



# **IGO GROUP SAFETY STANDARD 16 - HOT WORK**

**INDEPENDENCE GROUP NL**





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## 1. INTENT

This standard details IGO's requirements for the management of risks associated heat and the potential for burn injuries, fire or explosion as posed by work involving heat.

## 2. APPLICATION

This standard shall apply to all IGO sites and projects (exploration, construction and development) and to all IGO employees, contractors (including sub-contractors) and visitors to IGO sites and projects. All IGO sites and projects shall comply with the provisions of this standard and all legislative requirements for the location.

## 3. DEFINITION

Hot work is defined as the use of tools, equipment or techniques that could generate heat, flame or sparks of sufficient intensity to ignite flammable gases, liquids, dusts or materials. As a minimum, hot work includes grinding, welding, thermal and oxygen cutting or heating, poly pipe heat welding, the use of naked flames, and other similar operations.

## 4. DEFINED HAZARDOUS WORK

Hot Work is **Defined Hazardous Work**. Consequently:

- the task must be completed in accordance with a task specific Safe Work Procedure (SWP), **or** in absence of such, a JSEA. Refer to **IGO GSS3 - Personal Risk Management: 'Take 5' & JSEAs**, and;
- Unless exempted, the task must be formally approved by means of a Permit To Work (also referred to as a Hot Work Permit). **Refer to IGO GSS14 - Permit to Work.**

## 5. EXEMPTIONS

Sites and projects shall, by means of a risk assessment process, identify work areas or activities that are exempted from the requirement to have a Hot Work Permit in place (e.g. designated hot work workshops). Exemptions must be documented and approved by site management. Exempted work areas or activities must be a) sign-posted, and b) subject additional controls to manage the risk of injury, fire or explosion.

## 6. REQUIREMENTS

All sites and projects shall develop a general Hot Work procedure based on this standard. Sites and projects shall identify and comply with the legal and other requirements relating to working at height as is relevant to their jurisdiction.

### 6.1 Hot Work controls

SWPs and JSEAs shall give consideration to the need or otherwise of the following controls:

#### *Firewatcher*

A trained firewatcher may be required during and following completion of hot work, for the duration

identified in the hot work risk assessment and recorded on the Hot Work Permit.

**Note:** Where flammables cannot be removed from the working environment (eg rubber liners, rubber conveyor belts, etc), a Firewatcher is a *mandatory requirement*.

#### *Safe Atmospheres & Gas Testing*

Where there is the potential for the presence of flammable gases or vapours, atmospheric testing shall take place prior to the commencement of work. The requirements pertaining to atmospheric testing must be document as a Permit Condition in the Permit to Work.

#### *Managing Sources of Flammables*

Potential sources of flammable vapours and liquids such as vents, drains or contaminated ground within the vicinity of the work area shall be appropriately isolated prior to the commencement of work.

#### *Marking of Hot Work*

Consideration should be given to marking structures, pipelines or process vessels which may be heated as a consequence of hot work to enable those in the Work Team to see which pipelines or process vessels are potentially hot.

#### *Spark Containment and Screening*

Protective enclosures, where required, shall be fire resistant and prevent sparks, slag, or hot metal particles from penetrating openings or rolling underneath them.

Controls shall be implemented to prevent hot material falling onto passersby and or to protect structures, plant or potentially flammable materials from damage or fire where work is being undertaken at height.

#### *Signs, Security and Access Prevention*

Signs shall be prominently displayed to:

- Identify hazards associated with the Hot Work tasks
- Notify persons that they must not enter the Hot Work area unless authorised under a permit.

When identified as a control in the risk assessment, protective barriers and barricading shall be erected to prevent access by unauthorised persons. Refer to ***IGO GSS7 Barricades, Barriers and Signage***.

#### *Potential fuel removal (Rubbish, Grass, Bush & Timber)*

Before hot work commences near dry grass or bushed areas, the immediate area shall be cleared or wetted sufficiently to prevent ignition. Similarly rubbish and other flammables shall be removed.

## **6.2 Fire Bans**

A Hot Work Permit shall only be issued if it is in compliance with any fire bans applicable at the time of the work. Any approvals required by regulatory bodies to undertake hot work during fire ban periods shall be obtained prior to the commencement of work.

## 7. EMERGENCY PROCEDURES

The Hot Work Permit shall identify appropriate fire emergency response and first aid equipment that must be available at the site of the hot work prior to commencement of the work. At a minimum this shall include a fully charged fire extinguisher or firefighting water supply, appropriate to the task and materials, that it is positioned adjacent to the work area and is additional to those permanently installed in the work area.

When identified as a control in the risk assessment, the site emergency responders shall be notified of the proposed work.

## 8. TRAINING & COMPETENCE

Personnel issuing Hot Work Permits, accepting Hot Work Permits, acting as Firewatchers and undertaking Hot Work activities shall be trained and assessed for competence in the execution of those tasks.

## 9. RECORDS

Site and projects shall maintain and retain records in relation to:

- A Hot Work Procedure
- Exempted Hot Work areas and tasks
- The training and competency assessment of those involved in hot work.

## 10. RELATED DOCUMENTS

### 10.1 Common Management System Standards

- CMS ST-03 Risk Management
- CMS ST-12 Management of Change

### 10.2 HSES Standards and Guidelines

- IGO GSS3 - Personal Risk Management: 'Take 5' & JSEAs.
- to IGO GSS14 - Permit to Work.
- IGO GSS7 - Barricades, Barriers and Signage.

## 11. DOCUMENT CONTROL

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