

# KEDGE PTY LTD WORK HEALTH & SAFETY MANUAL

## Table of Contents

<b>1.</b>	<b>WHS POLICY .....</b>	<b>5</b>
1.1	GOALS: .....	5
1.2	OBLIGATIONS .....	5
1.3	RESPONSIBILITIES .....	5
1.3.1	<i>Management</i> .....	5
1.3.2	<i>Workers</i> .....	6
1.4	APPLYING THIS POLICY .....	7
1.5	REVIEWING THIS POLICY .....	7
1.6	COMMUNICATING THIS POLICY .....	7
<b>2.</b>	<b>INTRODUCTION .....</b>	<b>8</b>
<b>3.</b>	<b>HAZARD IDENTIFICATION, MANAGEMENT AND TRAINING .....</b>	<b>9</b>
3.1	RISK MANAGEMENT TOOLS .....	9
3.2	HAZARD IDENTIFICATION OR REVIEW .....	9
3.3	NON-STANDARD JSA's .....	10
3.4	STANDARD JSA .....	12
3.5	TRAINING NEEDS ANALYSIS .....	13
3.5.1	<i>Surveyor/Naval Architect Basic Training Requirements</i> .....	13
3.5.2	<i>Other Contractors/Employees</i> .....	13
<b>4.</b>	<b>PERSONAL PROTECTIVE EQUIPMENT .....</b>	<b>14</b>
4.1	PROTECTIVE/HIGH VISIBILITY CLOTHING .....	14
4.2	GLOVES .....	14
4.3	SAFETY BOOTS .....	15
4.4	SAFETY HELMETS AND HEADWEAR .....	15
4.5	EYE PROTECTION .....	15
4.6	HEARING PROTECTION .....	16
4.7	RESPIRATORY PROTECTION .....	16
4.8	SKIN PROTECTION .....	17
4.8.1	<i>Sunscreen</i> .....	17
4.8.2	<i>Barrier Cream</i> .....	17
4.9	KNEELING PROTECTION .....	17
4.10	SAFETY HARNESSES .....	17
4.11	GAS MONITOR .....	18
4.12	LIFE JACKETS .....	18
4.13	WET WEATHER GEAR .....	19
4.14	TORCHES .....	19

4.15	FIRST AID KITS.....	19
4.16	BACKPACK .....	19
4.17	CARE OF EQUIPMENT.....	19
<b>5.</b>	<b>HYGIENE AND HAZARDOUS SUBSTANCES.....</b>	<b>19</b>
5.1	HYGIENE .....	19
5.2	HEARING CONSERVATION .....	20
5.3	HAZARDOUS SUBSTANCES .....	20
5.3.1	<i>Hazardous Marine Creatures .....</i>	<i>21</i>
5.3.2	<i>Domestic Pets.....</i>	<i>21</i>
<b>6.</b>	<b>REMOTE LOCATION TRAVEL .....</b>	<b>22</b>
<b>7.</b>	<b>SINGLE PERSONS FIELD ACTIVITIES .....</b>	<b>23</b>
<b>8.</b>	<b>PORT SLIPWAYS AND BUILDERS YARDS .....</b>	<b>23</b>
8.1	TAS PORTS / OTHER SECURITY PORTS .....	24
8.2	COMMON HAZARDS .....	24
8.3	BULK LOADING TERMINAL HAZARDS.....	25
8.4	OIL AND GAS TERMINAL HAZARDS .....	25
8.5	SHIP BUILDING AND REPAIR YARD (INCLUDING VESSELS UNDERGOING MAJOR MAINTENANCE / MOBILIZATION) HAZARDS	26
8.6	RISK OF PLANT .....	27
<b>9.</b>	<b>ONSHORE BOARDING.....</b>	<b>27</b>
9.1	GANGWAYS .....	27
9.2	TIMBER WHARF EDGE .....	28
10.	OFFSHORE BOARDING .....	28
10.1	BOARDING FROM A LAUNCH .....	28
10.2	BOARDING BY BASKET TRANSFER .....	30
10.3	HELICOPTER TRANSFER AND VESSELS UNDERTAKING HELICOPTER OPERATIONS.....	31
<b>11.</b>	<b>ON-BOARD SAFETY.....</b>	<b>31</b>
11.1	HAZARDOUS SUBSTANCES .....	32
11.2	LIFEBOATS .....	33
11.3	HIGH VOLTAGE AREAS (>1kV) .....	34
11.4	WORKING AT HEIGHTS.....	35
11.5	CRANES AND DAVITS .....	35
11.6	CONFINED SPACES .....	36
11.7	CARGO HOLDS, TANKS AND VOID SPACES.....	37
11.8	DANGEROUS GOODS CONTAINERS .....	37
11.9	VEHICLE DECKS (RO/RO VESSELS).....	38
11.10	OIL TANKERS.....	38
11.11	GAS TANKERS .....	39

11.12	CHEMICAL TANKERS .....	40
11.13	POTENTIALLY CONTAMINATED VESSELS .....	40
11.13.1	<i>Hazards</i> .....	41
<b>12.</b>	<b>40-44 INNOVATION DRIVE (TECHNOPARK) OFFICE EMERGENCY PROCEDURE .....</b>	<b>42</b>
12.1	LONE WORKING PROTOCOL .....	42
<b>13.</b>	<b>FIELD WORK EMERGENCY SYSTEM .....</b>	<b>43</b>
13.1	MEDICAL EMERGENCY OR ACCIDENT/ILLNESS.....	43
13.2	EXTREME WEATHER EVENT/BUSH FIRE.....	43
13.3	GENERAL VESSEL EMERGENCY .....	43
13.4	CONFINED SPACE EMERGENCY .....	44
13.5	GENERAL AVIATION AIR TRAVEL .....	45
13.6	DELAYED FLIGHT/LATE JOB .....	45
<b>14.</b>	<b>POSTSCRIPT .....</b>	<b>45</b>

## 1. WHS Policy

### 1.1 Goals:

To provide a workplace that is free from risks to health and safety by implementing the highest possible standards to protect workers' health, safety, mental and social wellbeing;

To engage and consult with all workers and others affected by our business or undertakings to ensure hazards are identified and the risks associated with them removed or reduced to the greatest degree;

To create a workplace environment where workers and others affected by our business or undertakings are encouraged and supported to raise health and safety issues and help reduce and manage them.

### 1.2 Obligations

Management is firmly committed to a policy enabling all work activities to be carried out safely, and with all possible measures taken to remove (or at least reduce) risks to the health, safety and welfare of employees, contractors, authorised visitors, and anyone else who may be affected by our business or undertakings.

We are committed to ensuring we comply with the *Work Health and Safety Act 2011*, the *Work Health and Safety Regulations 2012*, relevant Codes of Practice and relevant Australian Standards.

### 1.3 Responsibilities

#### 1.3.1 Management

Management will ensure, as far as is reasonably practicable, the health and safety of:

- All workers engaged, or caused to be engaged by us;
- All workers whose activities in carrying out work are influenced or directed by us;
- Other people, by ensuring they are not put at risk from work carried out as part of our business undertakings.

We will also:

- Provide and maintain a work environment free from risks to health and safety; Provide and maintain safe plant (equipment), structures and safe systems of work;
- Ensure the safe use, handling and storage of plant (equipment), structures and substances; Provide adequate facilities for the welfare of workers in carrying out work;
- Provide any information, training, instruction or supervision that is necessary to protect all people from risks to their health and safety arising from work activities;
- Ensure that the health of workers and the conditions at the workplace are monitored for the purpose of preventing illness or injury of workers arising from our business;
- Follow all COVID protocols as required by our clients and government guidance Consult with workers on all matters relating to health and safety.

**Chief Fire Warden:** Kellie Easter has been appointed as Chief Fire Warden for our building.

**First Aid Officer:** Tim Harmsen has been appointed as First Aid Officer.

**Backup First Aid Officer:** To ensure we have a First Aid Officer available when needed, Callum-Thompson Young will act as the backup First Aid Officer, should Tim Harmsen be out of the office.

### 1.3.2 Workers

While at work, our workers must:

- Take reasonable care for their own health and safety;
- Take reasonable care that what they do, or what they do not do, does not adversely affect the health and safety of other people;
- Comply (so far as they are reasonably able to) with any reasonable instruction given by management;
- Co-operate with any reasonable policy or procedure for work health or safety that has been communicated to them;
- Not misuse or interfere with anything provided for work health and safety; Report all incidents and near misses immediately, no matter how trivial;
- Engage in consultation with management to identify, assess and control hazards and the effectiveness of such controls
- Follow all COVID protocols as required by our clients and government guidance Report all known or observed hazards to their supervisor or manager.

## 1.4 Applying this Policy

We seek the co-operation of all workers, contractor/employees, visitors and others whom may be affected by our business or undertakings.

We encourage and support suggestions to create a safe working environment as a result of all possible preventative measures being taken.

This policy applies to all business operations and functions, including those situations where workers are required to work off-site.

## 1.5 Reviewing this Policy

Management will review this policy annually, in consultation with workers:

- To assess the effectiveness of the policy;
- By reviewing our overall health and safety performance;
- By monitoring the effectiveness of policies and procedures.

## 1.6 Communicating this Policy

This policy (and related procedures) shall be displayed in our workplace/s.

All workers, contractor/employees and others affected by our business or undertakings will be provided with a copy through their manager/supervisor.

New workers will be provided with a copy as part of their induction.

### Relevant legislation

*Work Health and Safety Act 2011*

*Work Health and Safety Regulations 2012*

Darren Carey 28/04/2025



## 2. Introduction

This manual provides Kedge Pty Ltd workers, clients, contractors, visitors and other stakeholders with specific instructions and guidance relating to the hazards that may be encountered while carrying out vessel survey and other activities in the field, as well as more general policies and procedures. It uses the generic term 'worker' to refer to contractor/employees/surveyors. It is derived from and acknowledges work completed in this space by the Australian Maritime Safety Authority in 2015, which is appropriate given the Kedge area of expertise. We want our clients' vessels to go out and come back safe.

A safe and healthy workplace does not happen by chance or guesswork. We all must think about what could go wrong in the workplace and what the consequences could be. We must do whatever we can to eliminate or minimise health and safety risks arising from our business or undertaking.

Kedge Pty Ltd employees are expected to have a high level of understanding of the AMSA regulations and requirements. Any advice given by Kedge Pty Ltd is required to be correct and consistent. All contractor/employee are required to uphold Kedges standards and procedures when attending a location in accordance with the requirements outlined in this document.

This manual incorporates the safety related instructions and guidance as well as the information contained in the Work Health and Safety procedures, instructions to surveyors and a Job Safety Analysis (JSA).

An up to date copy of this manual shall be carried by all workers and referred to regularly. This forms the basis of your induction and will be covered comprehensively when you come on board as well as reviewed during toolbox meetings. Please note: This document may be updated at any time; all employees will be provided with a copy upon finalisation.

Kedge Pty Ltd is committed to a **"zero harm"** culture and takes health, safety and welfare of all contractor/employees and stakeholders seriously. Kedge Pty Ltd contractor/employee are required to uphold the WHS legislation at all times.



### 3. Hazard Identification, Management and Training

The WHS Act and Regulations require Kedge Pty Ltd to ensure that appropriate steps are taken to identify and assess all reasonably foreseeable hazards arising from work, and ensure that those risks are eliminated or minimised, as reasonably practicable.

#### 3.1 Risk Management Tools

Kedge Pty Ltd uses various risk management tools to identify and manage risks depending on different contexts and circumstances. They include:

- Kedge Pty Ltd standing WHS Hazard register; Internal procedures;
- Job Safety Analysis (JSA); both a standing one and one for 'unusual' activities, which is completed and acknowledged in GoFormz;
- The Kedge Pty Ltd WHS Hazard Reporting procedure.

We continually work on third parties' workplaces and vessels. Workers are to seek information on and be inducted into these sites and are to follow all instructions and site rules in accordance with the policies and procedures laid down by those companies.

**All workers have the authority to stop work** in the event that hazards are not able to be managed appropriately and the work poses a serious and imminent health and safety risk. A stop work event must be reported to the General Manager (GM) as soon as its practicable to do so but within 3 hours of the event by email or telephone.

#### 3.2 Hazard Identification or Review

Hazards may be identified during everyday activities, audits, or walk around inspections. Where a hazard is identified, the worker must report it according to the WHS Hazard Reporting procedure. This involves notifying the person conducting business of undertaking (PCBU) or if not present the GM via email or telephone. Steps are to be put in place to investigate, if necessary, report and in all instances improve processes to prevent a recurrence. All employees are also encouraged to report hazards/unsafe work practices they notice from our clients employees/operations/worksite.

All foreseeable hazards should be recorded, and risk assessed in the WHS hazard register after consultation between the GM and worker. The WHS hazard register will be reviewed periodically as

outlined in the WHS Risk Management procedure. The review must consider the existing measures to control the risks associated with each hazard and determine if the residual risk rating is as low as reasonably practicable, or whether further action is required to appropriately control the risk. Where further action is required, the existing controls should be reviewed and/or supplemented with other controls.

Hazards may be identified during everyday activities, audits, or walk around inspections. Where a hazard is identified, the worker must report it according to the WHS Hazard Reporting procedure. This involves notifying the person conducting business of undertaking (PCBU) or if not present the GM via email or telephone. Steps are to be put in place to investigate, if necessary, report and in all instances improve processes to prevent a recurrence. All employees are also encouraged to report hazards/unsafe work practices they notice from our clients employees/operations/worksites.

All foreseeable hazards should be recorded, and risk assessed in the WHS hazard register after consultation between the GM and worker. The WHS hazard register will be reviewed periodically as outlined in the WHS Risk Management procedure. The review must consider the existing measures to control the risks associated with each hazard and determine if the residual risk rating is as low as reasonably practicable, or whether further action is required to appropriately control the risk. Where further action is required, the existing controls should be reviewed and/or supplemented with other controls.

### **3.3 Non-Standard JSA's**

If an employee determines that a JSA is required to appropriately manage a risk after considering all other practical controls, reference to that JSA will always become a requirement before undertaking the activity.

A JSA should be used where:

- The need is identified in the risk register;
- An abnormal or emergency task is identified;
- As a training exercise.

For further information, refer to the JSA procedure.

Please note that the hierarchy of controls approach is to be adopted when mitigating risks identified as shown in Figure 1.

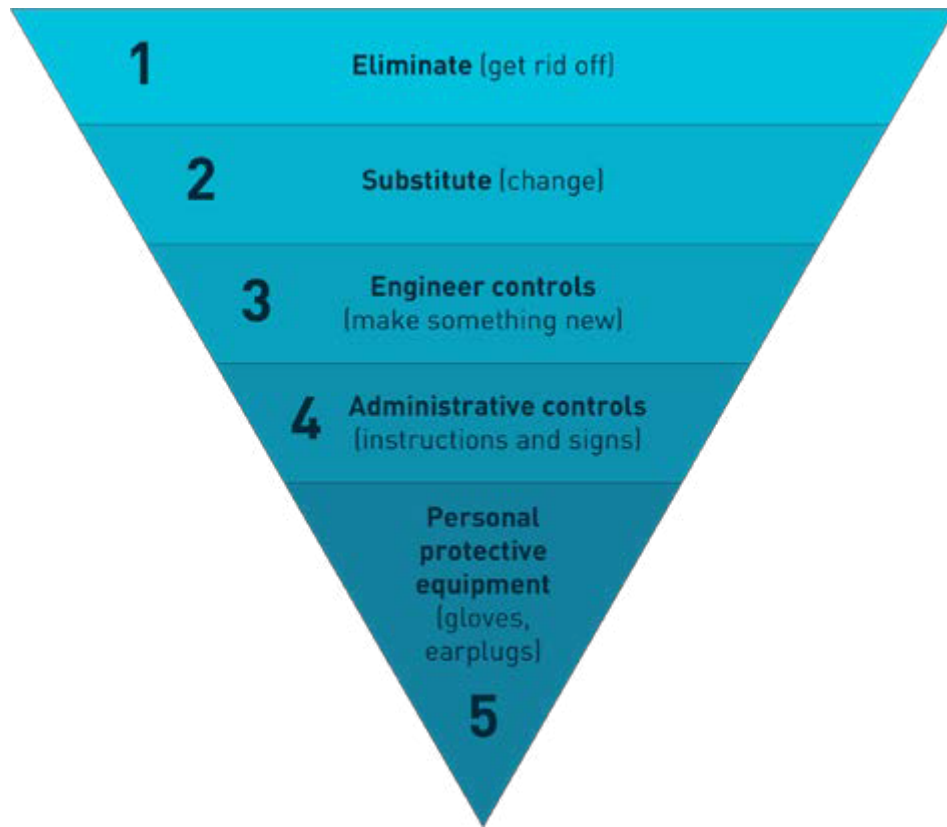


Figure 1: Hierarchy of Controls

### 3.4 Standard JSA

Kedge Pty Ltd has developed a "[JSA Standard JSA Procedure](#)" that surveyors and contractor/employee are required to undertake through a visual inspection before commencing any job. As part of the self-assessment process surveyors are required to ask themselves the outlined questions in the "*Kedge Pty Ltd Standard JSA Procedure*", and visually approve the [Kedge JSA checklist](#) deeming the workplace safe. If any unsafe hazards are identified through the initial JSA assessment, the surveyor / naval architect should complete a physical copy of the JSA checklist on their iPad's, and raise these hazards / safety concerns with the GM. If the GM is unavailable, contractor/employee should contact the next most senior management staff member. A follow up incident/hazard report form is to be completed once appropriate person is notified. If no concerns are raised prior to starting the job, the workplace is deemed as safe by Kedge Pty Ltd, contractor/employee and surveyors will be held liable for any decision they make regarding JSA procedures. GoFormz reloads this as having been completed.

The common hazards that could be found on a worksite are listed below in a non-exhaustive list. If any additional hazards are ever identified, they should be raised with management, and documented in the next staff meeting with an action plan to identify methods to mitigate the risk of such a hazard.

- **Inclement weather.** Strong winds, wet surfaces, very hot weather, very cold weather, ice, frost, snow, hail, heavy rain, extreme UV, lightning and surging waves are all hazards that may make undertaking a job unsafe and should be reported on in a JSA.
- **Trip hazards.** Cables, wires, ropes, loose tools, cracks in the ground, tree roots, rocks, trailers, and any other loose item on the ground pose a trip hazard.
- **Fall hazards.** Different from trip hazards, a fall hazard exists where someone may be able to fall from any path they are likely to walk/move along during a job. Jetty's, gangways, trailers, truck beds etc. all pose a fall hazard.
- **Chemical hazards.** Open chemical containers, recently chemically treated surfaces, precariously positioned chemical containers, or any source of potentially harmful chemicals pose a chemical hazard.
- **Asbestos risk.** Asbestos was commonly used in construction in Australia between 1940 and 1990 as a building material. However, exposure to this dangerous substance poses a significant health risk.
- **Slippery surface risk.** Many boat ramps will have very slippery surfaces where algae has settled on the ramp surface. This poses a significant risk when moving around a vessel both in and out of water.
- **Manual handling hazards.** Lifting, pushing, pulling, twisting and moving equipment can cause significant damage to an individual, and poses a significant risk of injury if done incorrectly.

- **Electrical hazards.** Exposed wires, corroded electrics, and any live wires pose an electrical hazard, and could lead to significant electric shock.
- **Noise hazards** - Many sites may have loud machinery operating which can cause ear canal damage. Hearing protection should be worn if noise exceeds 85 decibels.
- **Radiation hazard** – Some job sites may pose a radiation hazard, particularly where heavy telecommunications antennas and sonar are used. ALARA (As Low As Reasonably Achievable) should be employed to minimise exposure to radiation.
- **Heavy machinery hazards** – Many job sites will utilise heavy machinery for their daily operations. Extreme care should be taken to ensure workers are kept safe from the dangers presented by heavy machinery.

### 3.5 Training Needs Analysis

Kedge Pty Ltd has identified and will take steps to ensure that workers and contractor/employees have maintained the following training/qualifications.

#### 3.5.1 Surveyor/Naval Architect Basic Training Requirements

- Induction and reviews of this manual;
- Any AMSA stipulated training required in order to maintain accreditation.
- Senior 1st Aid Certificate; Confined Space Training;
- Working at Heights Training; HUET/BOSIET (only if offshore);
- Per requirements of any specialist tasks identified in induction or as work evolves.

#### 3.5.2 Other Contractors/Employees

- Per individual training needs analysis on commencement and during reviews;
- Senior 1<sup>st</sup> Aid Certificate

## 4. Personal Protective Equipment

Workers should always have appropriate personal protective equipment (PPE) for the job at hand and ensure that the equipment selected for use is manufactured to the appropriate Australian Standard (AS) and maintained correctly. It is the contractor/ employees' and employee's responsibility to provide and wear appropriate PPE for the job at hand. Kedge Pty Ltd will provide contractor/employee with the appropriate PPE. This can be done by contractor/employee purchasing and reimbursed or supplied at the Kedge Pty Ltd office.

It is important to remember that wearing PPE does not ensure total protection. PPE will reduce the severity of the incident but may not completely prevent injury. Workers must still work in a careful and considered manner.

The following list of equipment is considered as a minimum for field activities:

### 4.1 Protective/High Visibility Clothing

Appropriate protective and high visibility clothing shall be worn. Examples include long-sleeved drill shirt, drill pants and reflective vest. High visibility vests must be used when required and when their use doesn't constitute a hazard in itself. Long sleeves and long trousers for contractor/employees must be worn for all work.

It is Kedge Pty Ltd policy to prohibit the wearing of short sleeved shirts and shorts for workers working in locations where they are exposed to the sun. It is ok to travel in short sleeved gear, but full coverage clothing is required to be worn on site.

### 4.2 Gloves

Surveyors may need to wear suitable nitrile or rigger type gloves in situations where the hazards call for them and are to ensure they have them as part of their PPE. When working with hazardous substances the double gloving technique (wearing of inner and outer gloves) should be utilised to prevent contamination. Gloves are to be changed immediately after coming into contact with any hazardous substance or as soon as they become soiled or torn. For low hazard jobs, gloves are to be replaced every half hour. Workers need to be aware of any potential allergies/reactions they might have to a particular glove material and seek a glove made from an alternative material.

### 4.3 Safety Boots

Safety boots shall be worn at all times where there is risk of foot injury and worn prior to boarding a vessel. The type and style of boots should be one of personal choice, but they should have a protective toe cap (metal or composite cap) and effective non-slip soles. All must have pierce protection on the sole as a matter of course.

### 4.4 Safety Helmets and Headwear

A safety helmet, with a chin strap in place and fitted, should be worn in all slipway facilities, builders' yards and where there is a risk of head injury during the task being performed. Due to the nature and size of some vessels it may not always be practicable to wear safety helmets whilst undertaking surveys, inspections or investigations. Workers should assess the risk and if necessary, utilise the JSA Procedure. Workers should always follow local work site instructions. For low headroom situations a bump cap may be indicated.

Due to the hazards of exposure to the sun, workers should wear a wide brim hat or cap when outdoors. The hazards of excessive exposure in the sub-tropics and tropical areas should always be kept in mind.

### 4.5 Eye Protection

Many slipway facilities, builders' yards and ports will not allow access to visitors who are not wearing safety glasses or goggles. It is important to distinguish the difference between safety goggles and glasses; the latter may not afford good protection from dust, airborne particles, fumes, liquids or vapours. Therefore, it is good practice to always have both available for use. Safety sun glasses that reduce UV radiation are appropriate when exposed to bright light conditions.

Clear safety goggles should be worn around cargoes like grain and dangerous liquid cargoes, where there is a risk of eye injury from dust, airborne particles and splashing. Goggles come in a variety of styles, many of which are suitable for wearing over normal spectacles. Full face shields offer the maximum protection against splashing and can be worn over safety goggles and prescription glasses. Workers that regularly work in the field and wear prescription glasses may wish to upgrade to prescription safety glasses and goggles that fit over glasses.

## 4.6 Hearing Protection

The national standard for exposure to noise in the occupational environment is an average daily exposure of 85 decibels. This is consistent with overwhelming scientific evidence which indicates that exposure levels above 85 decibels represent an unacceptable risk to the hearing of those exposed. The installation of an appropriate decibel measuring application on a worker's mobile may assist in determining the local conditions.

When exposure to loud noise is expected (such as in engine rooms, in shipyards generally and in the vicinity of noisy machinery on deck or in the terminal), ear protection must be worn. Where possible, ear muff attachment (with safety helmet) should be used.

Suppliers of hearing protection should be informed that the hearing protectors must conform to Australian Standard AS 1270. Individual selection of hearing protection should be based on:

- The degree of protection required;
- Suitability for use in the type of working environment that the work is undertaken;
- The comfort, weight and clamping force of the hearing protector;
- The fit to the user;
- The suitability for use in conjunction with any other personal protective equipment that might be used at the same time.

While the use of ear plugs is convenient, they have some disadvantages and should only be worn where short-term exposure is expected. Each worker should determine the size of plug that is most effective and comfortable for them. It should be noted the use of plugs can lead to ear infection if care is not taken with respect to hygiene.

For long term exposures to noise, such as conducting comprehensive engine room surveys, ear defenders of a suitable rating must be worn.

## 4.7 Respiratory Protection

Workers should use a dust mask in environments which generate dust/air borne particles such as grain and concentrate cargoes. Depending on the nature of the environment to be encountered, it may be necessary to have a cartridge style respirator for special use; workers should consult the relevant Safety Data Sheet (SDS). Workers need to be aware of any potential allergies/reactions they might have to a particular masks material and seek a mask made from an alternative material.



Remerging concern about silicosis has led to a review of activities around sites where it may be an issue. Masks suitable for the risk must be worn when hazard identified. If required to do so by the worksite or government direction, an N95 mask must be worn to protect the employee or contractor from Covid risks.

## **4.8 Skin Protection**

### **4.8.1 Sunscreen**

Workers must have a supply of sunscreen for use as required prior to exposure to the sun. Field contractor/ employee should carry sunscreen of SPF 50 in their personal travelling equipment.

### **4.8.2 Barrier Cream**

Each worker must have a supply of barrier cream for use where a dermatitis risk may exist. Such creams (Vaseline, for example) are useful for application to exposed skin areas, when in the vicinity of certain chemicals and oils.

Barrier cream is to be applied by workers prior to exposure/handling of potentially sensitising materials such as epoxies (e.g. for FRP vessel test panels) etc. Safety data sheets indicate possible risks and should be consulted as part of the initial risk assessment. Barrier cream is a second means of defence; gloves should always be worn.

## **4.9 Kneeling Protection**

For prolonged kneeling during inspections workers are required to use appropriate knee pads.

## **4.10. Safety Harnesses**

Safety harness should always be used in accordance with the requirements of the Safe Work Australia National Code of Practice.

All surveyors must undergo working at heights training before they undertake any working at heights or purchase a safety harnesses and snap hook assembly. Surveyors must ensure that their personal

safety harness is suitably adjusted, properly fitted and cared for. This includes inspection by surveyor before and after each use.

As a general rule, Kedge workers are not to climb/inspect above head height where access is not protected until training in height access has been completed and appropriate PPE used. Examples include the climbing of sailing vessel masts, access onto unprotected crow's nests on purse seiners etc.

## **4.11 Gas Monitor**

All surveyors are to have with them an in-test, calibrated and serviceable 4 gas meter if their work involves entering confined spaces in any way whatsoever.

Portable and 4 gas meters are to be tested and calibrated at the intervals determined by the manufacturer. Records of tests are to be maintained by the surveyor. Under no circumstances are 'out of date' monitors to be used.

Third party monitors are not to be used by workers unless permission from the Managing Director is sought and received.

Before entering a confined space it's essential to monitor the air inside to test for atmospheric hazards. Atmospheric samples should be taken at the top, middle and bottom of the confined space. The test is to be conducted remotely using the gas monitor. The test should ensure proper oxygen levels are present and no combustible or toxic gases are present.

Monitors are not to be used by any workers not competent in their use. It follows that confined space entries are not to be done by workers not trained to do so.

## **4.12 Life Jackets**

It is possible that a worker could be called upon to attend a vessel at sea. Workers are to wear an appropriate serviced PFD

(Min 150N) when attending any vessel afloat, even if not specifically required to do so by the third-party SOP.

### **4.13 Wet Weather Gear**

Workers should ensure they are appropriately equipped to suit the local climatic conditions.

### **4.14 Torches**

Every surveyor should have an intrinsically safe torch which can be used in all environments encountered.

### **4.15 First Aid Kits**

Surveyors should carry a personal First Aid kit. Information should be given to clients to let them know what to do in the event of an injury to the surveyor.

### **4.16 Backpack**

Workers must have a weatherproof backpack or strap bag to carry essential work tools so that hands remain free when boarding a vessel. As a standard procedure equipment is not to be carried by hand when boarding it is to be passed across or a rope tied to it and hauled up if the vessel is on the hard.

### **4.17 Care of Equipment**

Workers are responsible for ensuring that their PPE is maintained in good condition and replaced as necessary. Specialty items such as gas monitors, safety harnesses and inflatable life jackets should be maintained and serviced as per manufacturer's instructions. Damaged or defective PPE must be discarded or repaired according to the manufacturer's specifications.

## **5. Hygiene and Hazardous Substances**

### **5.1 Hygiene**

A high degree of personal hygiene is expected of all workers. In high and humid temperatures, clothing should be changed regularly to minimize the risk of heat rash and other forms of dermatitis.

All cuts and abrasions should be promptly and properly treated, particularly when working in the vicinity of livestock and animal products and waste.

Workers may be inadvertently exposed to biological hazards through contact with hazardous substances or human/animal wastes. This can lead to skin and infection problems. Thorough washing is required to maintain cleanliness and reduce the risk of infection. Examples include fish farm 'morts' which are often encountered during work.

Care must be taken to ensure that appropriate, disposable protective clothing is worn and that any cuts or abrasions are promptly dealt with. Always exercise caution and do not hesitate to consult a doctor should unfamiliar symptoms develop. Worn disposable PPE must be disposed of in accordance with customers or local authorities' protocols.

*An important aspect of hygiene is to ensure that in travelling between farms/locations you do not inadvertently transfer diseases/ parasites etc from site to site. Make yourself aware of the protocols required by individual companies to prevent this occurring, wash/sterilize equipment, yourself and vehicles and in all instances seek local advice if you feel this hazard could possibly exist.*

Kedge will pay for flu shots for all workers. When requested and due, the GM shall arrange payment.

## **5.2 Hearing Conservation**

Workers may be exposed to hazardous noise levels. It is suggested that workers undergo periodic hearing tests to determine if any exposure is causing a deterioration in hearing capacity. Kedge Pty Ltd does not require pre-engagement hearing assessment for contractor/employees but does require appropriate hearing protection to be worn for all tasks the contractor/employee performs for the company.

## **5.3 Hazardous Substances**

It is possible in the course of carrying out a survey or compliance task that workers may be exposed accidentally or otherwise to hazardous substances. Workers should ensure that, before using or working near chemicals, solvents or other hazardous substances, they obtain and read the relevant Safety Data Sheet (SDS) and use appropriate PPE at all time.

Extreme caution should be taken to ensure that inspections involving hazardous substances are undertaken in the best possible circumstances - good visibility and ventilation are essential. Personal

gas monitors must be used in these areas and the atmosphere samples analysed before entering. Do not enter fumigated areas until the space has been thoroughly ventilated and cleared for entry by the relevant authorised person.

Eye, skin and hand protection is important. For dust producing cargoes, it will be necessary to also wear a particle mask. Some substances may cause severe allergic reactions (similar to the response some people have to penicillin). Examples include pencil pitch, fibre glass resins and some vegetable products (like mould spore). For these a full-face cartridge respirator may be required if indicated. For dust producing cargoes, employees/contractors must also be cautious of dust explosion hazards.

Be alert to the possibility of these effects and seek medical assistance if required. Workers should be aware that hazardous substances are also stored and transported at ports / terminals.

Workers with known/ particular sensitivity to a substance must make this known and if necessary, wear or carry an appropriate alerting solution to allow medical treatment to occur in the event of an incident.

### **5.3.1 Hazardous Marine Creatures**

As Kedge expands nationwide, we can expect to come into environments which contain hazardous marine creatures. These include crocodiles, jellyfish, sharks, rays etc. Kedge contractor/employee are not to enter the water in the course of their work unless specially authorised by the GM to do so. Care should be taken handling items which come into contact with water as Irukandji, blue bottle and similar animals may be present. Seek local briefings and heed local warnings. All prior precautions and appropriate PPE should be worn when working in these areas to mitigate the hazard. Appropriate PPE includes the use of gaiters/removable overalls.

### **5.3.2 Domestic Pets**

In 2019 a worker was bitten by a dog. We may find domestic pets on worksites and where we do so we need to be mindful of the risk that they might bite and request that they be locked away. In all instances we are not to engage with these animals.

## 6. Remote Location Travel

Contractor/employees frequently travel to remote locations or ports. Hazards that may be encountered include:

- road closures;
- weather (flood, rain, extreme heat, fires etc.);
- time of day (dusk, dawn being times of reduced visibility and increased animal activity);
- limited refuelling stops;
- limited mobile telephone coverage; heavy vehicles;
- interaction with animals or roaming livestock;
- uneven or damaged road surfaces;
- long hours on the road;
- vehicle breakdown with no nearby repair facilities.

Workers are responsible for scheduling their driving and travel to ensure that they rest adequately and are able to perform their duties competently on approval at the work location. Any issues or concerns with scheduling, travel etc. are to be discussed with the GM at the earliest opportunity.

The contractor/employee is responsible for providing their own late model, reliable, insured transportation. The vehicle used must be suitable for the intended purpose and workers should take into account the following:

Some considerations for safe travel include:

- Accurately estimate time of departure and arrivals; Plan travel accordingly;
- Ensure adequate supplies (e.g. fuel, first aid kit, food and water, mobile phone and charger) for the journey;
- Inspect the vehicle to ensure roadworthiness prior to driving to location; Check road conditions before departure;
- Refrain from driving during twilight or in darkness, especially where roaming animals are present;
- Contact the relevant officer for the site that is being visited, where possible

## 7. Single Persons Field Activities

The majority of the field activities are carried out by a single unaccompanied worker. Sometimes this introduces extra hazards including the potential for violent and abusive behaviours from disgruntled persons, either connected with the client or in the vicinity.

Kedge Pty Ltd has zero tolerance for this type of third-party behaviour and employees and contractor/employees are required to report any such behaviour or near miss to the GM as soon as practicably possible, having first extricated themselves from immediate danger.

Clients who abuse/assault contractor/employees will not be provided with services in future and will be reported to police or other relevant authorities.

During single person field activities in order to ensure their personal WHS contractor/employee must:

- Carry a mobile telephone at all times (unless not permitted in which case a standby person is to be tasked to attend the surveyor at all times);
- Exercise care when dealing with difficult and potentially volatile behaviours or situations;
- Advise owner/master on appropriate actions in the event of an emergency; Contact the GM if there are any safety concerns;
- Contact emergency services if in immediate danger.

## 8. Port Slipways and Builders Yards

The entry and exit of ports, slipway facilities and builders' yards are often controlled by external parties. The wearing of essential PPE, such as high visibility clothing, long sleeve shirt/long trousers safety boots, safety helmet, gas monitors safety glasses and lifejacket is often a pre-requisite to entering these areas. Workers may be required to complete a safety induction course before being admitted to a particular port or yard.

Workers must comply with all reasonable requests, including but not limited to:

- The completion of port, facility or yard safety inductions;
- Security and identification checks;
- The wearing of prescribed PPE;
- Port, facility or yard safety procedures and emergency plans.

Workers must at all times remain aware of their surroundings and be vigilant of hazards that may exist or may arise. If there is serious concern for personal safety, abort the visit or inspection and report using the “Kedge Pty Ltd Hazard/Incident form”.

## 8.1 TAS Ports / Other Security Ports

When operating within Tas Ports or similar facilities workers are to operate to Tas Ports regulations, or in their absence to Kedge Pty Ltd policies and procedures. At all times as a minimum requirement workers are to follow Kedge Pty Ltd Work Health & Safety Manual.

## 8.2 Common Hazards

While the environment can vary from site to site, common hazards associated with accessing ports, builder’s yards and repair facilities are:

- Noise;
- Weather (sun, rain, heat);
- Dust, dirt and other particulates;
- Moving vehicle and machinery;
- Crush hazards due to moving/falling objects and machinery;
- Interaction with machinery and overhead cranes;
- Falling objects/cargo;
- Restricted walkways;
- Poor illumination;
- Toxic or noxious vapours and flammable materials;
- Mooring ropes and wires under tension.

Workers should be escorted and, where provided, terminal vehicles should be used. Precautions to take when driving include:

- Comply with the port, builder’s yard or repair facility traffic management policy and rules;
- Follow speed limits, road markings and signage;
- Avoid driving in restricted areas or in the vicinity of a vessel loader when it is moving;
- Be vigilant of other traffic, pedestrian and mechanical equipment (such as forklifts, straddle carriers);
- Roaming livestock;



- Livestock excretion/discharge;
- Heavy vehicle traffic;
- Slippery surfaces.

### 8.3 Bulk Loading Terminal Hazards

Workers should be aware of:

- Dust, grit and other particulates (coal dust, alumina, sulphur, copper, grain dust etc.);
- Close proximity to moving parts (rollers and belts with conveyor systems);
- Remote control of loading/discharging;
- Slippery surfaces.

Workers must take the following precautions:

- Wear essential PPE (including safety goggles, dust/particle mask, gas monitor, safety gloves and hearing protection);
- Avoid areas with high dust concentration;
- Observe no smoking/naked lights safety signs;
- Identify the location of safety showers and nearest eyewash stations.

Access to the vessel at some bulk ore terminals is often by means of an exposed, narrow elevated jetty up to 20 m high and 3 km in length. Single vehicle access running parallel to the conveyor belt is normal and safety rails are not always fitted. Modern bulk handling systems are often computer controlled and monitoring may be remote from the discharge or loading point. Therefore, electronic equipment (e.g. mobile telephones, VHF radio) may need to be switched off and handed to terminal workers at check points.

### 8.4 Oil and Gas Terminal Hazards

Workers should be aware of the flammability and toxicity of petroleum products. Exposure to petroleum gases may cause narcosis, with symptoms that include headaches, eye irritation and dizziness. The toxicity of such gases can be influenced by the presence of relatively small amounts of aromatic hydrocarbons (such as Benzene, a carcinogen) in refined petroleum products, and by Hydrogen Sulphide present in crude oils. Chemical gases such as Vinyl Chloride Monomer are also carcinogenic and strict precautions against exposure must be taken.

Workers must take the following precautions:

- Wear essential PPE (including safety goggles, dust/particle mask, gas monitor, safety gloves and hearing protection);
- Surrender equipment such as mobile telephones, calculators, non-intrinsically safe battery-operated torches, matches, cigarette lighters, where required;
- Do not smoke (except in clearly defined accommodation areas);
- Endeavour to keep exposures to a minimum and ensure the appropriate Safety Data Sheet (SDS) is available.

## **8.5 Ship Building and Repair Yard (including vessels undergoing major maintenance / mobilization) Hazards**

Workers should be aware of:

- Hot work (grinding sparks, flashes);
- Toxic fumes from welding and painting solvents;
- Open and uneven flooring;
- Loose equipment and machinery parts (e.g. welding cables, pneumatic and oxy/acetylene hoses); Unguarded rotating machinery;
- Poorly illuminated areas;
- Temporary scaffolding (sharp steel edges)

Workers must take the following precautions:

- Follow safety and security instructions and procedures of the yard;
- Be accompanied during visit as restricted entry to certain places may be applied;
- Wear appropriate PPE. This should be clearly advised and signposted. Special safety equipment associated with the nature of the yard (e.g. ear plugs and safety glasses) is often available on site;
- Do not undertake entry into confined spaces such as ballast tanks or tanks recently painted if not required. When it is necessary to do so, workers must follow the safety procedures of the yard and the requirements of Kedge Pty Ltd.'s confined space entry policy;
- Wear a personal gas monitor.

## 8.6 Risk of Plant

In the workplace, 'plant' refers to machinery, tools, equipment, and components that can pose risks such as entanglement, crushing, cutting, or exposure to hazardous conditions like electricity or noise. These risks must be identified in a Job Safety Analysis (JSA) before work begins to ensure hazards are clearly understood and managed. At Kedge, we are committed to doing everything reasonably practicable to eliminate or minimise risks of plant for all staff, in line with the Code of Practice: Managing the Risks of Plant in the Workplace (WorkSafe Tasmania, 2024).

This includes ensuring proper maintenance, safe operating procedures, and adequate training and supervision for all equipment used.

## 9. Onshore Boarding

While the master must ensure that the means of access to the vessel provided for persons boarding or disembarking from the vessel is safe, the primary responsibility for determining if it is safe to board rests with the worker and care must always be exercised when boarding vessels.

Workers are to ensure all means of boarding are appropriate to the situation, ladders etc. are secure and any equipment is either able to be safely carried. An appropriate safe ladder must be provided by the contractor/employee and used when necessary/when the proposed ladder is not suitable.

### 9.1 Gangways

Where a vessel's gangway is used for access, it must be fully and completely erected with guard rails and safety nets in place before it is used. Many terminals have multi-level permanently stationed boarding arrangements, which are connected to the vessel by means of a catwalk.

When using either of these arrangements for access, follow these precautions before boarding:

- Assess the condition and suitability of the gangway/brow (steepness, rigging, free of obstructions, no slippery surfaces, safety rails and safety nets suitably rigged);
- Be aware of any gangway/brow movement caused by vessel listing or surging; Maintain three points of contact at all times;
- Take your time, do not rush;

- Check that the stanchions and supports are properly rigged and safe; Wear non-slip safety footwear;
- Be aware of trip hazards which may exist;
- Ensure all items are in a carry bag/back-pack, so that hands are free for holding on at all times;
- Ensure straps and other loose ends are tucked in.
- If a gangway is determined to be unsafe, abort the visit and contact vessel's agent, master or facility to ensure that they provide safe means of access.

## 9.2 Timber Wharf Edge

Workers should ensure the following precautions are taken:

- Wear 150N, in service life jacket (with auto inflation);
- Use dedicated stairs for access to the wharf edge closest to the gangway;
- Look for loose or damaged planking on wharf edge and keep clear of it;
- Keep well clear of the wharf edge;
- Check securing of the gangway and angle of bottom platform. Bottom platform should be horizontal, if not ask duty officer to adjust before boarding;
- Be aware of slipping hazards caused by wet areas, wear non-slip boots.

## 10. Offshore Boarding

### 10.1 Boarding from a Launch

Not all contractors/employees will be fit enough to manage the physical demands of launch transfer and Kedge Pty Ltd has

no expectation that a contractor/employee shall do so if they are not able to. In this case an alternative should be sought. Workers should be aware of:

- Slips and trips on jetty/launch/ladder/vessel;
- Falling into water;
- Crush or contact injury due to falling between vessel and jetty;
- Contact with mooring lines;
- Marine growth;
- Seasickness;

- Sun exposure.

When boarding the launch, workers should ensure the following precautions are taken:

- Ensure an induction/safety brief from the launch crew happens and as a minimum wear appropriate;
- PPE and life jacket (inflatable with auto inflation);
- Ensure either vessel crew or launch crew is watching the evolution; Hold on to rails or rope;
- Be aware of wet and slippery surfaces;
- Follow instruction of launch contractor/employee;
- Request launch master to provide adequate illumination of the boarding area; If possible, carry out transfer during day light hours;
- Exercise caution when boarding due to sea swell and weather;
- Keep both hands free and arrange for accompanying bags or backpacks to be hoisted up by rope rather than on your person;
- Look out for firm grip area and potential hazards when stepping on;
- Take motion sickness medication if prone to sea sickness
- Be aware of hazardous marine growth creating slipping hazards, cuts and abrasions; Apply sunscreen and sun protection as appropriate;
- Refrain from unnecessary moving about while on board the launch.

Boarding from a launch to the vessel can be done in three ways, using:

- A lowered accommodation ladder;
- A pilot ladder;
- A combination ladder if the vessel's freeboard exceeds 9m.

Timing of a launch boarding is critical; the transfer must be done when the launch is at the top of the wave or swell crest, so that the launch drops away as the ladder is climbed, giving time to clear the danger zone. Take some time to assess the variance in relative motion and wave height before committing to the transfer.

Unless the weather is calm, it is preferable to board using a pilot ladder, rather than a gangway. A visual inspection of the ladder's condition, cleanliness and state of repair should be conducted from the launch. Always note that the ladder is properly manned and fitted with spreaders with the steps

resting firmly against the vessel's side. The ladder should hang straight and be of sufficient height above the water to enable easy transfer, but at the same time not get crushed by the motion of the launch.

When boarding, exercise caution and follow instruction of launch crew. The boarding should take place from the lee side and the responsible crew member should be in attendance at the vessel's ladder. The use of pilot ladder manropes is a matter of personal preference. One of the methods of using the ladder ropes to hold on to is to pass the manropes through your arms and this allows the climber to "clamp" the ropes between their arms and body should their hand grip fail.

Under no circumstances should a worker climb a ladder which has not been properly rigged, in poor condition and, not well illuminated at night. If workers encounter rough weather or high sea swell conditions that increase the risk during transfer, they should not proceed and should notify their supervisor.

The GM advises that contractors/employees should exercise a 'stop work' approach to all unsafe or potentially unsafe situations which applies to offshore boarding. Do not undertake the transfer if you are in any way unsure as to its safety.

## **10.2 Boarding by Basket Transfer**

This is an operation sometimes carried out from the deck of an offshore supply vessel (OSV) where a basket is lowered by the rig crane. Workers being winched stand on the outside of the basket on a base board and loop their arms through the sides. The basket is then lifted clear of the OSV and swung out before being hoisted to the rig.

Workers should pay particular attention to the instructions of the OSV master and should wear appropriate PPE and suitable life jacket (with auto inflation).

It is a requirement that informed consent must be given for basket transfer and it should only be used as a last resort.

## 10.3 Helicopter Transfer and vessels undertaking Helicopter Operations

Kedge Pty Ltd contractors/employees anticipating helicopter transfer to worksites are to have appropriate, in date HUET training.

When travelling via a helicopter, workers must have a pre-flight brief and comply with reasonable directions from the pilot, attendant or aircraft personnel, However, workers maintain the authority to stop work in the case of imminent serious safety risk. In this case, the worker should report any serious safety risk to the pilot.

The workers should only approach or leave the aircraft in the direction indicated by the pilot. Under no circumstances whatsoever should a conventional helicopter is approached from the rear

## 11. On-board Safety

Workers should be aware of their duty of care obligations to comply with safety instructions when on board vessels. Workers must always be accompanied by a responsible person from the vessel and be aware of:

- Slippery decks, particularly with granular cargoes;
- Deck obstructions (pad eyes, wires, other fittings);
- Electrical/radiation hazards;
- Clear overhead height;
- Mooring arrangements (self-tensioning winches); Cargo operations; opening/closing hatches;
- High pressure gas cylinder stowage (oxygen/acetylene);
- Atmosphere hazards – oxygen deficient/explosive/toxic;
- Damaged/buckled ladders platforms and handrails;
- Crush injuries due to moving or falling objects/machinery and swinging doors.

In addition, survey workers are often required to lift hatches to perform their work. In all circumstances this is likely to happen contractor/employee are to make it clear to vessel contractor/employee that they will be doing so: a statement to the effect that *'I will be opening hatches*

*to do my work- please can you brief all vessel personnel that I will be doing so and ask them to exercise caution'.*

When testing is required of any on-board system survey contractor/employee are to get the attending person or a competent person on the vessel to do so, to ensure that inadvertent damage or hazards aren't created. Examples include any electrical or fire panel testing, use of pumps or winches/windlasses etc.

## **11.1 Hazardous Substances**

Workers must be aware of potential exposure to hazardous substances on board vessels. If necessary, they should consult the vessels' crew to confirm, in advance, the nature of any hazardous substance:

- Jewellery is removed including necklaces, watches wristbands and rings; Long hair is tied back appropriately or restrained with a net;
- Appropriate PPE is worn;
- The machine is properly guarded;
- The location of the emergency stop is known.

Machinery that is subjected to closer or internal inspection must be properly stopped, isolated and tagged out. Sources of power such as springs, pneumatics, counterweights, rams must be made safe or released. Care should be taken to ensure rams for watertight doors and capacitors are made safe. Machine guards should never be removed unless the machine has been stopped, isolated and tagged out. Isolation remains the duty of the vessel's crew, but workers must be satisfied with its efficacy, and place their own tags (as part of the tag out arrangements) if they are to be exposed to its consequences.

Pressure system hazards can cause severe damage. Workers must ensure that lines and pressure vessels have been effectively de-pressurised by crew with blanks and bleeds, where necessary. These arrangements must be checked personally before proceeding with the job and tags applied independently to isolations where appropriate. Pressure relief valves should be checked for effective operation before undertaking work on pressure vessels or lines. Cool down and thermal insulation techniques should be employed to reduce risk of exposure from high temperature.



Sewage systems present hazards from oxygen depletion, hydrogen sulphide generation and explosion hazard due to methane build up. In the normal course of activity if entry is required, they should be treated in the same manner as confined spaces and isolated, cleaned and tested accordingly.

Insulation can present a hazard, particularly on old vessels where there may be a risk of exposure to asbestos; if in doubt, workers are to remove themselves from the area and require the vessel operator to test and certify as safe using an appropriately certified consultant.

## **11.2 Lifeboats**

Lifeboats may be found on larger vessels. Workers should be aware of: Slips and trips on accessing;

- Falling from height;
- Inadvertent release of lifeboat;
- Injury through contact with sharp edges;
- Potential atmospheric hazards – oxygen depletion, explosive, toxic; Bumping head on low areas;
- Poor illumination;
- High ambient temperature.

Surveyors qualified to do so should provide the master with a copy of the AMSA Marine Notice 2014/02 if they plan to enter a lifeboat and:

- Show the master a copy of AMSA Port State Control in Australia fact sheet (lifeboat section) for further clarification;
- Give the master the SIR Book instructions for inspection of lifeboats;
- Ensure the master acknowledges that the boat is to be fully housed with additional restraints or fall prevention devices (FPDs);
- Inspect additional restraints, move to another vantage position to view (e.g. from deck above) and ask how the securing arrangements were put in place;
- Must be satisfied that additional restraints are suitable;
- Visually inspect that harbour pins are engaged, and gripes attached;
- Visually inspect to ensure that the boat sits on any blocks on the davit and that gripes appear in good condition;
- Visually inspect to ensure that the lifeboat falls retain the weight of the boat or fall blocks are engaged on the davit's hooks;

- Ask for the boat to be ventilated before entry, test atmosphere from outside the boat when discussing safety arrangements with the master;
- Open all access doors where possible to increase light inside the boat;
- Inspect at cooler times of the day and limit inspection time outside as much as possible;
- Explain lifeboat inspection procedure to all workers taking part in inspection. Limit the number of workers to a maximum of two inside the boat;
- Wear gas monitors at all times, test atmosphere before entry and vacate boat when gas monitor alarms; If in doubt about the arrangements, seek alternative arrangements or do not enter the lifeboat.

### 11.3 High Voltage Areas (>1kV)

On vessels where the potential exists for the use of high voltage applications (e.g. container ships, seismic vessels), workers should confirm with the master at the earliest opportunity whether such systems are fitted. Where the vessel utilises high voltage, workers should be aware of electrocution. Any voltage, especially DC, is dangerous.

Where the vessel utilises high voltage, workers should take the following precautions:

- Request a safety induction or briefing from a suitable qualified person who has completed a high voltage course (e.g. chief engineer or electrician). Induction to include location of high voltage isolators, emergency stops and exits;
- Proceed to the area accompanied by a suitably qualified person;
- Remain in the company of the designated person during the inspection of the high voltage area;

Where the high voltage can be isolated, workers should take the following precautions:

- Request a safety induction or briefing from a suitably qualified person;
- Do not proceed to the area until it has been confirmed by the chief engineer and by visual inspection that the high voltage supply has been isolated, locked-out and tagged.

## 11.4 Working at Heights

If authorised to do so by the GM workers must take the following precautions when conducting inspection:

- Determine whether inspection can be performed from the main deck;
- Have completed working at heights training; Wear appropriate PPE (e.g. safety harness);
- Check maintenance records for the last time any work done on the mast; Check the condition and soundness of the ladders and their mountings;

Where there are risks from working at height, emergency procedures must be established to enable the rescue in the event of an emergency. In particular, the emergency procedure shall include details on the method of rescue, communications (such as internal communication, local emergency services) and the provision of first aid to a person who has fallen. Consult with the crew and review their emergency procedures before proceeding.

## 11.5 Cranes and Davits

Workers should be aware of:

- Falling objects due to poor condition of wires and blocks;
- Falling objects due to poor slinging of loads or loads shifting;
- Loss of control/ falling structure due to poor condition of jibs and crutches and rotating gear;
- Falling from height due to poor condition of guardrails and access ladders;
- Inadvertent physical contact with moving cranes/loads. Warning sounds and lights may not be working or noticed; Wire freight cables.

Workers should take the following precautions:

- Identify safe working load and outreaches to ensure cranes are not being overloaded;
- Check Cargo Gear Register for latest load test and thorough examination/ inspection dates;
- Be visible and observant;
- Keep a look out for warning lights/sirens and equipment in poor condition;
- Ensure adequate deck illumination is available at night;
- Stay well clear of suspended loads.

## 11.6 Confined Spaces

A confined space as determined by Safe Work Australia as an enclosed or partially enclosed space that:

- Is not designed or intended primarily to be occupied by a person;
- Has restricted means of access or egress

Is or is likely to be a risk to health and safety from:

- An atmosphere that does not have a safe oxygen level;
- Contaminants, including airborne gases, vapours and dusts, that may cause injury from fire or explosion;
- Harmful concentrations of any airborne contaminants;\ Engulfment.

All Kedge Pty Ltd contractors/employees are required to have a Confined Space Entry certificate, that is to be recertified every 3 years to undertake work or enter a confined space. Entry to a confined space is considered to have occurred when a person's head or upper body enters the space. When working in a confined space contractors/employees should be aware of the following hazards:

- Restricted entry or exit;
- Harmful airborne contaminants;
- Unsafe oxygen level;
- Fire and explosion;
- Engulfment;
- Biological hazards;
- Mechanical hazards;
- Electrical hazards;
- Skin contact with hazardous substances;
- Noise;
- Environmental hazards.

Before entering a confined space it's essential to monitor the air inside to test for atmospheric hazards. Atmospheric samples should be taken at the top, middle and bottom of the confined space. The test is to be conducted remotely using the gas monitor. The test should ensure proper oxygen levels are present and no combustible or toxic gases are present. If when re-entering a confined space the atmosphere is required to be retested.

## 11.7 Cargo Holds, Tanks and Void Spaces

Workers should be aware of:

- Poor condition of access ladders, platforms and rails;
- Fresh paintwork, oxygen deficiency, solvent fumes;
- Unsecured shifting loads causing a crush hazard;
- Heat, noise, oily surfaces;
- Loose or removed floor plates;
- Loose gear;
- Restricted headroom;
- Poor lighting;
- Hazardous substances (e.g asbestos)
- Unguarded machinery, hot spots and fumes; live switch boards, control panels.

Workers should take the following precautions:

- Correct use of appropriate PPE and personal gas monitors;
- If a confined space act accordingly;
- Comply with permits to work;
- Lock out/tag out procedure.

## 11.8 Dangerous Goods Containers

Leaking hazardous containers workers should be aware of:

- Slippery surfaces;
- Leaking containers;
- Poor illumination;
- Lack of space;
- Unsecured objects;
- Oxygen depletion, fumes, toxic vapours, corrosive and flammable substances.

When inspecting, workers should take the following precautions:

- Wear appropriate PPE and gas monitor;

- If possible, inspect from a safe distance;
- If a leaking hazardous container requires entry for inspection, keep clear and wait for hazmat or expert advice that container is safe to approach;
- Check atmosphere before entering. Do not enter if atmosphere cannot be checked;
- Check that all possible sources of ignition in the space are shut off.

NB. Ensure good ventilation is provided at all times. Internal fans have to be intrinsically safe in work area.

## 11.9 Vehicle decks (RO/RO vessels)

Workers should be aware of:

- Slips, trips, falls due to poor illumination and/or oil and grease on decks and ramps;  
Atmospheric hazards of exhaust fumes;
- Noise from ventilation fans, vehicles and dropping lashing equipment;
- Falls from openings and ramps in decks; lifts and moveable decks;
- Interaction with large fast-moving fork lift and vehicular operations;
- Unbalanced loads;
- Obstructed walkways (lashing material and rubbish accumulations).

Workers should take the following precautions:

- Be escorted or accompanied during visit; Wear a high visibility safety vest;
- Carry a torch;
- Adhere to defined walkways;
- As far as practicable, keep clear of cargo operational areas.

## 11.10 Oil Tankers

In all circumstances when attending bulk fuel carrying vessels Kedge Pty Ltd contractor/employee/employees are to seek and undertake a vessel specific induction.

Workers should be aware of:

- Flammable gas in cargo compartments, pump rooms, void spaces adjacent to cargo compartments, on the tank deck, ballast tanks if lids are opened.

- **Potential for sparks/static to cause a fire.**

Workers should take the following precautions:

- Comply with the vessel's standing orders and Chapter 2 of International Safety Guide for Oil Tankers and Terminals (ISGOTT) when entering into pump rooms and spaces likely to contain hydrocarbon residues;
- Switch off all non-intrinsically safe equipment such as mobile phones, cameras and pagers, and surrendering lighters, electronic car keys and other relevant items to terminal security;
- Adhere to requirements for entering confined spaces, including the completion of the confined space entry permit;
- Be accompanied by a responsible officer from the vessel at all times;
- Maintain communication with the person responsible for loading at all times.

## 11.11 Gas Tankers

In all circumstances when attending bulk fuel carrying vessels Kedge Pty Ltd are to seek and undertake a vessel specific induction.

Workers should be aware of:

- Flammable atmospheres;
- Hazardous atmospheres;
- Oxygen depletion;
- Low temperature freezing hazards.

Gas tankers carry a variety of petroleum and chemical gases; workers should become familiar with the relevant SDS before commencing work and consult appropriately with the responsible officer concerning any special protective equipment required.

As well as the flammability hazards and controls noted for oil tankers above, many gases (such as Ammonia and Chlorine) are poisonous and some (such as Vinyl Chloride Monomer) are carcinogenic. A pressurised LPG carrier may be operating with tank relief valves set at about 15 bar, while a LNG or ethylene carrier operates with cargo temperatures less than -120°C. Appropriate PPE must be worn at all times when working at low temperatures.

## 11.12 Chemical Tankers

In all circumstances when attending bulk fuel carrying vessels Kedge Pty Ltd contractor/employee/employees are to seek and undertake a vessel specific induction.

Workers should be aware of:

- Flammable atmospheres;
- Toxic atmospheres;
- Oxygen depletion;
- High or low temperatures.

Cargo residues can be found in cargo compartments, pump rooms, and void spaces adjacent to cargo compartments, on the tank deck and in ballast tanks if the tank lids are opened.

There are also hazards from chemical tankers due to the temperature (coal tar pitch is carried at 200°C), pressure, corrosivity, toxicity and reactivity. Some cargoes react with water (toluene diisocyanate), some with air (phosphorous) and some with themselves (styrene monomer).

Some cargoes are extremely poisonous on contact (phenol) others can cause severe irritation (acid vapours). Cargo vapours are often denser than air and, in many cases, closed loading techniques must be used.

Workers working on chemical tankers should confirm with the vessels' crew, in advance, of any hazardous substance they are likely to encounter and consult with the applicable SDS. Appropriate PPE is essential; in certain cases, special equipment must be worn.

## 11.13 Potentially Contaminated Vessels

In the past 12 months Kedge has been called upon to assist agencies in clearing for safety and ongoing monitoring and assessment of potentially contaminated vessels. The principles and practices of internationally recognised IHM are the basis upon which Kedge has and continues to work.

This is highly specialised work that requires senior contractor/employee to perform on-site JSA and risk assessments both regarding their own work and the work of third parties who rely on Kedge expertise to keep themselves safe whilst achieving their aims.

In general terms the following sequence of events is to take place:



- Client brief/request and GM acceptance of task IAW Kedge standard T&C and Terms of Survey;
- On site recce visit and JSA;
- Liason with stakeholders as necessary;
- Bring together team including external experts (e.g. interpreters, specialist environmental contractor/employee, videographers, tech specialists including electricians);
- Plan and brief to participants
- Conduct evolution;
- Report per client's instructions;
- Debrief and follow up as required.

### 11.13.1 Hazards

The following hazards are to be anticipated (not exhaustive):

- Difficulty of access;
- Unfamiliar systems;
- Language issues relating to signage, information;
- Slips/trips/falls;
- Non-isolated machinery;
- Jury-rigged systems;
- Fire systems live;
- Electrical systems live;
- Hazardous substances including petrochemicals, gasses, liquid, paints, battens, explosives, asbestos etc.;
- Biological hazards;
- Vermin hazards;
- Bilge water;
- Environmental hazards;
- Lack of stability;
- Hostile or uncooperative crew;
- Press and media interest;
- Low headroom;
- Confined spaces;
- Heights;
- Crush hazards;

- Evidence preservation requirements;
- Cross contamination of evidence.

## **12. 40-44 Innovation drive (Technopark) Office Emergency Procedure**

Kedge Pty Ltd is committed to establishing and maintaining procedures to control emergency situations that can adversely affect contractor/employee, affiliates and visitors.

Building incidents and emergencies can occur at any time and can arise from causes including fire, medical emergencies, chemical spills, gas leaks, bomb threats and physical threats.

Any of these can threaten the safety of the occupants of the building- on becoming aware of a potential threat the **emergency services should be called on 000**.

In some situations, contractor/employee may be required to evacuate the building. All contractor/employee and visitors are required to respond to emergency alarms and follow instructions which will come from the building emergency warden.

Contractor/employee should:

- Check for immediate danger;
- Only if safe take personal belongings – leave all company property and do not wait to shut down computers etc.;
- Locate the nearest safe exit;
- Leave the building via the steps;
- Go to the assembly area as listed on the plans;
- If not in the building, call the GM on 0411 740 045.

### **12.1 Lone Working Protocol**

Any contractor/employee member working alone in the building must ensure that the doorway at the bottom of the stairs is locked/secured whilst they are in the building.

## 13. Field Work Emergency System

Kedge Pty Ltd contractors/employees are sometimes required to perform field work that has a diversity of foreseeable and unforeseeable hazards which may expose a risk. Initially, when conducting fieldwork staff/contractors are required to perform a JSA to try and eliminate any foreseeable risks and hazards. If the worksite is deemed unsafe by the surveyor all work should be stopped immediately, the GM notified, and a follow up hazard/incident report completed. All Kedge Pty Ltd contractors/employees are to follow the emergency procedures of the site they are attending. If a fieldwork emergency does occur, Kedge Pty Ltd is committed to the following procedures to help control emergency situations.

### 13.1 Medical Emergency or Accident/Illness

1. Initial first aid treatment is to be given. If CPR is required, it is to be continued until emergency personal can take over;
2. Raise the alarm/Emergency Services (call 000) if serious. Give details of GPS coordinates if known or approximate location.
3. Patient to be made as comfortable as possible. Always have a person stay with the patient at all times to monitor their condition.
4. Do not move the individual unless essential to protect life. If necessary, to prevent shock, keep the individual warm and elevate lower extremities if possible.
5. Notify the GM asap.

### 13.2 Extreme weather event/bush fire

1. If in immediate danger or threat move to a safer location and raise the alarm/Call emergency services (000). Give details of GPS coordinates if known or approximate location. Follow the advice given by the emergency service providers;
2. Monitor the threat via updates from BOM or local authorities (if possible);
3. Notify the GM of any changes to plans or location.

### 13.3 General Vessel Emergency

1. Inform master/ helmsman of incident/accident;
2. Follow all instructions given by master/helmsman;
3. Commence first aid if required;
4. Contact emergency services on 000 if serious;
5. Notify the GM;
6. Complete a hazard/injury report form.

### 13.4 Confined Space Emergency

When a contractor/employee is conducting work in a confined space, a standby person must be present with established communication with the worker. The contractor/employee must notify the standby person immediately of the following:

- An unusual action or behaviour occurs;
- An unexpected hazard;
- An unsafe act;

The contractor/employee must exit the confined space immediately if:

- An order to evacuate is given by the standby person;
- The contractor/employee notices a sign or symptom of over exposure;
- An unacceptable condition occurs;
- An emergency alarm is activated.

If a confined space rescue is to occur:

- If possible, the rescue should be performed from outside the confined space;
- The standby person should not enter the confined space, they should immediately contact an onsite rescue team/person or if serious contact the emergency services (000);
- If the employee/contractor has been overcome by a lack of oxygen or airborne contaminants, a rescue person/team are not to enter the confined space without respiratory protective equipment;
- If the injured person is extracted, their injuries should be assessed and relevant first aid applied as necessary;
- A hazard/incident report should be completed within 24 hours and the GM notified as soon as practically possible.

### **13.5 General Aviation Air Travel**

In the event of aviation emergency, all passengers should listen to the instructions given by the pilot. All aviation procedure and emergencies should be conducted in accordance to [the Civil Aviation Act 1988](#).

### **13.6 Delayed Flight/Late Job**

When undertaking remote work, in the case of a delayed/cancelled flight or the assigned job running later than expected, the contractor/employee has the option to do the following:

1. Seek local accommodation for the night;
2. Purchase a meal and required provisions within reason;
3. Continue travel the following day;
4. Provide an itemised receipt to the GM to be reimbursed.

Please note, the GM should be notified as soon as reasonably practical about any changes to travel arrangements.

## **14. Postscript**

Kedge Pty Ltd treats WHS as its highest priority and wants all of its workers, clients, contractors/employees and associates to enjoy a long and safe working life.

YOU - our workers and contractor/employees, are primarily responsible for making sure you go on to the work site, assess the circumstance and mitigate and act appropriately and we will do everything possible to support you to do so.

We commend this manual to you and urge you to keep WHS at the forefront of your mind in everything you do.

Our aim is ZERO HARM - together we can achieve this important aim.