

Domain**MINERAL PROCESSING****Title:****Work safely with instruments that emit radiation****Level: 3****Credits: 6****Purpose**

This unit standard is intended for those who carry out metallurgical processing operations. People holding credit for this unit standard are able to: Store instruments safely and securely; transport instruments safely and securely; use instruments safely and maintain security; monitor radiation levels; maintain records; and perform emergency procedures.

Special Notes

1. Entry information:

Prerequisite

- 1449 - *Comply with health, safety and environmental rules and regulations pertaining to processing operations*; or demonstrated equivalent knowledge and skills.

2. Assessment evidence may be collected from a real workplace or a simulated workplace in which processing operations are carried out.

3. Safe working practices include day-to-day observation of safety policies and procedures and compliance with emergency procedures.

4. Specifications refer to any, or all of the following: manufacturer's specifications and recommendations, and workplace specific requirements.

5. Performance of all elements in this unit standard must comply with relevant regulatory, legislative, workplace requirements and/or manufacturers' specifications.

6. Regulations and legislation, including subsequent amendments, relevant to this unit standard may include but are not limited to the following:

- Labour Act, No. 11, 2007
- Mineral Act, No. 33, 1992
- Atomic Energy Radiation Protection Act, No. 5, 2005
- Mine Health and Safety Regulations, 1999
- Regulations relating to the Health and Safety of employees at work, 1997 and all industry specific regulations, legislations, code of practice, or code of conduct.

Quality Assurance Requirements

This unit standard and others within this subfield may be awarded by institutions which meet the accreditation requirements set by the Namibia Qualifications Authority and the Namibia Training Authority and which comply with the national assessment and

moderation requirements. Details of specific accreditation requirements and the national assessment arrangements are available from the Namibia Qualifications Authority and the Namibia Training Authority. All approved unit standards, qualifications and national assessment arrangements are available on the Namibia Training Authority website www.nta.com.na.

Elements and Performance Criteria

Element 1: Store instruments safely and securely

Performance Criteria

- 1.1 Legislative requirements and associated document processes for storage facilities are sourced and identified.
- 1.2 Instruments are stored according to legislative requirements and workplace procedures.
- 1.3 Instruments are secured to prevent unauthorised access according to workplace procedures.
- 1.4 Instruments' movements and usage are recorded according to workplace procedures.

Element 2: Transport instruments safely and securely

Performance Criteria

- 2.1 Vehicle suitable for the purpose is selected.
- 2.2 Regulation signage is attached to indicate that radioactive sources are being carried.
- 2.3 Instruments are properly located and securely fixed in place according to workplace procedures.
- 2.4 Security of instruments is ensured when vehicle is unattended according to workplace procedures.

Element 3: Use instruments safely and maintain security

Performance Criteria

- 3.1 Safe working practices are followed to minimise own exposure to radiation.
- 3.2 Radiation dosimeter is used to monitor own exposure to radiation.
- 3.3 Safe work practices are followed to minimise exposure of others to radiation.
- 3.4 Safe work practices are followed to protect the instrument from damage.
- 3.5 Instrument security is maintained according to workplace procedures.

Element 4: Monitor radiation levels

Performance Criteria

- 4.1 Operation and calibration status of radiation survey meter are checked.
- 4.2 Radiation survey is performed according to workplace procedures.
- 4.3 Any atypical conditions and/or problems are reported to appropriate personnel according to workplace procedures.

Element 5: Maintain records

Performance Criteria

- 5.1 Observations, data, and results are recorded according to workplace procedures.
- 5.2 Confidentiality is maintained according to workplace policies and procedures.

Element 6: Perform emergency procedures

Performance Criteria

- 6.1 Potential emergency procedures are identified.
- 6.2 Emergencies are responded to according to site safety plans and workplace procedures.
- 6.3 Emergency situations are reported to appropriate personnel according to workplace procedures.

Registration Data

Subfield:	Metallurgy
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