MANUAL HANDLING
SAFE OPERATING PROCEDURE

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1. PURPOSE
This procedure sets out the project requirements to minimise and control potential adverse health and safety risks associated with manual handling for all employees, contractors and other persons.

This procedure applies to all Namaqua Engineering Project personnel where manual handling is involved.

2. DEFINITIONS
Ergonomics means, adapting work factors to, as far as is reasonably practicable, suit the physical and mental abilities and needs of employees, thereby promoting health, safety, comfort, efficiency and productivity.

Manual Handling Means any activity requiring the use of force extended by a person to lift, lower, push, pull, carry or otherwise move, hold or restrain a person, animal or thing.

3. ROLES AND RESPONSIBILITIES

3.1 Project Manager
The Project Manager will:
• Ensure effective implementation of this procedure.

3.2 Project Construction Manager
The Project Construction Manager will ensure that:
• Ergonomic and manual handling risks are identified by ensuring manual handling/ergonomic assessments are conducted;
• Hazard studies of new plant or modifications to plant include an assessment of ergonomic and manual handling risks;
• All records of consultation, risk identification and assessment, control options and training related to ergonomics are kept for the duration of the contract;
• Nominate supervisors to attend onsite ergonomic/manual handling training in order to conduct ergonomic and manual handling assessment in the workplace.

3.3 Project SHE Manager
The Project SHE Manager will consult with and involve employees when recommending:
• Changes to manual handling tasks;
• Priorities to assess manual handling tasks;
• Methods and approaches to assessment;
• Risk assessment studies;
• The types of risk control measures to use;
• Reviews of the effectiveness of controls
• Keep Records of consultations:

The Project SHE Manager will ensure that:
• The people involved in identifying, assessing and controlling risk are trained in the principles of each stage and in ergonomic principles;

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- Risk identification is repeated regularly where ergonomic factors may vary or deteriorate (e.g., forklift seats, lighting, ventilation);
- Project Construction Manager is advised of the appropriate audit and inspection frequencies that will ensure standards are maintained;
- Follow up action resulting from an ergonomic risk assessment is reported. Site Managers and Supervisors

3.4 Ensure the application of this procedure;
- Ensure that a Risk Assessment / mini HIRA is developed for tasks associated with this standard;
- Ensure that employees review and sign the Risk Assessment / mini HIRA prior to task commencement.

3.5 Employees
- Ensure that they are aware of the risks associated with the job;
- Ensure compliance with this procedure;
- Ensure compliance with Risk Assessment;
- Shall not operate equipment unless competent and tools/equipment have been inspected prior to commencement of task.

4. PROCEDURE

4.1 Manual Handling Tasks
Risk assessment shall be coordinated on manual handling tasks involving:
- Lifting, carrying or putting down (e.g., the transportation of stock and equipment);
- Pushing, pulling, throwing or restraining;
- Any activity involving bending, twisting or awkward postures, even where no object is handled (e.g., working in confined spaces, reaching into low or high cupboards, or maintaining inaccessible equipment items);
- Prolonged, frequent, repetitive movements (e.g., operating a keyboard, stapler, spanner or labelling tool);
- Activities that require stationary/static muscle loading e.g., to support or restrain loads.

**Lifting Technique**
To minimise the risk of back injury, employees shall comply with the following:
- Think and plan lifting activities before commencing. Depending on the task to be undertaken, a mini HIRA may be required;
- If the assessed risk is too great, use mechanical aids or seek assistance;
- Adopt a stable foot position, e.g., place the front foot beside the load, pointing in the direction of travel, placing the back foot slightly behind and a hip-width apart from the front foot;
- Grip the load firmly and keep it close to your body. Use the strong muscles of your legs to lift. Aim to maintain the natural curves of your spine, thereby lessening the chance of injury to the intervertebral disks;
- Hold loads close to the body when carrying. The further away from the trunk, the greater the force required to lift and carry. Tighten stomach muscles to help stabilise the trunk and use the leg muscles. Maintain the natural lumbar curve during lifting and lowering;
- Avoid extreme positions including bending, twisting and excessive reaching;
- Maintain a good level of personal health and fitness, to help maintain muscle strength.

**Management Approach to the Prevention of Manual Handling Injuries**

Key strategies for the management of manual handling shall be as followed:

(a) **Hazard Identification**

Hazard identification checklists shall be developed using incident reviews, statistics etc to identify activities that could cause manual handling injuries.

(b) **Risk Assessment**

Consideration shall be given to the following four principal categories of risk factors as follows:

- **Actions and postures**
  e.g. excessive forces required to perform the manual handling task, awkward movements (bending, twisting, over reaching), static muscle loading holding the body or a part of it in a fixed still position for a long time, poor work postures which cause rapid muscle fatigue.

- **Load characteristics**
  e.g. the weight of the object, potential for sudden, unexpected movements and jarring, objects of awkward shape or size, of with unevenly-distributed weight.

- **Work and work environment factors**
  e.g. frequent or prolonged tasks, isolated employees unable to share manual handling tasks, poor design, or layout of the work environment (steps, uneven, slippery floors, poor lighting, cramped work areas, non-adjustable furniture or equipment).

- **Characteristics of employees**
  e.g. age, experience, physical dimensions and abilities/disabilities.

(c) **Risk Control**

Manual handling hazards shall be eliminated or minimised through adopting a hierarchy of controls in the sequence outlined below.

- Eliminate manual handling wherever practicable (e.g. eliminate unnecessary handling of loads by improving delivery timing and changing the delivery location to the point of usage);
- Minimise the manual handling risks by such means as modifying the workplace, the work task or the equipment, and use of mechanical aids (e.g.

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improve lighting, replace steps with ramps, use mechanical lifting equipment and adjustable-height work surfaces, introduce task sharing or job rotation, use lifts where provided rather than carry loads up stairs)

- Provide appropriate manual handling training.
- Apply Administrative controls such as rotation of employees

(d) **Follow Up**

Incident reports and safety observations results shall be reviewed to establish the effectiveness of the new controls and whether any new or ongoing manual handling risks remain.