



# EMPLOYEE SAFETY HANDBOOK

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# INTRODUCTION

This booklet contains important Safety information for Zeal Engineering employees.

We ask that you ensure you issue this Handbook to your employees and take the time to explain the safety information contained in this guide.

Our main aim is that when you have completed your induction, you are equipped with the safety and health knowledge of your workplace. There should never be any misunderstanding on the employee's behalf.

In the event that you lose your Zeal Engineering Safety Handbook, we ask you to contact your Supervisor/ Manager and request a copy be given to you.

We hope you enjoy working for our organisation.



## GENERAL INFORMATION



It must be understood that Zeal Engineering will not tolerate any of the following practices in any workplace:

- Working under the influence of alcohol or other drugs
- Gambling, horseplay or fighting while at work
- Theft from the workplace or any other property or equipment belonging to fellow workmates
- Wilful damage or destruction to the workplace or any other property or equipment belonging to work- mates
- Entry into areas that are restricted
- Not following safe work procedures or standards
- Failure to wear, use or maintain personal protective equipment or clothing
- Unauthorised use of equipment and machinery

# SAFETY IN OUR WORKPLACES

## Introduction to the Zeal Engineering Safety Philosophy

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Included in this Safety Handbook is information on the way our company manages Safety in the workplace. In saying this, we have developed a comprehensive "Occupational Safety & Health Policy" and expect all our employees to understand and comply with the policy requirements.

Zeal Engineering has developed policies, plans and procedures with the aim of providing and maintaining a safe work environment for our employees and contractors.

Effective safety and health management, along with productivity and quality, is a critical factor for the overall efficiency of our company.

The Zeal Engineering safety program is very much a JOINT effort. We encourage and appreciate your contribution to our safety initiatives. This may require you:

- Being advised of Occupational Safety and Health hazards and receiving training about safe working conditions, safe work procedures and personal protective equipment
- Participating in any task specific training conducted by the company when you are requested
- Providing information to us about safety hazards and requesting information or making safety suggestions without fear of reprisal in any form; and
- Being involved in an injury management and rehabilitation program if you suffer an injury at work.

## Occupational Health & Safety Policy

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Zeal Engineering understands Occupational Safety and Health is an integral part of its business operations. We believe no business priority comes before safety.

We will strive to continually improve our systems and processes. This will be done by continually monitoring our business activities and implementing beneficial changes when needed.

The Zeal Engineering business is committed to the health and safety of all our employees.

The Zeal Engineering team is actively involved in the management and planning of Occupational Safety and Health.

We encourage our employees to be active in observing and recommending changes in the workplace to reduce exposure to any risks and hazards.

Zeal Engineering expect all our employees to accept responsibility for their actions, to report unsafe acts and working conditions, and behave in a manner that reflects safe work practices and standards.

If at any time illness or injury results in a disability to our employees, Zeal Engineering will manage the Injury Management process to facilitate their safe return to gainful and meaningful employment.

Jay Daviot  
Managing Director

### Your Duty of Safety Responsibilities

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It is your responsibility whilst working for our company that you:

- Look after your own safety and the safety of others around you.
- Undertake that all work carried out as directed by your supervisor will be done in the safest possible manner and follow the site or task safe work procedures.
- Obey all verbal and written safety instructions relayed to you by our Supervisors / Managers.

- Never carry out an activity if you do not feel safe or are unsure of the safety procedures. If this occurs report your concerns to your supervisor or safety officer for safety directions.
- Report all accidents, near misses or illnesses to your site first aid officer, medical officer or supervisor immediately.
- Highlight tasks that require safe work procedures before starting the job.
- Report any hazards you identify or create.
- Correctly use all personal protective equipment required to perform the task.
- Ensure that all your personal tools and working equipment are in good working order and will not pose a hazard to you or any others who may come into contact with them.
- Ensure that your work area is kept clean and tidy.
- Become familiar with the location of all emergency life-saving facilities such as first aid boxes/facilities, firefighting equipment and emergency evacuation procedures. If you cannot familiarise yourself with these within your first 12 hours of employment, ask your supervisor for direction.
- Only perform work that is within your competence, qualification and authorisation.
- Request authorisation from your supervisor if you are requested to undertake any of the following:
  - Hours of work, particularly if the hours will exceed 12 hours in a shift
  - If the consecutive shifts you are expected to work will exceed 13 and
  - Rest periods with less than 10 hours between your shifts.

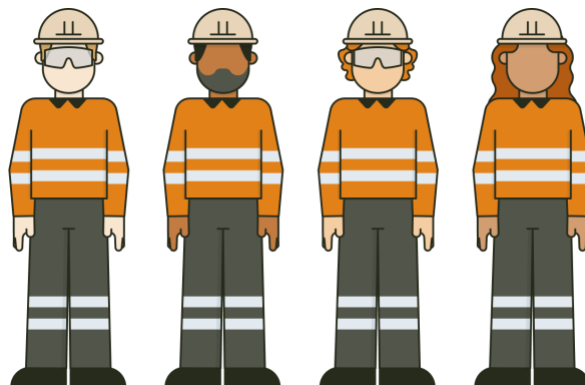


## Your Personal Protective Equipment (PPE) Checklist

Before you commence work for the company, refer to the check list below to ensure you are well-prepared for your duties. You are required to wear the mandatory PPE listed below.

MANDATORY PPE	Checklist
Safety footwear (i.e. enclosed steel capped boots and shoes as appropriate for the task)	
Long sleeve shirt with collar, high visibility with reflective strips (King Gee industrial style)	
Full-length pants (King Gee industrial style)	
Approved safety glasses or prescription glasses with side shields and safety helmet (if required)	

Additional specific PPE and safety equipment will be issued by your supervisor as required for your job tasks.



## Safety Induction

As a new employee of Zeal Engineering, you will be given a site induction and familiarisation when you arrive on your first day. The Supervisor will conduct this induction, and it MUST occur before you commence any work duties.

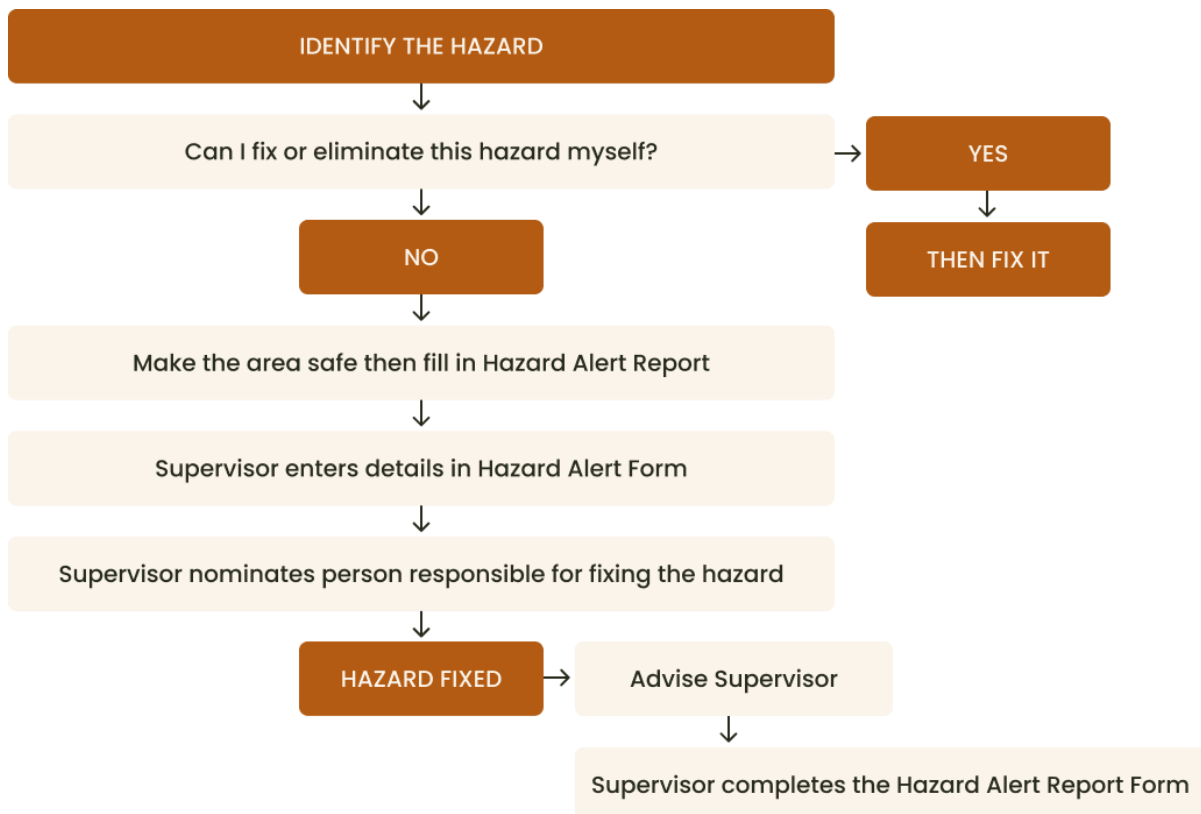
You will be asked to sign an Induction Verification Form that your supervisor will use to highlight the most important safety aspects of your work duties for us at Zeal Engineering.

## How to Report a Hazard in the Workplace

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Our company recognises the importance of timely hazard reporting as a major component of the accident prevention program.

If you see a hazard, which can be identified, from observation, inspection, task observation, because of an accident investigation or unsafe condition follow the flow chart below:



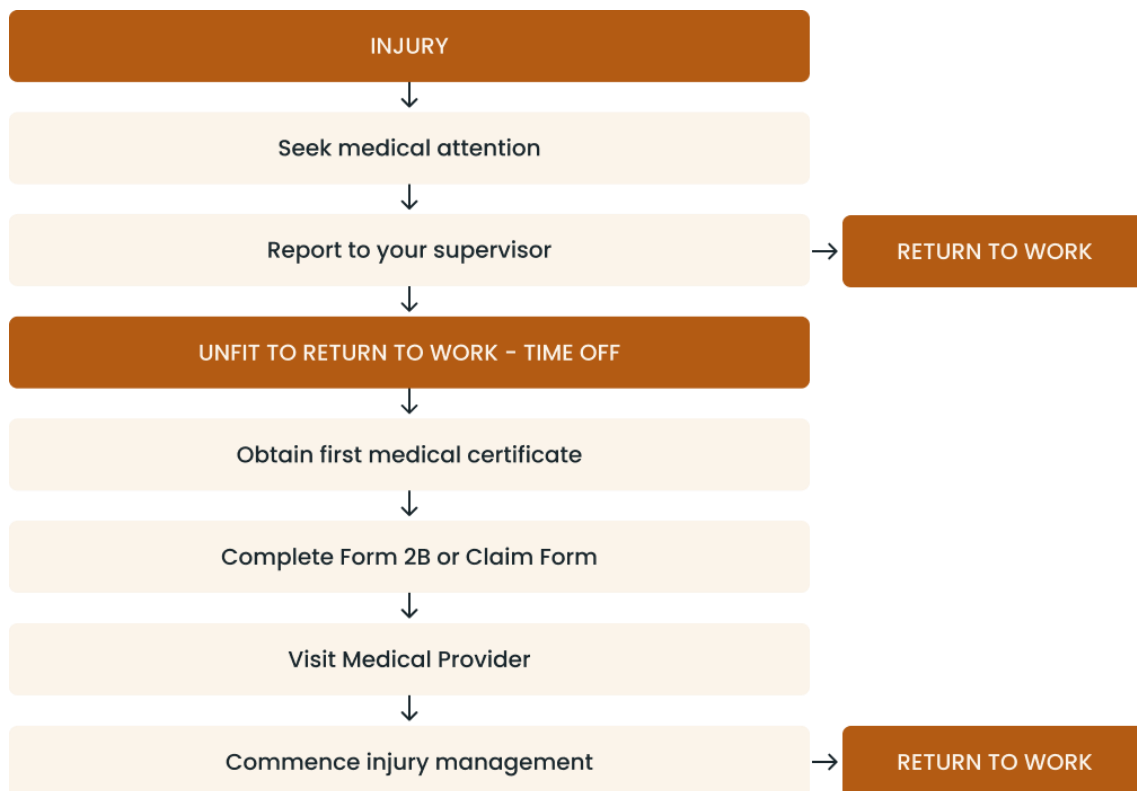
## Reporting Accidents & Incidents

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It is very important that we know about all injuries immediately after they happen. We have a responsibility to manage all injuries to employees. We cannot do this if we do not know about them.

Your conditions of employment require you to immediately notify your supervisor no later than eight hours from the time of the injury.

The following chart shows the steps to take in the event of an injury.



# GENERAL SAFETY GUIDE

## Basic First Aid Information

The following section is intended as a general guide and to reinforce the essential induction. If an accident occurs, you may need to render first aid to an injured person until the site nurse, rescue team or ambulance arrives.

First aid should be given in this order of priority, no matter what the injury is:

- Danger
- Response
- Send for help
- Airways
- Breathing
- CPR
- Defibrillation



**DO NOT DISTURB THE SITE OF A SERIOUS ACCIDENT OR MOVE ANY EQUIPMENT IN THE AREA UNLESS IT IS NECESSARY IN ORDER TO MAKE THE AREA SAFE.**

## Manual Handling – Correct Lifting

The physical handling of materials often involves activities requiring the use of personal force in order to lift, push, pull, carry or restrain an object.

Almost any part of the body can be affected unless these activities are carried out correctly. Back and muscle strain injuries can be avoided by using the correct techniques.

Plan the lift by estimating the load and knowing exactly where it is to go.

1. Think and plan any lifting you perform
2. Make sure you have a firm footing
3. Bend your knees
4. Check the load
5. Make sure you have a secure grip on the object

6. Tighten your stomach muscles
7. Keep your back straight
8. Lift the load smoothly and slowly
9. Keep the load close to your body

## Fire Protection

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The basic elements necessary to produce fire are fuel, oxygen and an ignition source. Prevention means keeping any of these three elements away from the other two.

Various first aid and back-up firefighting facilities are available on all sites. You must not interfere with this vital equipment.



**FIRE HYDRANTS, HOSES AND EXTINGUISHERS ARE EXCLUSIVELY FOR THE FIGHTING OF FIRE.**

Ensure that any empty or faulty equipment is handed to your supervisor.

Make yourself familiar with all the firefighting appliances. Check procedures with your supervisor and learn how to use the fire extinguishers in your work area. Never use conductive extinguishers, such as water or foam, on electrical fires.

**REPORT ANY FIRE THAT YOU SEE, IMMEDIATELY.**

If you discover a fire, extinguish it, if possible, and then advise your supervisor. If you cannot extinguish it, raise the alarm immediately.

## Working in Confined Spaces

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A confined space is defined as a space of any volume which:

- Is not intended as a regular workplace
- Has restricted means of entry and exit
- May have inadequate ventilation or a contaminated atmosphere; and
- Is at atmospheric pressure during occupancy

**SAFE WORK PROCEDURES MUST BE FOLLOWED WHEN ENTERING CONFINED SPACES, OR SERIOUS INJURY OR DEATH MAY RESULT. SEE YOUR SUPERVISOR FOR (SWP)**

All personnel directed to work in a confined space must be aware of and understand the following procedures:

- A confined space entry permit must be sighted and signed by all persons on entering and leaving the confined space
- A proper means of entry and exit it to be provided
- 240-volt electrical cables are not to be fed into vessels through access openings
- Only 32-volt lighting is to be used
- Appropriate personal protective equipment, in accordance with the material safety data sheets for products in use, is to be worn
- Adequate ventilation is to be provided at all times
- An observer is to be stationed at all times
- An appropriate fire extinguisher is to be available
- On completion of work the confined space entry permit must be checked and signed by supervisor
- Rescue plan is required for all confined space entries
- Gas testing must be conducted prior to entry

## Danger Tags

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A danger tag is designed for your personal protection. It must be attached to the main isolating switch, valve, etc. of equipment whenever there would be danger posed to someone if that switch was turned on.

If during your course of duties, you come across a danger tag that prevents you from carrying out your duties do the following:

- Do not proceed and report your findings to your supervisor
- You must not under any circumstances remove the danger tag, tamper with the danger tag or attempt to operate the machine that the danger tag relates to
- Your super supervisor will be responsible for conducting any on-site removal policies of the danger tag if deemed necessary

### Out of Service Tags

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Out of service tags do not replace or mean the same as danger tags. These tags indicate that a piece of machinery is not to be used until the nominated component has been repaired.



When to place an out of service tag:

- If you come across equipment, machinery, power tools, etc. that are faulty, inoperable, unsafe or the continued use of the designated piece of equipment would cause further damage or create a hazard you must tag it with an out of service tag
- Always apply the tag in a prominent place for all other personnel to clearly see, e.g. a tag at the bottom of a ladder is not easily seen by someone who may proceed to climb the ladder

Removal of an out of service tag:

- The following personnel can only remove this tag from a piece of equipment:
  - The person who completes the repairs or component replacement
  - The supervisor upon satisfaction that the equipment is now safe and operational

## Persons Falling

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Falls are usually serious – if not fatal.

- Be conscious of your surrounds to prevent overbalancing, slipping or tripping
- Be aware of slippery boards, the absence of guardrails, holes and penetrations not properly protected
- Climbing supporting framework is prohibited. Ladders must be used for access to and from any work platform or supporting surfaces
- Persons who are required to work from a mobile aerial work platform must always wear a site approved and inspected fit for purpose, safety harness/fall arrest system

If there is any necessity for persons to exit a working platform to carry out works whilst aloft, **a safety harness must be worn** and be **connected to a safe anchorage** prior to moving off the working platform.

The safety harness shall not be disconnected for any reason whatsoever until the person has returned to the working platform and is protected by the guardrails.

## Electric Shock

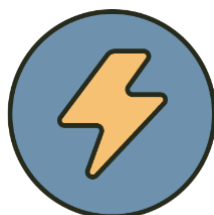
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Before attending to a person who has received an electric shock, make sure that the **power is turned off**.

**DO NOT TOUCH THE INJURED PERSON BEFORE THE POWER IS TURNED OFF**

If you cannot turn the power off, use heavy-duty PVC gloves or something made of rubber, dry wood or cloth to remove the wire or free the injured person.

If the injured person has stopped breathing, apply artificial respiration immediately – **only to be done by a competent accredited CPR officer or first aider**.



## Hot Work – Welding & Cutting

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Persons carrying out welding and cutting operations can be exposed to the following hazards:

- Electric shock due to contact with electricity live components
- Radiation burns to the eyes or body due to the welding arc
- Body burns caused by weld spatter or hot or molten materials setting fire to clothing
- Fire and explosion due to arc, flame, sparks or spatter or electrical faults in combination with flammable materials, gases or liquids
- Eye injuries caused by foreign matter, such as, chipped welding slag
- Sickness due to inhalation of fumes from welding or cutting from surface coatings on the materials being dealt with, such as, galvanising or paint
- Asphyxiation due to displacement of oxygen by nontoxic gases

## Hazardous Substances

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There are five types of hazardous substances:

- **Asphyxiants** – substances, such as cyanide, which prevent the body absorbing oxygen
- **Toxic** – substances such as pesticides, that can cause serious injury, major organ damage and death
- **Flammable substances** – liquids and gases that form a combustible mixture with air
- **Explosives** – mixtures and compounds that cause explosions.
- **Corrosives** – substances, such as acids and caustic soda, that breaks down human tissue and other substances.

## Compressed Air Safety

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Injuries from compressed air can result in the following:

- Ruptured internal organs
- Noise induced hearing loss
- Fractures and bruises
- Loss of an eye
- Ruptured ear drums
- Puncture wounds

**NEVER USE COMPRESSED AIR TO CLEAN DUST OR OTHER MATTER OFF YOU OR ANY OTHER PERSON'S BODY – CONTACT WITH YOUR SKIN CAN BE FATAL**

- Never use compressed air to clean your hair or clothes
- Never direct compressed air at a person
- Never clean a bench, machine tool or a floor with compressed air
- Never drive vehicles over compressed air hoses
- Never attempt to catch a hose that has become detached from a connection

**COMPRESSED AIR ENTERING THE BLOOD STREAM CAN CAUSE DEATH**

## Overhead Travel Cranes

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Pre-use crane checks:

- You are authorised and competent to use the crane
- Pendant controls are clearly marked
- Emergency stop is functional
- Crane path is clear
- Rollers, drums and sheaves rotating freely

Check the crane hook for:

- Stretching or distortion
- Missing or damaged safety latch
- Failure of latch to lock in position

# QUALITY AWARENESS

## Quality Policy

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A guiding principle for our business is that competitive success comes from customer satisfaction delivered by continuous improvement in the quality of all our processes, products and services. We define as: providing both internal and external customers with products and services that meet their agreed requirements on time, every time and at competitive prices. Involving all our people in achieving quality in everything we do will give us total quality in Zeal Engineering

Therefore, we must always be:

- Listening to our customers so we can understand and respond to their changing needs
- Striving for continuous improvement in all our systems and processes of production and service
- Looking for ways of reducing variation, providing a predictable degree of uniformity, eliminating waste and improving reliability
- Assuring our customers of the standard of our products and services through the use of applicable International Quality Assurance standards from the ISO9001 series
- Involving all our people in accepting responsibility for continuous improvement and contributing all their skills and energies toward improved customer satisfaction

### Documentation

- Remember that the goal here is consistency for your processes
- If two trained employees were to perform this task, would they do it the same way?
- If the answer to this is "Maybe not" a work instruction is appropriate

### Understand that employees may feel threatened

- "If I document everything I do, will I still have value?"
- "What is this corrective action? It sounds like going to the principal's office"
- "Someone is going to audit my performance?"

# ENVIRONMENTAL AWARENESS

## Environmental Policy

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Zeal Engineering recognises that care for the environment is an integral part of conducting its business. Zeal Engineering is committed to continuous improvement in our business practices in order to protect the environment, in accordance with the requirements of the law, our clients, and the evolving expectations of the community.



In applying this policy, Zeal Engineering activities shall be governed by the following principles:

- Zeal Engineering shall meet all applicable laws, regulations and standards
- Zeal Engineering shall plan, develop, implement and monitor relevant procedures and standards to minimise any adverse environmental impact that may result from our business
- Employees shall be encouraged to foster a sense of responsibility for the protection of the environment
- We shall ensure that our employees, suppliers and subcontractors are informed of our policy and are aware of their environmental responsibilities in relation to Zeal Resource's business activities

Some areas to consider for the environment:

- Do not pour things down the drain
- Re-use paper wherever possible
- Clean up any spills straight away
- Recycle when possible

## SUMMARY

### Any Questions?

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Zeal Engineering prides itself on how we treat our employees. This relationship must be based on mutual respect, professionalism and courtesy at all times.

If you ever feel you're not receiving the service you expect from any member of our staff, then **please tell us**.

All grievances can be reported in the first instance to the local Zeal Engineering Site Supervisor or Manager. Any serious issues will then be referred to the site manager for resolution.

We value all our employees and want to ensure that we all work safely and enjoy our work environment.

From the Zeal Engineering Management Team, we hope you have a long and rewarding relationship with us and the company.

Best regards,

Jay Daviot

Managing Director

Zeal Engineering

# EMPLOYEE DECLARATION

I, \_\_\_\_\_  
(Please print full name)

of, \_\_\_\_\_  
(Please print address)

Do solemnly declare that:

I have received, read, understood and agree to the contents of The Zeal Resources Safety Guidelines – A Handbook for Employees.

All the information I have given to Zeal Resources, including all sections of the **Pre-Assignment Medical Assessment Form**, is true and correct to the best of my knowledge.

Employee signature \_\_\_\_\_

Date \_\_\_\_\_

Witness full name \_\_\_\_\_

Witness signature \_\_\_\_\_

Date \_\_\_\_\_