



NQC UAE NATIONAL QUALIFICATION/AWARD

For use by developers of UAE national qualifications based on national occupational standards (Q+NOS)

1. General Profile of Qualification

1.1	Title	Level 4 Award for Radiation Occupationally Exposed Workers - Tier 2			
1.2	Code	EGY04003NQ23			
1.3	Type	<input type="checkbox"/> Principal Qualification		<input checked="" type="checkbox"/> Award	
1.4	Credit and duration	Credit value	1 credits	Duration	15 hours
1.5	QF Emirates Level	Level 4			
1.6	Aim	This award aims to provide Learners with the intermediate knowledge, skills and competencies to safely perform work activities in facilities characterized by intermediate radiological risks which may also include radioactive contamination risks, ensuring that best Radiation Protection practices are maintained.			
1.7	Qualification outcomes	Upon successful completion of this award, learners will be able to:			
		QO01	Demonstrate relevant knowledge and application of work policies, procedures and instructions related to Radiation Protection in facilities characterized by intermediate radiological risks which may also include radioactive contamination risks		
		QO02	Demonstrate knowledge of ionizing radiation risk identification and control in facilities characterized by intermediate radiological risks which may also include radioactive contamination risks		
		QO03	Demonstrate ability to select and use personal protective equipment against ionizing radiation, in facilities characterized by intermediate radiological risks which may also include radioactive contamination risks		
1.8	Functions	<input type="checkbox"/> Policy and strategy	QF 9-10	<input type="checkbox"/> Controlling	QF 6
		<input type="checkbox"/> Managing	QF 7-8	<input checked="" type="checkbox"/> Maintaining capability	QF 4-6
		<input type="checkbox"/> Specifying	QF 6-7	<input type="checkbox"/> Performing/carry out	QF 1-4
1.9	Pathways/progression into other qualifications (if any)	Successful Candidates may progress and obtain the Level 4 Award for Radiation Occupationally Exposed Workers - Tier 3.			
1.10	Licensing/regulatory requirements (if any)	Not applicable			

2. Occupation and industry sector

2.1	ISCO title and code	Occupation title	Protective services workers not elsewhere classified
		4-digit ISCO code	5419

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2.2	Industry sector	Sector	Energy resources - oil, natural gas, petrochemical, chemical and mining/quarrying
		Sub-sector	Other (Energy)

3. Entry requirements for this qualification

3.1	Minimum requirements (if any)	Qualification(s) required for entry	Level 4 Award for Radiation Occupationally Exposed Workers - Tier 1
		Other minimum requirements e.g. competence, experience	Candidates should already be employed in a sector in which work activity in the course of radiation emergencies is likely, or be students or trainees in nuclear or radiological sciences. Basic English language literacy. Basic computational abilities.
3.2	Advisory requirements (if any)	Recommended requirements	It is recommended that medical fitness to work in a radiation emergency environment be obtained prior to work assignment. Grade 12 education.

4. Rules of combination

4.1 The learner must successfully complete the following minimum number of credits

Unit type	Min. Credits	Guidance on the rules of combination (if any)
Stream	1	Choose "Stream A" for medical facilities and choose "Stream B" for all other facilities

4.2 Core unit standards

Title	Code (NQC to enter)	QF level	Credit value
Total number of credits from <u>core</u> unit standards to be completed			

4.3 Stream unit standards

Title	Code (NQC to enter)	QF level	Credit value
Execute work activities in the presence of ionizing radiation sources, medical facilities, intermediate radiological risks, radioactive contamination – Exposed Worker Tier 2 Stream A	EGY04001NU23	Level 4	1
Execute work activities in the presence of ionizing radiation sources, non-medical facilities, intermediate radiological risks, radioactive contamination – Exposed Worker Tier 2 Stream B	EGY04002NU23	Level 4	1
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4.4	Optional unit standards		
	Title	Code (NQC to enter)	QF level
			Credit value

5. Assessment advice

The assessment advice for the qualification to guide learners, assessors and verifiers must consider evidence requirements in NOS unit standards and summarise the main assessment approach and methods for the qualification that will ensure learners meet the qualification learning outcomes. (Note: Trainers, assessors, internal verifiers and external verifiers for this qualification must be occupationally competent in the occupational field of the qualification).

Assessment must be conducted in an environment where evidence gathered demonstrates consistent performance.
Learners must demonstrate consistent performance in conditions that are safe and replicate a potential workplace.

Assessment methods can include:

- Scenario setting
- Presentations
- Virtual simulations (or role plays) and modelling
- Written material and reports, including authenticated evidence from workplace and/or training courses
- Checklists and comparative charts
- Statements
- Evidence of written reports summarising results of candidate skills assessment
- Oral or written questioning

Evidence:

- Verbal or written questioning to assess candidate’s knowledge
- Summative assessment to ensure consistency of performance in a range of contexts
- Formative evidence for this unit can be written, oral or diagrammatic
- Formative evidence ought to assist learners to learn and increase performance
- Summative assessment is based on real live work situations or simulated situations

Assessors and verifiers must satisfy NQC/VETAC requirements with subject matter expert related to radiation protection assessments.

All evidence submitted by the learner must be verified and documented by the assessor for future evaluation purpose.

Summative assessment is based on real live work situations or simulated situations.

Assessment judgements are based on evidence that is documented valid, authentic, current, and sufficient, and are consistent with previous judgements made on similar evidence.

Re-submissions are permissible

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6. Glossary

Term	Definition
Occupationally Exposed Worker - Tier 1	Workers exposed to ionizing radiation during the course of their work (and whose potential doses may exceed that of the general population), in facilities characterized by lowest radiological risks (or during transport of radioactive materials), across all Sectors (industrial, research, medical, etc.). They should be trained in general radiation protection and have a basic, broad understanding of radiological risks and radiation detection.
Occupationally Exposed Worker - Tier 2 Stream A (medical)	Workers exposed to ionizing radiation during the course of their work in medical facilities characterized by intermediate radiological risks (or during transport of radioactive materials), which may also include risks from radioactive contamination. Facilities may include CT scanner, PET, SPECT, nuclear medicine departments, etc. Workers should be trained in general radiation protection topics, including risks of contamination and its prevention, and have an intermediate, broad understanding of radiological risks and radiation detection in medical facilities.
Occupationally Exposed Worker - Tier 2 Stream B (non-medical)	Workers exposed to ionizing radiation during the course of their work in non-medical facilities characterized by intermediate radiological risks (or during transport of radioactive materials), which may also include risks from radioactive contamination. Workers should be trained in general radiation protection topics, including risks of contamination and its prevention, and have an intermediate, broad understanding of radiological risks and radiation detection in non-medical facilities.
Occupationally Exposed Worker - Tier 3 - Stream A (medical)	Workers exposed to ionizing radiation during the course of their work in medical facilities characterized by highest radiological risks (or during transport of highly irradiating radioactive materials), which may also include risks from neutron sources. Facilities include radiotherapy departments, BNCP, alpha-immunotherapy, etc. Workers should be trained in most radiation protection topics, including risks arising from neutron sources, and have an advanced, broad understanding of radiological risks and radiation detection in most complex medical facilities.
Occupationally Exposed Worker - Tier 3 - Stream B (industrial)	Workers exposed to ionizing radiation during the course of their work in industrial facilities (non-medical and non-nuclear), characterized by highest radiological risks (or during transport of highly irradiating radioactive materials), which may also include risks from neutron sources. Facilities include food and commodities irradiation centres, NDA services, accelerators, neutron sources and gauges, etc. Workers should be trained in most radiation protection topics, including risks arising from neutron sources, and have an advanced, broad understanding of radiological risks and radiation detection in most complex non-medical, non-nuclear facilities.

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Occupationally Exposed Worker - Tier 3 - Stream C (nuclear)	<p>Workers exposed to ionizing radiation during the course of their work in nuclear facilities (or during transport of nuclear materials), including risks from neutron sources.</p> <p>Facilities include fuel fabrication facilities, nuclear reactors, high activity fuel storage, etc.</p> <p>Workers should be trained in most radiation protection topics, including risks arising from neutron sources, and have a more advanced, broad understanding of radiological risks and radiation detection in nuclear facilities.</p>
FANR Safety, Security, and Safeguards Glossary	<p>FANR Safety, Security, and Safeguards Glossary aims to provide with a comprehensive compilation of all the terms included in the Federal Law by Decree No.6 of 2009 Concerning the Peaceful Uses of Nuclear Energy (the Nuclear Law) , the Federal Law by Decree No.4 of 2012 Concerning Civil Liability for Nuclear Damage, FANR regulations and FANR regulatory guides and their respective definitions.</p> <p>The 2021 Edition of the FANR Glossary is an updated version of the initial Glossary issued in 2011 and reflects the updates in the legislative and regulatory framework of FANR. This document is developed for information purposes only, the official and authentic definitions being the ones contained in the laws, FANR regulations and regulatory guides as available on the FANR website.</p> <p>https://www.fanr.gov.ae/en/open-data/fnar-glossary (in English) https://www.fanr.gov.ae/ar/open-data/fnar-glossary (in Arabic)</p>

7. Developer details

7.1 Organisation(s)	Radiation Protection RNDC
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8. Key dates

8.1	Endorsement date	01/06/2023
8.2	Review date	31/05/2028



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NQC UAE-NOS TEMPLATE

For use by developers of UAE national occupational standards (UAE-NOS) packaged as unit standards

1.	Title	Execute work activities in the presence of ionizing radiation sources, medical facilities, intermediate radiological risks, radioactive contamination – Exposed Worker Tier 2 Stream A			
2.	Code	EGY04001NU23			
3.	Credit and duration	3a) Credit value	1	3b) Duration	15
4.	Aim	This unit aims to provide Exposed Workers with intermediate knowledge of radiation physics and radiation protection, and skills to operate effectively with ionizing radiation sources in medical facilities characterized by intermediate radiological risks (or during transport of radioactive materials) which may also include radioactive contamination			
5.	Learning outcomes	At the end of this unit, learners will be able to:			
		LO01	Demonstrate relevant knowledge and application of work policies, procedures and instructions related to Radiation Protection in medical facilities characterized by intermediate radiological risks which may also include contamination risks		
		LO02	Demonstrate knowledge of ionizing radiation risk identification and control in medical facilities characterized by intermediate radiological risks which may also include radioactive contamination risks		
		LO03	Demonstrate ability to select and use personal protective equipment against ionizing radiation in medical facilities characterized by intermediate radiological risks which may also include radioactive contamination risks		
6.	QFEmirates Level	Level 4			
7.	Outcomes, performance criteria, and evidence requirements				

Outcome 1	LO01
Performance criteria	
PC01	Demonstrate knowledge and understanding of radiation physics
PC02	Demonstrate knowledge and understanding of radiation sources used in a Medical Department for diagnostics and in a Nuclear Medicine Department
PC03	State typical dose rates originated by radiation sources in use in Medical Departments
PC04	Explain the difference between surface and volumetric contamination
PC05	Explain the difference between radiation sources, radioactive sources and radiation generators
PC06	Describe quantities and units used in expressing dose, dose rate, and contamination on a surface or in a volume
PC07	Describe safety precautions when operating or working in proximity with more complex medical imaging equipment

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PC08	Describe safety precautions when operating in Nuclear Medicine Departments
PC09	State good practices to be applied in handling, use, storage and transportation of radioactive sources in a Nuclear Medicine Department
PC10	Explain the concepts of radiation emergency response in a Medical Department, and Workers' role during an emergency

Specific evidence requirements

Candidates must demonstrate understanding and application of Radiation Protection precautions when operating or working in close proximity with more complex diagnostic equipment, or unsealed radioactive sources; and explain their role in a radiation emergency.

The following information is provided to aid the training provider in developing the course work:

PC1.06: includes the demonstration of understanding the meaning of "concentration of activity" and its value in Bq/cm², Bq/L or Bq/m³, and being able to relate measured values to derived contamination levels

PC1.07: e.g.: CT scanner, fluoroscopy, scintigraphy

PC1.09: For patients: including patient preparation, safety measures, and patient's discharge, from a radiation protection point of view

PC1.09: for radioactive waste: including shielding and use of personal protective equipment, contamination checks, various precautions to minimize dispersion of radioactivity, control of effluents and waste, patients' management)

PC1.10: Describe potential risks related to malfunctions and incidents involving CT scanners, radioactive sources in a Nuclear Medicine Department, contaminated patients, etc.

Outcome 2 LO02

Performance criteria

PC01	Explain the difference between diagnostic X-ray machines, CT scanners and scintigrams
PC02	State typical dose rates emerging from X-ray machines, CT scanners, and other radioactive sources used in Nuclear Medicine Departments
PC03	Describe radioactive sources used in a Nuclear Medicine Department and their associated radiological risks
PC04	State contamination levels due to radioactive sources used in Nuclear Medicine Departments
PC05	Describe appropriate techniques to mitigate risks related to radioactive contamination
PC06	Explain effects of contamination to workers (skin and internal contamination)
PC07	Explain basic skin decontamination procedures
PC08	Describe methods for measuring radiation dose rate
PC09	Describe methods for measuring radiation surface contamination
PC10	Describe methods for measuring radiation airborne contamination
PC11	Explain biological effects of the exposure to ionizing radiation
PC12	State applicable FANR Regulations and annual dose limits for workers and the population, including dose limits on extremities, lens of the eye and the skin
PC13	Demonstrate the ISO symbols for radioactive contamination and for general radiation risk

Specific evidence requirements

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Candidate must demonstrate knowledge and understanding of basic principles of radiation risk identification and control, the concept of ALARA, and the potential sources/effects of exposure to ionizing radiation, including radioactive contamination.

Candidates must have knowledge of the applicable Radiation Protection Regulations in the UAE, and must be familiar with annual dose limits to Workers and to the population, including organs and tissues.

The following information is provided to aid the training provider in developing the course work

PC2.03: it includes indicating name and radiation emissions (type and approximate energy) of the most used radionuclides in a Nuclear Medicine Department, and their typical shielding materials and thicknesses

PC2.05: includes measuring surface contamination levels, simple decontamination of contaminated surfaces, controls at the border of a Department with appropriate contamination detectors)

PC2.11: including the distinction between tissue reactions and stochastic risks, typical dose thresholds for tissues reactions and their consequences, and a clear explanation of the LNT theory as practical working tool in occupational radiation protection

PC2.12: state dose limits for workers and the general public, and reference levels to be applied in emergency situations, for the whole body and organs, including the skin

Outcome 3	LO03
Performance criteria	
PC01	Describe various personal protective equipment used in work activities in presence of ionizing radiation, including radioactive contamination, in medical facilities
PC02	Demonstrate the ability to correctly don, use and doff personal protective equipment in normal operating and emergency situations
PC03	Explain basic protocols to prevent the spread of radioactive contamination in the workplace
PC04	Explain the function, types, and use of various personal dosimeters, including electronic dosimeters
PC05	Describe precautions in radioactive waste management in a medical facility
PC06	Explain the difference between perceived risks and actual risks, with specific reference and examples related to ionizing radiation
Specific evidence requirements	
Candidate must demonstrate knowledge and understanding of selecting personal protective equipment against ionizing radiation according to the situations, and wearing it appropriately.	

8.	Range statement	This Unit may be assessed in a simulated environment under conditions that safely replicate relevant workplace situations
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9.	Assessment advice	<p>Assessment must be conducted in an environment where evidence gathered by Learners demonstrates consistent performance in conditions that are safe and replicate a potential workplace environment.</p> <p>Assessment methods can include:</p> <ul style="list-style-type: none"> • Scenario setting • Presentations • Virtual simulations and modelling • Written material and report • Checklists and comparative charts • Statements • Topologies • Evidence of written reports summarising results of candidate skills assessment • Oral or written questioning <p>Evidence:</p> <ul style="list-style-type: none"> • Verbal or written questioning to assess candidate’s knowledge • Summative assessment to ensure consistency of performance in a range of contexts • Formative evidence for this unit can be written, oral or diagrammatic • Formative evidence ought to assist learners to learn and increase performance • Summative assessment is based on real live work situations or simulated situations <p>Assessors and verifiers must satisfy NQC/VETAC requirements with subject matter expert related to radiation emergency assessment.</p> <p>All evidence submitted by the learner must be verified and documented by the assessor for future evaluation purpose.</p> <p>Summative assessment is based on real work situations or simulated situations.</p> <p>Assessment judgements are based on evidence that is documented as valid, authentic, current, and sufficient, and are consistent with previous judgements made on similar evidence.</p> <p>Re-submissions are permissible</p>	
10.	Entry requirements	10a) Mandatory	Level 4 Award for Radiation Occupationally Exposed Workers - Tier 1
		10b) Advisory	None
11.	Grading	<p>Percentile 100%: ____%</p> <p>80% pass mark</p>	

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12.	Resources required	<p>Reference materials related to this unit, for consideration, and which correlate with international nuclear industry acceptance, for working in a workplace environment include:</p> <ul style="list-style-type: none"> • relevant and contemporary reference documents, manuals, instructions, procedures, standards; • relevant industry policies and organizational procedures • Other reference documents, including: <ul style="list-style-type: none"> A. Basic Safety Standards for Facilities and Activities involving Ionizing Radiation other than in Nuclear Facilities (FANR-REG-24) B. IAEA Safety Standards Series, Building Competence in Radiation Protection and the Safe Use of Radiation Sources, No. RS-G-1.4 C. American National Standards Institute, Inc. ANSI/HPS N13.36-2001, American National Standard: "Ionizing Radiation Safety Training for Workers", July 19, 2011, Published by Health Physics Society, 1313 Dolley Madison Blvd., Suite 402, McLean, VA 22101 	
13.	Relevant CoreLife Skills	<ul style="list-style-type: none"> <input checked="" type="checkbox"/> Collecting, analysing, organising and applying information in a given context <input checked="" type="checkbox"/> Communicating information, concepts and ideas <input checked="" type="checkbox"/> Initiating and organising self and activities incl. motivation, exploration and creativity <input checked="" type="checkbox"/> Working with others in teams incl. leadership <input checked="" type="checkbox"/> Solving problems incl. using mathematical ideas and techniques <input type="checkbox"/> Applying information and communication technology (ICT) <input type="checkbox"/> Participating in social and civic life incl. ethical practice 	
14.	Industry sector	14a) Sector	Energy resources - oil, natural gas, petrochemical, chemical and mining/quarrying
		14b) Sub-sector	Other (Energy)
15.	Developing organisation	Federal Authority for Nuclear Regulation (and Counterpart Organizations) in the "RNDC for Radiation Protection"	
16.	Approval date	01/06/2023	
17.	Review date	31/05/2028	



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For use by developers of UAE national occupational standards (UAE-NOS) packaged as unit standards

1.	Title	Execute work activities in the presence of ionizing radiation sources, non-medical facilities, intermediate radiological risks, radioactive contamination – Exposed Worker Tier 2 Stream B			
2.	Code	EGY04002NU23			
3.	Credit and duration	3a) Credit value	1	3b) Duration	15
4.	Aim	This unit aims to provide Exposed Workers with intermediate knowledge of radiation physics and radiation protection, and skills to operate effectively with ionizing radiation sources in non-medical facilities characterized by intermediate radiological risks (or during transport of radioactive materials) which may also include radioactive contamination			
5.	Learning outcomes	At the end of this unit, learners will be able to:			
		LO01	Demonstrate relevant knowledge and application of work policies, procedures and instructions related to Radiation Protection in non-medical facilities characterized by intermediate radiological risks which may also include radioactive contamination risk		
		LO02	Demonstrate knowledge of ionizing radiation risk identification and control in non-medical facilities characterized by intermediate radiological risks which may also include radioactive contamination risks		
		LO03	Demonstrate ability to select and use personal protective equipment against ionizing radiation in non-medical facilities characterized by intermediate radiological risks which may also include radioactive contamination risks		
6.	QFEmirates Level	Level 4			
7.	Outcomes, performance criteria, and evidence requirements				

Outcome 1	LO01
Performance criteria	
PC01	Demonstrate knowledge and understanding of radiation physics
PC02	Demonstrate knowledge and understanding of radiation sources used in the industry and in research
PC03	State typical dose rates originated by radiation sources in use in the industry and in research
PC04	Explain the difference between surface and volumetric contamination
PC05	Explain the difference between radiation sources, radioactive sources and radiation generators
PC06	Describe quantities and units used in expressing dose, dose rate, and contamination on a surface or in a volume
PC07	Describe safety precautions when operating or working with more complex industrial radiological equipment

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PC08	State good practices to be applied in handling, use, storage and transportation of radioactive sources
PC09	Explain the concepts of radiation emergency response in an industrial or research facility, and Workers' role during an emergency

Specific evidence requirements

Candidates must demonstrate understanding and application of Radiation Protection precautions when operating in more complex non-medical facilities, or manipulating unsealed radioactive sources; and explain their role during a radiation emergency.

The following information is provided to aid the training provider in developing the course work:

PC1.06: includes the demonstration of understanding the meaning of "concentration of activity" and its value in Bq/cm², Bq/L or Bq/m³, and being able to relate measured values to derived contamination levels

PC1.08: including shielding and use of personal protective equipment, contamination checks, various precautions to minimize dispersion of radioactivity, control of effluents and waste

PC1.09: Describe potential risks related to malfunctions and incidents involving non-medical sources of radiation

Outcome 2	LO02
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Performance criteria

PC01	Explain the difference between irradiators, nuclear gauges, X-ray machines, and radioactive sources used in the industry
PC02	State typical dose rates emerging from irradiators, gauges, X-ray machines, and radioactive sources used in the industry
PC03	Describe radioactive sources used in the industry and their associated radiological risks, including contamination
PC04	State potential contamination levels due to radioactive sources used in the industry
PC05	Describe appropriate techniques to mitigate risks related to radioactive contamination in an industrial or research environment
PC06	Explain effects of contamination to workers (skin and internal contamination)
PC07	Explain basic skin decontamination procedures
PC08	Describe methods for measuring radiation dose rate
PC09	Describe methods for measuring surface radioactive contamination
PC10	Describe methods for measuring airborne radioactive contamination
PC11	Explain biological effects of the exposure to ionizing radiation
PC12	State applicable FANR Regulations and annual dose limits for workers and the population, including dose limits on extremities, lens of the eye and the skin
PC13	Demonstrate the ISO symbols for radioactive contamination and for general radiation risk

Specific evidence requirements

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Candidate must demonstrate knowledge and understanding of basic principles of radiation risk identification and control, the concept of ALARA, and the potential sources/effects of exposure to ionizing radiation, including radioactive contamination.

Candidates must have knowledge of the applicable Radiation Protection Regulations in the UAE, and must be familiar with annual dose limits to Workers and to the population, including organs and tissues.

The following information is provided to aid the training provider in developing the course work

PC2.05: includes measuring surface contamination levels, simple decontamination of contaminated surfaces, controls at the border of a workplace with appropriate contamination detectors

PC2.12: state dose limits for workers and the general public and reference levels in emergency situations, also for organs and the skin

Outcome 3 LO03

Performance criteria

PC01	Describe various personal protective equipment used in work activities in presence of ionizing radiation, including radioactive contamination, in a non-medical facility
PC02	Demonstrate the ability to correctly don, use and doff personal protective equipment in normal operating and emergency situations in the industry or research
PC03	Explain basic protocols to prevent the spread of radioactive contamination in a non-medical workplace
PC04	Explain the function, types, and use of various personal dosimeters, including electronic dosimeters
PC05	Describe precautions in radioactive waste management activities in an industrial/research workplace
PC06	Explain the difference between perceived risks and actual risks, with specific reference and examples related to ionizing radiation

Specific evidence requirements

Candidate must demonstrate knowledge and understanding of selecting personal protective equipment against ionizing radiation according to the situations, and wearing it appropriately.

8.	Range statement	This Unit may be assessed in a simulated environment under conditions that safely replicate relevant workplace situations
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9.	Assessment advice	<p>Assessment must be conducted in an environment where evidence gathered by Learners demonstrates consistent performance in conditions that are safe and replicate a potential workplace environment.</p> <p>Assessment methods can include:</p> <ul style="list-style-type: none"> • Scenario setting • Presentations • Virtual simulations and modelling • Written material and report • Checklists and comparative charts • Statements • Topologies • Evidence of written reports summarising results of candidate skills assessment • Oral or written questioning <p>Evidence:</p> <ul style="list-style-type: none"> • Verbal or written questioning to assess candidate’s knowledge • Summative assessment to ensure consistency of performance in a range of contexts • Formative evidence for this unit can be written, oral or diagrammatic • Formative evidence ought to assist learners to learn and increase performance • Summative assessment is based on real live work situations or simulated situations <p>Assessors and verifiers must satisfy NQC/VETAC requirements with subject matter expert related to radiation emergency assessment.</p> <p>All evidence submitted by the learner must be verified and documented by the assessor for future evaluation purpose.</p> <p>Summative assessment is based on real work situations or simulated situations.</p> <p>Assessment judgements are based on evidence that is documented as valid, authentic, current, and sufficient, and are consistent with previous judgements made on similar evidence.</p> <p>Re-submissions are permissible</p>		
10.	Entry requirements	10a) Mandatory	Level 4 Award for Radiation Occupationally Exposed Workers - Tier 1	
		10b) Advisory	None	
11.	Grading	Percentile 100%: ____%		
		80% pass mark		

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12.	Resources required	<p>Reference materials related to this unit, for consideration, and which correlate with international nuclear industry acceptance, for working in a workplace environment include:</p> <ul style="list-style-type: none"> • relevant and contemporary reference documents, manuals, instructions, procedures, standards; • relevant industry policies and organizational procedures • Other reference documents, including: <ul style="list-style-type: none"> A. Basic Safety Standards for Facilities and Activities involving Ionizing Radiation other than in Nuclear Facilities (FANR-REG-24) B. IAEA Safety Standards Series, Building Competence in Radiation Protection and the Safe Use of Radiation Sources, No. RS-G-1.4 C. American National Standards Institute, Inc. ANSI/HPS N13.36-2001, American National Standard: "Ionizing Radiation Safety Training for Workers", July 19, 2011, Published by Health Physics Society, 1313 Dolley Madison Blvd., Suite 402, McLean, VA 22101 D. IAEA, International Atomic Energy Agency, Training Course Series n. 40: "Radiation Protection and the management of radioactive waste in the oil and gas industry", IAEA, Vienna, 2010, ISSN 1018-5518 	
13.	Relevant CoreLife Skills	<ul style="list-style-type: none"> <input checked="" type="checkbox"/> Collecting, analysing, organising and applying information in a given context <input checked="" type="checkbox"/> Communicating information, concepts and ideas <input checked="" type="checkbox"/> Initiating and organising self and activities incl. motivation, exploration and creativity <input checked="" type="checkbox"/> Working with others in teams incl. leadership <input checked="" type="checkbox"/> Solving problems incl. using mathematical ideas and techniques <input type="checkbox"/> Applying information and communication technology (ICT) <input type="checkbox"/> Participating in social and civic life incl. ethical practice 	
14.	Industry sector	14a) Sector	Energy resources - oil, natural gas, petrochemical, chemical and mining/quarrying
		14b) Sub-sector	Other (Energy)
15.	Developing organisation	Federal Authority for Nuclear Regulation (and Counterpart Organizations) in the "RNDC for Radiation Protection"	
16.	Approval date	01/06/2023	
17.	Review date	31/05/2028	



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