	Unit ID: 1458
Domain	**METALLURGICAL PROCESSING - CORE**
Title:	**Apply operational maintenance skills**
Level: 2	**Credits: 10**

Purpose

This unit standard is intended for those who carry out metallurgical processing operations. People holding credit for this unit standard are able to: Identify and respond to basic faults in mechanical systems; identify and respond to basic faults in electrical systems; identify, select and use fasteners; and complete duties pertaining to operational maintenance.

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. This unit standard should be assessed in conjunction with other relevant technical unit standards selected from the metallurgical processing, mineral processing, hydrometallurgy, or pyrometallurgy domain.

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

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

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

7. 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, complete duties pertaining to operation and maintenance, 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: Identify and respond to basic faults in mechanical systems

Range

Mechanical system may include but are not limited to hydraulic systems; lubrication systems; and pneumatic systems.

Performance Criteria

1.1 Site safety information and procedures, including isolation and lock-out procedures, are applied when working with mechanical systems.

1.2 Major components of mechanical systems and their functions are identified and described.

1.3 Techniques to identify and respond to faults are applied.

1.4 Basic faults are rectified within scope of own responsibility, or reported to appropriate personnel according to workplace procedures.

Element 2: Identify and respond to basic faults in electrical systems

Range

Electrical system may include but is not limited to equipment batteries; ignition and operational circuits; and lighting circuits.

Performance Criteria

2.1 Site safety principles and procedures, including isolation and lock-out procedures, are applied when working with electrical systems.

2.2 Major components of basic electrical circuitry and their functions are identified and described.

2.3 Techniques to identify and respond to faults are applied.

2.4 Basic faults are rectified within scope of own responsibility, or reported to appropriate personnel according to workplace procedures.

Element 3: Identify, select and use fasteners

Range

Fasteners may include but are not limited to screws; bolts; staples; clamps; rivets; and adhesives.

Performance Criteria

3.1 Site safety systems and procedures, including isolation and lock-out procedures, are applied when working with fasteners.

3.2 Fasteners are correctly identified and matched with the work requirements.

3.3 Fasteners are used and/or applied according to manufacturer's specifications and workplace procedures.

Element 4: Complete duties pertaining to operational maintenance

Range

Housekeeping may include but is not limited to ensure the work area is ready for next user; remove work materials to designated locations; correctly identify waste and re-usable material; and remove waste and re-usable materials to designated locations.

Performance Criteria

4.1 Task-specific tools and equipment, personal protective and safety equipment, are cleaned, maintained and stored for further use according to workplace procedures.

4.2 Good housekeeping practices are maintained according to workplace procedures.

4.3 Reporting and recording requirements are met according to workplace procedures.

4.4 Work related documents are completed according to job requirements and workplace procedures.

Registration Data

Subfield:	Metallurgy
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Anticipated review:	2021
Body responsible for review:	Namibia Training Authority