Unit ID: 1118

Domain Title:

HEAVY EQUIPMENT OPERATIONS Lift, move and place loads with a forklift as part of surface mining and quarrying operations

Level: 2 Credits: 5

Purpose

This unit standard is intended for those who work in surface mining and quarrying operations. People holding credit for this unit standard are able to: Plan and prepare for work; demonstrate knowledge of the functions of a forklift; lift, move and place loads; perform post-lifting procedures; complete work related documents; and clean up work area.

Special Notes

1. Entry information:

Prerequisite

- Unit 1113 Comply with health, safety and environmental rules and regulations pertaining to heavy equipment operations
- 2. Expected worksite production target are to be met.
- 3. Assessment evidence may be collected from a real workplace or a simulated workplace in which surface mining and quarrying operations are carried out.
- 4. Equipment, tools and material may include but are not limited to machine attachments, personal protective equipment, safety signs, fuel, specified oil and lubricants, and accessory tools.
- 5. Maintenance may include but is not limited to cleaning, authorised servicing and the monitoring, recording and reporting of faults. It may also include the conduct of authorised minor replacements and the provision of assistance to maintenance and repair activities.
- 6. Safe working practices include but are not limited to day-to-day observation of safety policies and procedures, and compliance with emergency procedures.
- 7. Performance of all elements in this unit standard must comply with all relevant legal and workplace requirements, contractual agreement and/or manufacturers' specifications.
- 8. Regulations and legislation, including subsequent amendments, relevant to this unit standard may include but are not limited to the following:
 - Labour Act, No. 11 of 2007
 - Regulations relating to the Health and Safety of employees at work, 1997 and 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 on www.nta.com.na.

Elements and Performance Criteria

Element 1: Plan and prepare for work

Range

Workplace hazards may include but are not limited to environmental conditions; ground conditions; roadway conditions; restricted areas; loading area conditions; and traffic flow.

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 requirements including personal protective clothing and equipment are obtained from the site safety plan, workplace policies and procedures, and applied to the allocated task.
- 1.3 On-site traffic control requirements are obtained and implemented in line with workplace requirements.
- 1.4 Plant, tools, fuel, lubricants, equipment, attachments and accessories selected to carry out tasks are checked for consistency with the requirements of the job, their usability and any faults rectified or reported prior to commencement of work.
- 1.5 Workplace hazards and/or potential hazards, including obstructions, are identified and removed or guarded.
- 1.6 Environmental protection requirements are identified from the project environmental management plan and applied to the allocated task.

Element 2: Demonstrate knowledge of the functions of a forklift

<u>Range</u>

Operational requirements include but are not limited to towing and speed limits; traffic control systems; environmental conditions, i.e. heat, gases, dust, excessive water, visibility, and ventilation flow; sling types and colour coding; and load mass limitations.

Emergency procedures include but are not limited to brake failure; fire to equipment or machinery; fall of ground; collisions; power failure; restricted areas; and chemicals.

Performance Criteria

- 2.1 The main functions of forklifts are explained in terms of surface mining and quarrying processes.
- 2.2 The operation of all major components is explained in terms of their functions.
- 2.3 Safety features and warning devices of the forklift are identified, and their purposes explained in accordance with manufacturers' specifications.
- 2.4 The maximum operating capacities and efficiencies are explained in terms of the specific forklift capabilities in accordance with manufacturers' specifications.
- 2.5 Operational requirements pertaining to lifting, securing, moving, and placing loads are explained.
- 2.6 Emergency procedures are described.

Element 3: Lift, move and place loads

Performance Criteria

- 3.1 Pre-operational checks are carried out according to appropriate checklist and workplace procedures.
- 3.2 The load is secured and the inclination to be traversed is verified according to workplace procedures and specified requirements
- 3.3 The load is transferred and positioned according to workplace procedures and specific requirements.
- 3.4 Communication with co-workers is established and maintained during the process according to workplace procedures.

Element 4: Perform post-lifting procedures

Performance Criteria

4.1 The forklift is parked, secured and locked out according to workplace and manufacturer's requirements.

Element 5: Complete work related documents

Performance Criteria

- Work related documents are completed in accordance with contract and workplace requirements.
- 5.2 Maintenance and service related documents are completed in accordance with manufacturer and workplace requirements.

5.3 Documents related to accidents or other incidents are completed in accordance with workplace requirements.

Element 6: Clean up work area

Performance Criteria

- Work area is cleared and materials disposed of or recycled in accordance with project environment management plan.
- 6.2 Plant, tools and equipments are cleaned, checked, maintained, serviced and stored in accordance with manufacturers' recommendations and standard work practices.

Registration Data

Subfield:	Surface Mining and Quarrying
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