GROUP SAFETY STANDARD 16 MANUAL HANDLING AND HAND TOOLS

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TABLE OF CONTENTS

1. INTENT 1
2. APPLICATION 1
3. HAZARDOUS MANUAL TASKS 1
   - 3.1 Manual Task Risk Screening 2
     - 3.1.1 Who should be involved? 2
     - 3.1.2 Intended Outcomes 2
     - 3.1.3 Frequency of Screening 2
   - 3.2 Specific Hazard Controls 3
     - 3.2.1 Manually Lifting Heavy Objects 3
     - 3.2.2 Weight limits for machinery seats 3
     - 3.2.3 Climbing Ladders or Stairs 3
4. HANDTOOLS AND EQUIPMENT 3
   - 4.1 Risk Assessment 4
   - 4.2 Safe Work Procedures and Operating Manuals 4
   - 4.3 In-House Fabricated Tools and Work-Stands 4
   - 4.4 Inspections, Testing and Maintenance 5
5. RECORDS 5
6. RELATED DOCUMENTS 5
   - 6.1 Common Management System Standards 5
   - 6.2 HSES Standards and Guidelines 5
   - 6.3 External Reference Material 5

LIST OF APPENDICES

APPENDIX 1 : CONTROLLED TOOLS AND EQUIPMENT 6

1. INTENT

The purpose of this standard is to define IGO's requirements for the management of activities that pose a risk of injury arising from manual handling activities. This standard also includes the minimum mitigating requirements for the risks associated with the use of portable hand tools and equipment.

2. APPLICATION

This standard shall apply to all IGO sites and projects (exploration, construction, mining, and development) (collectively refers to as 'sites' hereafter) and to all IGO employees, contractors (including sub-contractors) and visitors to IGO sites and projects.

This standard specifically applies to everyone working in an IGO 'Operational Area'[1] including contractors, and those visiting IGO operations.

Where the contractor has an existing process that meets or exceeds the requirements of this standard, the contractor may request authorisation from IGO to use their process in lieu of those outlined in this standard.

Where this standard identifies Australian and New Zealand Standards, IGO's international sites and projects shall ensure recognised industry standards relevant to their location meet or exceed the minimum requirements established through this standard and applicable legislation for their jurisdiction.

3. HAZARDOUS MANUAL TASKS

Most jobs involve some aspect of work involving a manual task (i.e. lifting, lowering, pushing, pulling, carrying, moving, holding or restraining any person or item). Not all manual tasks are hazardous. Hazards that arise from manual tasks generally involve interaction between a worker and:

- how the work tasks are performed
- the tools, equipment, and objects handled
- the physical work environment.

A manual task is hazardous if it involves any of the following that directly stresses the body and can lead to an injury:

- repetitive or sustained force
- a high or sudden force
- repetitive movement
- sustained and/or awkward posture
- exposure to vibration.

Note: As a general guide, 'repetitive' means that a movement or force is performed more than twice a minute and 'sustained' means a posture or force is held for more than 30 seconds at a time.

[1] At each site or project, the 'Operational Area' must be mapped or provision of clearly articulated descriptions are communicated to those affected. Except as otherwise approved by the site manager, an Operational Area is to include any location within 500m of any mining or beneficiating activity, 100m of any drilling or core handling activity, and any area within workshops and warehouses. Generally, offices and crib rooms are excluded from the Operational Area. Refer to ***IGO CMSS 5 - Roles, Responsibilities, Accountabilities and Authorities.***

IGO requires that the risks associated with manual handling tasks are systematically identified and controlled. This involves two discrete processes:

- the Take 5 and JSEA process as described in the ***IGO Safety Risk Management Procedure***
- manual task risk screening (see section 3.1).

3.1 Manual Task Risk Screening

IGO requires that all operating mine sites and exploration teams complete periodic Manual Task Risk Screening that conforms to the process outlined in ***Model Code of Practice: Hazardous manual tasks (2018).*** This is a periodic program of work that involves the:

1. identification of Hazardous Manual Tasks by screening manual tasks to recognise those that have the potential to cause injury
2. assessment of injury risks that arise from these hazardous manual tasks
3. eliminating tasks or parts of the task that have a potential to cause injury, or if this is not reasonably practicable implementing measures to alter the sources of risk in a way that minimises the risk of injury as far as is reasonably practicable
4. monitoring and reviewing the effectiveness of the measures you have implemented as well as keeping records of the action taken to manage the risk.

3.1.1 Who should be involved?

A 'participative ergonomics' approach involving the workers, line management, elected safety representative and facilitated by an appropriately experienced ergonomic consultant. Workers who perform the manual tasks have expert knowledge of those tasks and therefore are best placed to undertake the risk management process of hazard identification, risk assessment, risk control, and evaluation.

For more information in manual task risk screening, persons involved should refer to the ***Comcare Worker Manual Task Checklist,*** developed by the Australian Government to supplement the in ***Model Code of Practice: Hazardous manual tasks (2018)*** in both identifying and managing sources of manual task risks.

3.1.2 Intended Outcomes

The benefits of a participative ergonomics approach include:

- better identification of hazardous manual tasks, risk assessment and solutions because of the workers' hands-on and relevant knowledge and experience with the tasks
- worker ownership of the process resulting in increased support for implementing control measures
- improved team work and cooperation
- an improved workplace safety culture.

3.1.3 Frequency of Screening

Manual task risk screening must occur:

- within 6 months of the commencement of operations at a new mine or exploration project

- where there are material changes to work practices
- at least every 5 years in IGO operating mines.

3.2 Specific Hazard Controls

IGO requires that the following specific requirements be adhered to:

3.2.1 Manually Lifting Heavy Objects

A manual handling injury can result from the use of incorrect lifting techniques which may make the load awkward to lift or heavier by virtue of the lifting technique itself. Different individuals have different physical capabilities, consequently IGO expects is people to exercise discretion when deciding to manually lift an object.

With the exception of emergencies, IGO requires that:

- no individual permitted to lift a weight in excess of 40kg
- no group of individuals is permitted to lift a weight in excess of 60kg.

Any task that regularly requires an individual to lift a weight of 20kg or greater must be subject to manual task risk screening.

3.2.2 Weight limits for machinery seats

IGO requires that no person shall operate a mobile plant and equipment where their weight exceeds the weight rating of the chair. Refer to ***IGO GSS 3 - Occupational Health***.

3.2.3 Climbing Ladders or Stairs

Any task or role that regularly requires an individual to climbing ladders or significant numbers of stairs must be subject to manual task risk screening. This specifically includes members of IGO emergency response rescue teams.

4. HANDTOOLS AND EQUIPMENT

All tools utilised on IGO sites must comply with the applicable Australian Standard (or equivalent). Hand tools and equipment typically includes tools that are held by a person, such as:

- electric power tools and extension cords
- welders
- portable abrasive wheel tools (e.g. grinders, cutters, polishers and wire buffers)
- pneumatic / compressed air power tools (e.g. chippers, drills, hammers, and sanders)
- liquid fuel power tools (e.g. chainsaws, brushcutters)
- powder-actuated / explosive tools (e.g. nail guns)
- hydraulic power tools
- unpowered hand tools such as screwdrivers, hammers, chisels, cutters, knives, and saws, etc, that are designed such that force must be applied by the user.

Some tools and equipment used in the workplace pose a particular hazard. Consequently, IGO defines some tools as ‘Controlled Tools & Equipment’. The use of ‘Controlled Tools & Equipment’, as listed in Appendix 1, and the associated job must be subject to risk assessment

Prior to the use of controlled tools or equipment, the operator shall:

- prepare a task specific JSEA, or ensure they are familiar with the task specific Safe Work Procedure, and
- be assessed as being competent in the use of the equipment.

4.1 Risk Assessment

Risk assessments relating to the use of portable hand tools and equipment shall be conducted in accordance with the ***IGO Safety Risk Management Procedure*.**

Personal risk assessments (i.e. Take 5s, JSEAs) shall be used to identify and document the controls required when using the portable hand tools or equipment. Controls must consider the following:

- guarding to protect the operator and others from moving parts of powered tools
- operating controls and switches to control power to tools and equipment
- PPE
- securing of pneumatic tool hoses
- use of safety clips on pneumatic tools and attachments
- stopping of fuel powered tools whilst refuelling.

4.2 Safe Work Procedures and Operating Manuals

As deemed appropriate by site management, safe work procedures, standard work instructions and or operating manuals shall either be supplied by a) the manufacturer or supplier of powered portable hand tools and equipment as part of the documentation provided with purchase/hire of the equipment, b) IGO, or c) the contractor supplying the equipment. These procedures, instructions, and manuals shall address at a minimum:

- inspecting tools before use and ensuring that damaged tools are not used
- knowing how to use the tool properly and in accordance with the manufacturer's instructions
- ensuring that the correct controls such as guards, operating controls and switches are in place and working
- carrying tools properly and storing them in a safe manner
- repairing and otherwise maintaining tools.

As procedures, instructions and manuals may provide minimal guidance, competency assessments should be considered.

4.3 In-House Fabricated Tools and Work-Stands

The manufacture and/ or use of in-house fabricated tools and work-stands is prohibited except in circumstances where the following conditions are met:

- the provision of a documented assessment of the tool or work-stand conducted and signed by a competent engineer as being fit for purpose. Document verification shall be readily available for inspection, or
- following the completion of a risk assessment, the responsible department manager provides express written approval for the tool or stands use.

4.4 Inspections, Testing, and Maintenance

Guidance on pre-start checks, maintenance and inspection programs for different types of powered hand tools should be as prescribed by the OEM and fit for purpose risk assessments.

5. RECORDS

IGO requires that records are kept of all manual task risk screening processes and related reports are captured in the IGO DMS.

Corrective actions arising from the screening process must be captured in INX and actions must be tracked to completion.

6. RELATED DOCUMENTS

6.1 Common Management System Standards

- IGO CMSS 5 - Roles, Responsibilities, Accountabilities, and Authorities

6.2 Group Standards, Procedures and Guidelines

- IGO Safety Risk Management Procedure
- IGO GSS 3 – Ocupational Health

6.3 External Reference Material

- AS 1873 Power-Actuated (PA) Hand-Held Fastening Tools
- AS/NZS 3160: Approval and test specification - Hand-held portable electric tools
- AS/NZS 60745.1: Hand-held motor-operated electric tools - Safety - General requirements (IEC 60745-1 Ed 4, MOD)
- Safe Work Australia Code of Practice: Managing electrical risks in the workplace

APPENDIX 1: CONTROLLED TOOLS AND EQUIPMENT

- Stanley knife's or similar open blade cutting devices
- '9 inch' angle grinder (Site Manager approval required before use)
- high pressure water cleaning devices (greater than 5800psi / 400bar or Class B high pressure system)
- firearms (Site Manager approval required before use)
- paintball guns (Site Manager approval required before use)
- nail gun
- chainsaws (Site Manager approval required before use)
- hand held concrete cutting saws
- sand blasting equipment
- refractory brick saws
- powder filled ramset guns (concrete nail guns).

Note: Some of the listed tools or equipment require a statutory licence to operate.