



IGO SAFETY RISK MANAGEMENT PROCEDURE

DATE: 24 JULY 2019



DATE	NAME	CHANGE	APPROVED	REVISION
23/05/2019	K. Ashby	Issued for Use	Executive Leadership Team (ELT)	0
18/08/2018	P. Jenkins	Formatting and typos	ELT	1
12/04/2019	By working group comprising sites, exploration and corporate representatives	Consolidation of GSS 3, 11 and 12	ELT	2
03/07/2019	J. Lee	Updated cross references	K. Ashby	2.1
24/07/2019	By working group comprising sites, exploration and corporate representatives	Reclassified from GSS 3 to a Company-wide Procedure. Sections 4 & 5 consolidated to CMSS 3. No additional material changes to content.	K. Ashby	2.2



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1. INTENT

The purpose of this Procedure defines IGO's requirements for hazard identification and safety related risk management for individuals, projects and entire sites.

2. APPLICATION

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

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

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

3. OVERVIEW

This Procedure addresses IGOs risk management processes related to:

1. Personal Risk Management - Take 5 & JSEA (section 4)
2. Hazard Reporting (section 5)
3. Workplace Inspections (section 6)

For information regarding Site Risk Registers and Operational Risk Assessments (HAZIDs and HAZOPs) refer to **IGO CMSS3 – Risk Management**).

Risk is to be evaluated according to the approved IGO Risk Matrix (refer to **IGO CMSS3 – Risk Management**).

4. PERSONAL RISK ASSESSMENTS (TAKE 5 AND JSEA)

Personal risk management is the process that must be used by employees and contractors to manage the day-to-day risks they face as an individual and/or workgroup. The two defined processes for personal risk management applied at IGO projects and sites are:

- **Take 5s.** A formalised process requiring each individual to 'stop and think before they act'. A Take 5 must be completed prior to the start of, and before, every new job or when the job changes in an Operational Area¹.
 - Take 5s are to aided by the use of the IGO standard **Take 5 wallet** as approved corporately.
 - Personnel working in an 'Operational Area' must ensure that their Take 5 notebook is readily retrievable at the worksite.

Note: If a hazard is identified that the individual cannot control, and it impedes the individual's ability to complete the job safely, they must not proceed with the

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**.

job. The individual must notify their Job Supervisor immediately and a **'Hazard & Observation Record'** must be completed (refer to section 5).

- Job Safety & Environmental Analysis (JSEA).** A systematic and task specific risk assessment completed by the workgroup or individual undertaking a job. JSEAs must define the job steps, assess the associated hazards and identify the mitigating controls to be implemented. The completion of a JSEA is to be aided by the use of the **IGO JSEA Form** as approved corporately.

Note: JSEAs will improve the safety of a job only if those involved in the job are also involved in the preparation of the JSEA. The conversation about the job steps (i.e. 'how we plan to do the job'), the hazards involved, and how these hazards are to be controlled is as important as filling in the form!

Note: A JSEA form shall not be re-used once the job has been completed. An SWP shall be written where the job is required to be repeated on a frequent basis. Where the job is performed infrequently, a new JSEA shall be performed each time the job is to be performed. For further information on Safe Work Procedures, refer to **IGO CMSS 11 – Operating and maintenance procedures**.

Note: **IGO Major Hazard Cards** can assist in identifying hazards and controls during the JSEA process.

The following flowchart (Figure 1 – Personal Risk Assessment Process) illustrates the minimum steps IGO requires of everyone before they start a job in an Operational Area.

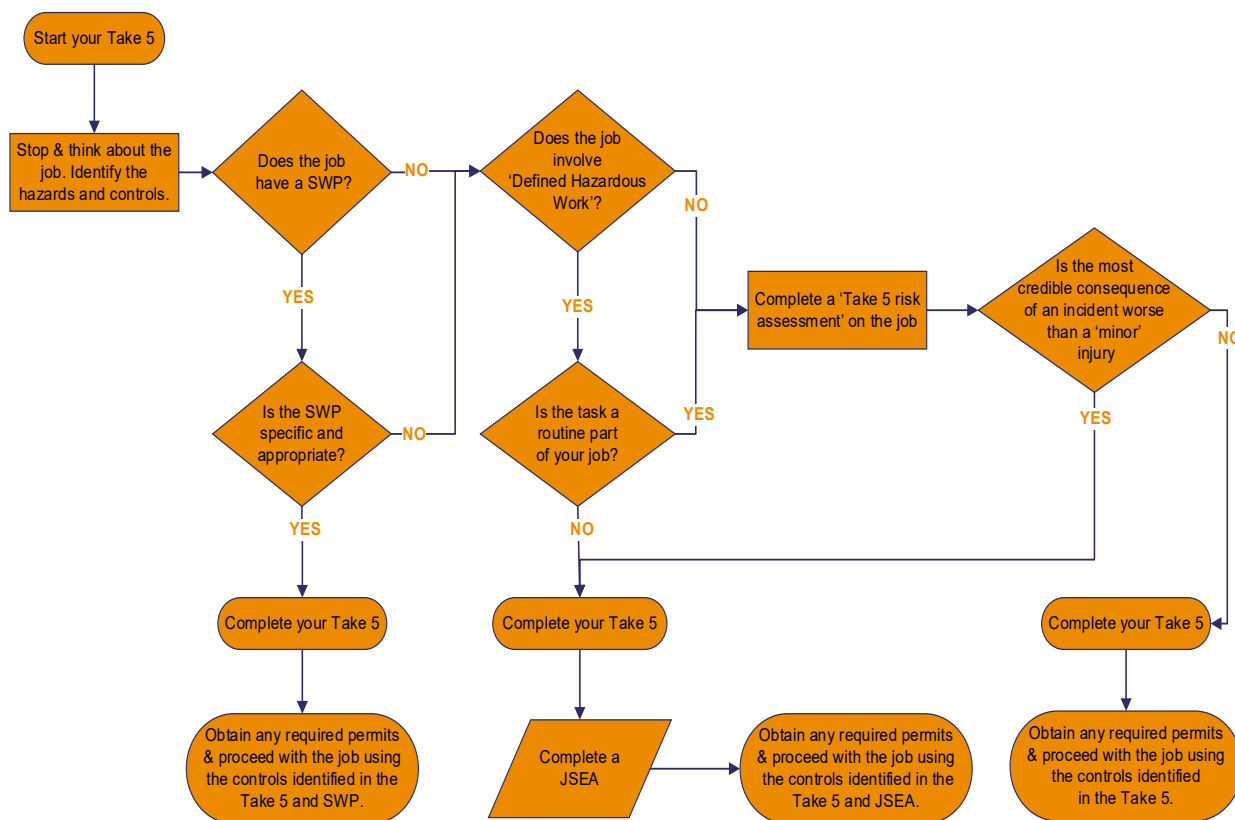


Figure 1 – Personal Risk Assessment Process

Note (1) If the Take 5 cannot be completed, the job must not proceed.



Note (2) All jobs involving Defined Hazardous Work (section 4.1) must be subject to either a Safe Work Procedure (SWP) or JSEA. No defined hazardous work may be completed in the absence of an SWP or JSEA. No exceptions.

Note (3) Tasks may only be deemed a routine part of one's job given the individual has been trained in the completion of the task, is verified as competent, and completes the task frequently.

Note (4) A JSEA must be completed if a directive has been made by the job supervisor irrespective of the above process.

4.1 Defined Hazardous Work

IGO has designated some jobs as Defined Hazardous Work (refer to **IGO GSS 14 – Defined Hazardous Work and Permit to Work**). Defined Hazardous Work includes:

- Working at heights
- Working in confined spaces
- Hot Work
- Isolations or Live Work
- Remote control equipment
- Working with High Voltage
- Non-mining excavation
- Tree felling
- Working with Registered Plant
- Scaffolding
- Dogging or Rigging
- Working with Explosives
- Working with controlled tools
- Working with Radioactive Sources
- Lone or isolated work
- Working with high pressure tools

5. HAZARD REPORTING

Everyone working in an IGO managed workplace has a general duty to a) be mindful of the hazards that may be present in their work area, b) 'remedy' hazards that they identify where practical, or c) in circumstances where they cannot remedy the hazard, report the hazard such that others can attend to it.

Where someone cannot readily remedy a hazard, they must report the hazard to their supervisor, or in their absence, someone in line management, and or their elected safety representative.

Note: At IGO, we expect everyone to exercise judgement when attending to or reporting hazards. Some hazards will, self-evidently, require an urgent response. We are dependent on each other to act to prevent injury or worse!

Once a hazard or observation is reported, the supervisor must:

- review all hazard & observation records and where necessary discuss the matter with the employee or as part of pre-start safety meetings
- decide what remedial action is required, if any
- or escalate the matter to their line manager
- provide feedback to the workgroup on hazards reported and the status of associated corrective actions.

Where actions arise from the hazard & observation records, the hazard and corrective actions must be captured in INX if they cannot be remedied within 24 hours.

6. WORKPLACE INSPECTIONS

The Site Manager (Registered Manager or General Manager) must ensure that each work area is inspected to verify the safety of the workplace. This activity specifically includes inspection for the purpose of identifying hazards posed by the environment, equipment and process. At IGO this is to be achieved by:

- Establishing areas for which each of their managers and supervisors is responsible (refer to **IGO CMSS 5 - Roles, Responsibilities and Accountabilities**).
- Requiring that, in the case of open pit or quarry operations, an inspection of the workplace is completed at least once during each working shift by the quarry manager, or by a person appointed by the quarry manager who is competent to perform such an inspection, to ensure that the workplace is safe for persons working there.
- Requiring that, in the case of underground operations, an inspection of the workplace is completed at least once during each working shift by a person who holds either a first-class mine manager's certificate or an underground supervisor's certificate to ensure that the workplace is safe for persons working there.

Note: The underground manager must, in respect of each underground workplace, consider whether the underground workplace should be inspected more frequently than once in each working shift due to the nature of the workplace or the type of activities being conducted in the workplace.

- Requiring that, in the case of other on-site workplaces, an inspection of the workplace is completed at a frequency pre-determined and document by line management. The frequency should be determined on a risk basis and shall consider any manufacturer recommendations, industry best practises and legislative requirements
- Involving elected safety representatives in workplace inspections. Value is often derived from having these individuals completing inspections outside of the areas in which they normally work.

Note: Workplace inspections often provide an opportunity to observe the behaviours of people, safe or otherwise. For further guidance on 'safety interactions', refer to **IGO GSS 13 – Behavioural and Administrative Safety**

7. IDENTIFICATION & VERIFICATION OF CRITICAL CONTROLS

A 'Control' is a device or activity to prevent a person's exposure to a hazard. Critical Control is a control that is deemed the most important among others to prevent a person's exposure to a hazard. The absence or failure of a critical control could significantly increase risk despite the existence of other controls. IGO identifies and records critical controls during the risk process (see section 4 and refer to Operational Risk Assessments in **IGO CMSS 3 – Risk Assessment**) and in safe work procedures. For further guidance on determining critical controls refer to the decision tree in Figure 2 - Aid to Identifying Critical Controls.

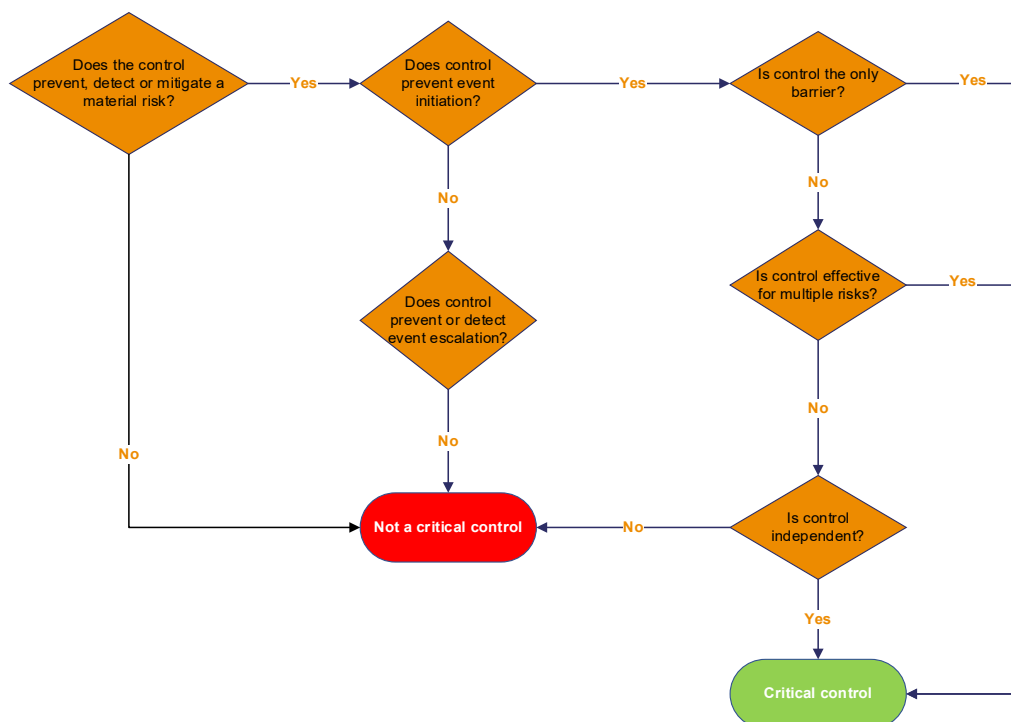


Figure 2 - Aid to Identifying Critical Controls

Source: ICMM International Council on Mining & Metals Critical Control Management Implementation Guide

Supervisors and managers are responsible for monitoring and verifying the efficacy of critical controls in the field. Activities for verification include (but are not limited to) reviewing currency of safe work procedures, the timely execution of maintenance programmes, participation in inspection programmes, and Visual Safety Leadership interactions. These activities are also supported by internal and third-party audits.

Note: A clear understanding of the critical controls associated with any given job will result in more productive and insightful “visible leadership” interactions (refer to *IGO GSS 13 - Behavioural and Administrative Safety*). The *IGO Major Hazard Cards* are prompting ques addressing Critical Controls for Visual Safety Leadership interactions.

Additionally, incident management and change management processes must review critical controls that were compromised and required improvements (see *IGO Incident Reporting and Management Procedure* and *IGO CMSS 12 – Management of Change*).

8. RESPONSIBILITIES

8.1 Site Manager

Site Managers (General Managers or Registered Manager) are responsible for:

- ensuring that they understand and aid in the communication of this Procedure
- making such arrangements as necessary to assure themselves that their site is operating in compliance with this Procedure
- ensuring that a site register exists, is reviewed, and reflects their management team’s assessment of the site’s most significant risks and controls
- determining the need or otherwise for the completion of Operational Risk Assessments in accordance with this Procedure.

8.2 Work Area Owners and Line Managers

Work Area Owners and line managers (i.e. those reporting to Site Managers or equivalents) are responsible for:

- ensuring that they understand and aid in the communication of this Procedure
- completing Operational Risk Assessments as required
- making such arrangements as necessary to assure themselves that their operational area has effective Safe Work Procedures that specifically address hazards and their controls
- ensure workplace inspections are scheduled, completed, and corrective actions are captured in INX
- ensuring change management processes are effected to manage risk, and risk reviews are updated accordingly (refer to **CMSS 12 – Management of Change**).

8.3 Supervisors

Everyone in a supervisory role, irrespective of title, is responsible for:

- ensuring that they understand and aid in the communication of this Procedure
- verifying that the personnel under their supervision complete Take 5s, JSEAs and report hazards
- assisting in the preparation of SWPs
- approving JSEAs
- being familiar with the hazards, mitigating controls and associated resources within their area of control
- eliminating hazards within their operational area, and where they cannot, escalating the matter through line management.

8.4 All personnel

All personnel are responsible for:

- complying with the requirements of this Procedure
- completing a 'Take 5' before every new or changed job within Operational Areas
- participating in the development of JSEAs and SWPs as required
- identifying hazards in the workplace
- controlling the hazard if competent and safe to do so
- making the area safe and contacting the supervisor if unable to control the hazard
- providing a completed hazard reports to the supervisor.

For further information on roles and responsibilities, refer to **IGO CMSS 5 – Roles, Responsibilities and Accountabilities**.

9. TRAINING & COMPETENCE

All site-based personnel working at an IGO controlled workplace must be trained and conversant in the application of personal risk management processes (i.e. Take 5s and JSEAs). Personnel must receive hazard identification, and risk assessment training appropriate to their roles and responsibilities.



Generic training presentation available on the IGO DMS for Personal Risk Management and Hazard Reporting.

10. RECORDS

Copies of the following documents must be retained:

- site risk register using IGOs enterprise risk software (Meercat)
- Operational Risk Assessments using the DMS or Meercat
- HAZIDs and HAZOPs using the DMS.

Action items identified from all risk management processes must be actioned track in the INX database with assigned responsibilities and close out dates.

All hazards identified through the hazard reporting process at IGO sites or projects will be formerly recorded into the INX database.

Training records shall be kept as per ***IGO CMSS 6 - Training, Competence and Awareness***.

11. RELATED DOCUMENTS

11.1 Common Management System Standards

- IGO CMSS 3 – Risk Management
- IGO CMSS 5 - Roles, Responsibilities and Accountabilities
- IGO CMSS 6 - Training, Competence and Awareness
- IGO CMSS 11 – Operating and Maintenance Procedures
- IGO CMSS 12 – Management of Change

11.2 HSES Standards, Procedures, Guidelines and Forms

- IGO GSS9 – Traffic, Road Travel & Mobile Plant Management
- IGO GSS 10 – Ground Control
- IGO GSS 13 – Behavioural and Administrative Safety
- IGO GSS 14 – Defined Hazardous Work and Permit to Work
- IGO GSS 17 - Inrush and Outburst
- IGO Incident Reporting and Management Procedure
- IGO JSEA Template
- IGO Major Hazard Cards
- IGO Operational Risk Assessment Template
- IGO Take 5 Wallet and Note Pads
- IGO Personal Risk Management and Hazard Reporting Presentation