use of equipment
- 3 The use of substances hazardous to health
- 4 The workplace layout
- 5 The working practices
- 6 The job role

Each organisation will have its own risk control strategy.

Risk

Almost anything may be a hazard, but may or may not become a risk. For example:

- 1 A trailing electrical cable from a piece of equipment is a hazard. If it is trailing across a passageway there is a high risk of someone tripping over it, but if it lies along a wall out of the way, the risk is much less
- 2 Toxic or flammable chemicals stored in a building are a hazard, and by their nature may present a high risk. However, if they are kept in a properly designed secure store, and handled by properly trained and equipped people, the risk is much less than if they are left about in a busy workshop for anyone to use - or misuse
- 3 A failed light bulb is a hazard. If it is just one bulb out of many in a room it presents very little risk, but if it is the only light on a stairwell, it is a very high risk. Changing the bulb may be a high risk, if it is high up, or if the power has been left on, or low risk if it is in a table lamp which has been unplugged
- 4 A box of heavy material is a hazard. It presents a higher risk to someone who lifts it manually than if a mechanical handling device is properly used

Workplace

This is the single or multiple areas in which you carry out your work.

Changes in the workplace covered by this unit are in relation to:

- 1 Layout of workplace
- 2 New facilities and services

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Working Practices

These are any activities, procedures, use of materials or equipment and working techniques/instructions used in carrying out your job. In this unit it also covers any omissions in good working practice which may pose a threat to health and safety. Previous and new working practices covered by this unit are relating to:

- 1 Plant, machinery and equipment
- 2 Radioactive material or other substances
- 3 People

Workplace Policies

The Workplace Policies covered by this unit are documentation prepared by the employer on the procedures to be followed regarding health and safety matters. It could be the employer's safety procedures covering aspects of the workplace that should be drawn to the employees' (and "other persons") attention

Personal Presentation

This includes:

- 1 Personal hygiene
- 2 Use of personal protection equipment, clothing and accessories suitable to the particular workplace

Information Sources

Information sources covered by this unit are:

- 1 Internal Health and Safety experts
- 2 HSE offices
- 3 Relevant industry publications
- 4 External organisations

Health, safety and environmental legislation

To be aware of all relevant legislation and company policy including the disposal of waste

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