

Domain**METALLURGICAL PROCESSING - CORE****Title:****Manage plant shutdown and restart****Level: 4****Credits: 8****Purpose**

This unit standard is intended for those who carry out metallurgical processing operations. People holding credit for this unit standard are able to: Plan and prepare for plant operation; manage shutdown sequence; conduct start-up process; and document shutdown and start-up process.

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
- 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: Plan and prepare for plant operation

Performance Criteria

- 1.1 Work instructions, including plans, specifications, quality requirements and operational details are obtained, explained, clarified and applied to the allocated task.
- 1.2 Safety and security requirements, including personal protective clothing and equipment are obtained from the site safety plan, workplace policies and procedures, explained, and applied to the allocated task.
- 1.3 Environmental protection requirements are identified from the project environmental management plan and applied to the allocated task.
- 1.4 Work area is inspected and prepared according to workplace procedures.

Element 2: Manage shutdown sequence

Performance Criteria

- 2.1 Workplace hazards and associated risks are identified, minimised or eliminated according to workplace procedures and legislative requirements.
- 2.2 Safety systems are checked and verified according to workplace procedures.
- 2.3 The reason for, or cause of the shutdown is identified by troubleshooting the system and by utilising all available data and information systems.
- 2.4 Confirmation of the identified shutdown is obtained from appropriate personnel according to workplace procedures.
- 2.5 Procedures to rectify the fault or shutdown cause through either repair of the operational fault or readjustment, are initiated before returning the system to start-up status according to workplace procedures.

Element 3: Conduct start-up process

Performance Criteria

- 3.1 Workplace hazards and associated risks are identified, minimised or eliminated according to workplace procedures and legislative requirements.

- 3.2 Start-up permission is obtained from appropriate personnel according to workplace procedures.
- 3.3 Start-up is conducted in a safe and efficient manner according to workplace procedures.

Element 4: Document shutdown and start-up process

Performance Criteria

- 4.1 Workplace hazards and associated risks are identified, minimised or eliminated according to workplace procedures and legislative requirements.
- 4.2 All logs and workplace documentation relating to the shutdown and start-up process are completed.
- 4.3 Any further ongoing production problems are recorded and reported to appropriate personnel according to workplace procedures.

Registration Data

Subfield:	Metallurgy
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