**Domain:** METALLURGICAL PROCESSING - CORE

**Title:** Implement environmental initiatives as part of processing operations

**Level:** 2  
**Credits:** 4

**Purpose**

This unit standard is intended for those who carry out metallurgical processing operations. People holding credit for this unit standard are able to: Demonstrate knowledge of the impact of processing activities on the environment; and implement environmental management initiatives during processing activities.

**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. ‘*Environment*’ refers to the physical environment and natural resources, as well as social-cultural issues and the interaction of the aforementioned with economic systems.

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

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

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](http://www.nta.com.na).
Elements and Performance Criteria

Element 1: Demonstrate knowledge of the impact of processing activities on the environment

Performance Criteria

1.1 Impacts of processing activities on the environment are outlined.

1.2 The benefits and importance of environmentally oriented processing activities are explained.

1.3 The purpose of the environmental impact assessment and the environmental management plan is described.

1.4 The importance of material sustainability is explained.

1.5 Socio-cultural values and perceptions with regard to mining materials, energy and mining methods are described.

1.6 Knowledge of pre- and post-processing environmental management initiatives is demonstrated.

Element 2: Implement environmental management initiatives during processing activities

Performance Criteria

2.1 Processing based pollution reduction measures are implemented in line with workplace procedures and legislative requirements.

2.2 Disease prevention and hygiene measure are implemented in line with workplace procedures and legislative requirements.

2.3 Measures to conserve water and energy are implemented in line workplace procedures.

2.4 Processing activities are carried out in accordance with environmental management plan and legislative requirements.

Registration Data

<table>
<thead>
<tr>
<th>Subfield:</th>
<th>Metallurgy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Date first registered:</td>
<td>28 September 2016</td>
</tr>
<tr>
<td>Date this version registered:</td>
<td>28 September 2016</td>
</tr>
<tr>
<td>Anticipated review:</td>
<td>2021</td>
</tr>
<tr>
<td>Body responsible for review:</td>
<td>Namibia Training Authority</td>
</tr>
</tbody>
</table>