Uncontolled Risk			Residual Risk			Future Controls			
Risk ID	Risk Description	Likelihood	Consequences	Risk Rating	Controls in place	Likelihood	Consequences	Risk Rating	relow
1	Electical	4	5	20	Safety switch - System in place to ensure checks -competent person -push button Electrical lead awareness -electrical leads only to be used for short term tasks. -prestart checks Testing and Tagging	2	5	10	Puematic tools
2	Forkift Operation	4	5	16	Licensed competent operators - System in place to ensure licenses do not expire. Traffic management plan Pre-start checks	2	5	8	Engineering seperation of plant and pedistrians.
		23		5					

Risk management plan – multiple hazards

Business name Business location		Complet	-		<u>\$</u>		
Work area			ed review date				
Identify the hazard	Assess the risk	Control the risk		0			
What is the hazard?	What might go wrong? Who might be harmed and how?	What are you already doing to control the risk?	Priority or risk level (low, med, high) *	What else do you need to do to control the risk?	Action by whom?	Action by when?	Date completed
Example: Unguarded dough mixer	Bakers could accidently put hands in operating bowl and be cut or have finger amputated	Mixer in low traffic area. Procedures on safe use.	Medium	Install interlocking guard on mixer	J. Smith	13/7/16	02/7/16
			912				
		R					
		O``					
		20					
	oupils						

*The level of risk will increase as the likelihood of harm and its severity increases. For more details on the risk management process see page 2.

How to manage work health and safety risks

Use this information to help you complete the risk management table on the front of this form. This information is sourced from the *How to manage work health and safety risks Code of Practice 2011*. You can view the full code at worksafe.qld.gov.au.

Step 1

Identify hazards

Identify the things or situations that could potentially cause harm to people.

How to identify hazards

Try a number of ways, including:

Inspecting the workplace

- Consulting workers, directly or through surveys, representatives, etc.
- Information from industry bodies, regulators and specialists, etc.
- Reading instruction manuals or safety data sheets
- Reviewing your records of incident reports, complaints, health monitoring, etc.

Where to look

Look in all aspects of work, including:

- the physical work environment
- equipment, materials and substances used
- work tasks and how they are performed
- work design and management (e.g. shift work)

Step 2

Assess hazards

Consider *what* could happen if someone is exposed to a hazard and how *likely* that is.

Level of risk

Work out the level of risk by considering the possible severity injury and likelihood of it occurring.

The level of risk will increase as the likelihood and severity increase.

Severity

How severe could the harm be? Consider what type of injuries may happen, who it affects, if it could escalate, etc.

Likelihood

Work out the likelihood of harm occurring. You can estimate it by considering:

- How often is the task done? Does this make the harm more or less likely?
- How close do people get to the hazard?
- Has it ever happened before, either in your workplace or somewhere else? How often?

Consider if the harm is: certain to occur, very likely, possible, unlikely or rare.

Step 3

Control hazards

Try to eliminate the risk first, or if that is not possible, put controls in place that minimise the risk so far as is reasonably practicable.

Finding the best control

You can rank ways of controlling risks from the highest level of protection and reliability to the lowest. This ranking is known as the *hierarchy of risk control* (see below).

Always start at the most effective control (level 1, elimination), and work down the hierarchy.

The hierarchy of risk control

not Review controls

Step 4

Reviews will help you identify if your controls become less effective.

Regular reviews

The control measures that you put in place should be reviewed regularly to make sure they work as planned. Don't wait until something goes wrong.

If you find problems, go back through the risk management steps, review your information and make further decisions about risk control.

			Examples
Most effective	Level 1	Eliminate the hazard	Remove trip hazards
	Level 2	Substitute the hazard with something safer Isolate the hazard from people Reduce the risks through engineering controls	Safer chemicals or equipment Pedestrian barriers, remote operation Machinery guarding, lifting devices
Least effective	Level 3	Reduce exposure using administrative actions Use Personal Protective Equipment (PPE)	Work procedures Hard hats, high vis. clothing, gloves

• Electrical safety – (Depending on the type of business you have the requirements for this may vary.) Ensuring that safety switches have been tested by a competent person and you have some system in place to self-check safety switches. Test and tagging of any leads and corded electrical equipment.

• Hazardous Chemicals - (this is an area of mandatory enforcement/fines) Ensure that if you use any hazardous chemicals (these are identified via red diamond warnings on the product containers) that they are recorded on a hazardous chemical register. Ensure you have current Safety Data Sheets (less than 5 years) for all hazardous chemicals and that these are located near and accessible to workers handling or using the hazardous chemicals. Ensure you have an Emergency plan regarding any possible incidents with the hazardous chemicals. https://www.worksafe.qld.gov.au/safety-and-prevention/hazards/hazardous-

chemicals/managing-hazchem-risks/hazardous-chemicals-register

• Ensure that you have conducted risk assessments and identified appropriate controls of any hazards at the workplace. If you want any help with this before my site visit, please let me know and I will assist you to ensure you are compliant.

• If you have identified that workers need to wear respiratory protection equipment – ensure that workers have been fit-tested by a competent person.

• Storage – depending on type of storage you have, for example pallet racking – make sure that the racking is not overloaded. The racking has been inspected by a competent person and SWL charts are clearly visible.

• Work at heights – ensure that workers are not exposed to falls, if they must access storage areas where there is a risk of fall. Ensure you have appropriate controls in place.

• Traffic management – ensure if you use forklifts around people that there is an appropriate traffic management system to ensure people don't come in contact with moving plant. In areas where you may have trucks loading and unloading, ensure you have a traffic management plan so that people don't walk around trucks when they are being unloaded for example.

• Licensing – Ensure that you have records establishing that workers hold the appropriate licenses for operating high risk plant such as forklifts. Ensure you have appropriate instructions at the workplace so that non licensed workers don't use forklifts, etc.

• Plant maintenance – Ensure that mobile plant is properly maintained and equipped, for example seats on forklifts aren't torn and seat belts or some other restraint is fitted and worn.

• Plant guarding – Ensure that any plant and equipment is maintained and is appropriately guarded, for example exposed gears, belts or moving parts are not able to meet workers.

• Manual handling – ensure that the workers aren't exposing themselves to injuries by lifting or moving in a way that may cause them injury, for example ensure you have repetitive tasks are not exposing workers to injuries.

• Housekeeping – Ensure that paths and work areas are not cluttered or obstructed which could lead to slips trips and falls.

• Emergency Plan – Ensure you have an emergency plan for your workplace, with evacuations plans and exits clearly identified.

• Ensure that fire exits are clear, and extinguishers are in date.

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- First Aid Kits Ensure first kits are appropriate for the workplace and are maintained and accessible to workers.
- Ensure you have appropriate inductions and training specific to the workplace.
- Consult with workers when conducting risk assessments and preparing safe systems or work.

If you have an elected Health and Safety Representative (HSR elected by the workers), please make them aware that I will be on site and they can accompany me as part of their role as a HSR.

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Hazard Identification, Risk Assessment

1. Purpose

To ensure that there is a formal process for hazard identification, risk assessment and control to effectively manage workplace and safety hazards within Company Name

2. Preamble

A Person Conducting A Business or Undertaking (PCBU) has obligations under the Work Health and Safety Act 2011 (WHS Act) as well as the Work Health and Safety Regulation 2011 (WHS Regulation) to manage risks to health and safety so far as is reasonably practicable. A risk management approach involves identification and assessment of risks followed by elimination of risks in the first instance or where this is not practicable, minimising those risks so far as reasonably practicable.

The risk management approach is important for three main reasons:

- So that the Company's duty of care to its workers, customers, contractors, visitors and others that work at the place of business can be met, as part of the legislative health and safety requirements.
- Out of concern for the health and safety of workers, contractors, visitors and others at workplaces.
- It makes good business sense and is cost effective.

A key requirement of managing risks in the workplace is consulting with workers affected by a health and safety matter. Workers should be involved in the hazard identification, risk assessment and risk control processes. Where workers are represented by a Health and Safety Representative (HSR), this HSR must be involved in the consultation process. The legislation also requires that where several PCBUs have duties for a health and safety matter, these PCBUs must consult, cooperate and coordinate their risk management activities to ensure effective management of the health and safety matter.

Workplace hazard identification, assessment and control is an on-going process. It should be undertaken at various times, including:

- If it has not been done before.
- When a hazard has been identified
- When a change to the workplace may introduce or change a hazard. Such as when changes occur to the work equipment, practices, procedures or environment.
- As part of responding to a workplace incident, even where an injury has not occurred.
- Where new information about a risk becomes available or concerns about a risk are raised by workers
- At regularly scheduled times appropriate to the workplace.

It is often more effective and easy to eliminate hazards if risk management approaches used at the planning and design stages for products, processes and places for work.

The following procedure for risk management (involving hazard identification, risk assessment and control) is a practical guide for helping make all workplaces safer for workers, contractors, and visitors. It will help both management and workers, through consultation, to comply with the WHS regulations. These regulations require PCBUs to identify, assess and control hazards in the workplace with the aim of eliminating hazards or minimising hazards, do far as reasonably practicable. Recording risk management activities, including risk assessments and consultation processes is required.

These procedures will assist in:

- Finding hazards in the workplaces.
- Assessing the risks that may result from these hazards.
- Determining control measures to eliminate or minimise the level of the risks.
- Monitoring and reviewing the effectiveness of control measures.

3. Definitions

Hazard: Anything (e.g. condition, situation, practice, behaviour) that has the potential to cause harm, including injury,

disease, death, environmental, property and equipment damage. A hazard can be a thing or a situation.

Hazard Identification: This is the process of examining each work area and work task for the purpose of identifying all the hazards which are "inherent in the job". Work areas include but are not limited to machine workshops, mobile sites, office areas, agricultural and horticultural environments, stores and transport, maintenance and grounds, designated work sites, and rest spaces. Tasks can include (but may not be limited to) using hand held equipment, audio and visual equipment, industrial equipment, hazardous substances and/dealing with people, driving a vehicle, dealing with emergency situations, construction. This process is about finding what could cause harm in work task or area.

Risk: The likelihood, or possibility, that harm (injury, illness, death, damage etc) may occur from exposure to a hazard.

Risk Assessment: Is defined as the process of assessing the risks associated with each of the hazards identified so the nature of the risk can be understood. This includes the nature of the harm that may result from the hazard, the severity of that harm and the likelihood of this occurring.

Risk Control: Taking actions to eliminate health and safety risks so far as is reasonably practicable. Where risks cannot be eliminated, then implementation of control measures is required, to minimise risks so far as is reasonably practicable. A hierarchy of controls has been developed and is described below to assist in selection of the most appropriate risk control measure/s.

Monitoring and Review: This involves ongoing monitoring of the hazards identified, risks assessed and risk control processes and reviewing them to make sure they are working effectively.

4. Responsibilities

Effective risk management requires the commitment to WHS from managers and Officer as well as the input and involvement of workers.

It is the responsibility of all managers and supervisors to ensure that this policy is fully implemented in their area(s) of control and to consult with workers as part of undertaking the hazard identification, risk assessment and control process. It is the responsibility of workers to cooperate and comply with this policy. This includes providing effective and constructive information and feedback to aid the risk management process.

Officers have a responsibility to ensure that the areas under their control are complying with legislative requirements. This includes the Officer understanding the hazards and risks associated with their operations and ensuring that appropriate resources and processes are in place to eliminate or minimise these risks.

5. Risk Assessment Procedure

The risk assessment procedure can best be illustrated in the following way.



Step 1: Identify Hazards

WHS legislation in Queensland requires that PCBUs, in consultation with workers identify all potentially hazardous things or situations that may cause harm. In general, hazards are likely to be found in the following;

- Physical work environment,
- Equipment, materials or substances used,
- Work tasks and how they are performed,
- - Work design and management

In order to identify hazards the following are recommended:

(i) Past incidents/accidents are examined to see what happened and whether the incident/accident could occur again.

(ii) Employees be consulted to find out what they consider are safety issues.

I.e. ask workers about hazards near misses they have encountered as part of their work. Sometimes a survey or questionnaire can assist workers to provide information about workplace hazards.

(iii) Work areas or work sites be inspected or examined to find out what is happening now. Identified hazards should be documented to allow further action. The work environment, tool and equipment as well as tasks and procedures should be examined for risks to WHS.

(iV) Information about equipment (e.g. plant, operating instructions) and Material Safety Data Sheets be reviewed to determine relevant safety precautions.

(V) Welcome creative thinking about what could go wrong takes place, i.e. what hazardous event could take place here?

Any hazard which is identified by this process should be recorded on the **Risk Assessment and Control Sheet** (see Attachment 1 to this document) and further action taken to assess and then control the risks from this hazard.

Step 2: Assess Risks

Risk assessment involves considering the possible results of someone being exposed to a hazard and the likelihood of this occurring. A risk assessment assists in determining:

- A risk

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- How severe a risk is
- Whether existing control measures are effective
- What action should be taken to control a risk
- How urgently action needs to be taken. assessment should include:

(i) Identify factors that may be contributing to the risk,

(ii)Review health and safety information that is reasonably available from an authoritative source and is relevant to the particular hazard,

(iii)Evaluation of how severe the harm could be. This includes looking at the types of injuries/illnesses/harm/damage that can result from the hazard, the number of people exposed, possible chain effects from exposure to this hazard.

(IV)Evaluation of how a hazard may cause harm. This includes examining how work is completed, whether existing control measures are in place and whether they control the harm, looking at infrequent/abnormal situations as well as standard operating situations. A chain of events related to a risk may need to be considered.

(V)Determining the likelihood of harm occurring. The level of risk will increase as the likelihood of harm and its severity increases. The likelihood of harm occurring may be affected by how often the task is completed, in what conditions, how many people are exposed to the hazard and for what duration.

(vi) Identify the actions necessary to eliminate or control the risk; and

(VII)Identify records that it is necessary to keep to ensure that the risks are eliminated or controlled.

risk factors should also be identified as they may contribute to the risk: including (VIII)The work premises and the working environment, including their layout and condition,

(iX)The capability, skill, experience and age of people ordinarily undertaking work, (X) The systems of work being used; and

(XI) The range of reasonably foreseeable conditions.

Other

The process of assessing the risk is undertaken by reviewing any available information about the hazard (e.g. legislation, Australian Standards, Industry Code of Practice or guidance material about the hazard) and by using your personal work experience about what sort harm the hazard could create and how likely this would be to happen. When determining how likely it is that a person could be exposed to a hazard, consideration needs to be given to these "exposure factors":

(i) Whether there are any other risk factors that increase the likelihood of exposure?

(ii) How often is the person exposed (frequency)?

- (iii) or how long is the person exposed (duration)?
- (iv) How many people are exposed?

(V) the likely dose to which the person is exposed?

(VI) any legislative or recommended exposure levels required by statutory authorities.

We require managers and supervisors to identify hazards, assess the risks of harm resulting from exposure to the hazards and set a priority for corrective action by using a clearly laid out process. The process is as follows:

(i) Identified hazards are placed on the Risk Assessment and Control Form. (attachment 1)

(ii) A Risk Category Table (below) is then used to categorise the type of risk to Remedial Building Technicians

Risk Category	Description
Physical Activities (load/ logistics)	Work load and site conditions, up skill loads, admission processes and standards, worker progression and retention rates , mode of delivery, changes of worker profile and industry demands, levels of administrative and technical support for desired outcome and delivery

Behaviour	University community's risk culture: staff & sub-contractors reckless (disasters), conservative (opportunities lost), observation of policies and procedures. Corrupt conduct, activists seeking to damage Remedial Building Technicians.
Environmental	Water, soil, air contamination, asbestos, waste management, incidents causing damages, injury/ death, environmentally triggered emergencies.
Financial	Reductions in income, liquidity, financial loss, insurances, debt, budget overruns, tenders.
Infrastructure	Buildings, roads, pathways, utilities (electricity, water).
International	Overseas ventures/ reputation/ program disaster, relationships with overseas universities.
Legal	Contracts and agreements, high profile litigation - financial and reputational impact.
Legislation	Breach, financial penalty/ impact on reputation, laws, regulations, codes, affecting the industry.
Organisation	Strength of policies and procedures, planning, staffing, morale, training, ethical culture, leadership and management.
Political	Ability to respond to major changes in industry policies, level of government consultation.
Reputation (local/ international)	Damaging media reports, research links, regional involvement.
Technology	Strategic direction of IT, reliance on ecommerce/ email/ internet, records system.

(iii)The **Risk Ranking Matrix** is used to assess the likelihood and the severity or consequences of each hazard and to give it a "risk rating".

RISK SCORE MATRIX						
	CONSEQUENCE [C]					
•	[1] CATASTROPHIC	[2] MAJOR	[3] MODERATE	[4] MINOR		
онѕ	Fatality or permanent disability	Serious injury or temporary disability	Injury requiring medical attention	First aid treatment only		
Environmental	Irreversible damage to environment	Long term reversible damage	Short term reversible damage to environment	Little consequence to environment		
[A] Very Likely Expect to occur	1 [H]	1 [H]	2 [H]	3 [M]		
[B] Likely probably occur	1 [H]	2 [H]	3 [M]	4 [M]		
[C] Unlikely May occur	2 [H]	3 [M]	4 [M]	5 [L]		
D] Rare Occurs only rarely	3 [M]	4 [M]	5 [L]	6 [L]		

RISK SCORE	1-2 [H] – HIGH	3-4 [M] – MEDIUM	5-6 [L] – LOW					
		RISK HIERARCHY OF CONTROLS						
	e preferred risk control methods, starting from the	most preferred methods, are:		BEST				
1.	1. Try to eliminate the hazard.							
	E.g. use a machine to do a repetitive manual task, or completely removing asbestos from a workplace.							
~	If this is not possible, prevent or minimise exposure to the risk by one or a combination of:							
Ζ.	2. Substituting a less hazardous material, process or equipment: E.g. use less dangerous chemicals, substitute a flammable solvent with a water-based solvent, replace glass with plastic replacing an							
	existing machine with one that has better guarding.							
3.	B. Redesigning equipment or work processes:							
•.	e.g. modifying exhaust systems to reduce noise, installing lift equipment to reduce manual handling, fitting a roll over protective							
	structure to a backhoe or roller, controlling chemicals through improved ventilation.							
4.	Isolating the hazard:							
	E.g. installing screens or barriers around hazardous areas, enclosing or guarding dangerous equipment, using remote handling							
	equipment for hazardous substances or procedures.							
_	As a last resort, when exposure to the risk is not (or can not be) minimised by other means:							
5.	5. Introduce administrative controls:							
	E.g. job rotation to reduce exposure, limited entry or limited time in hazardous areas, adequate supervision, Instruction and training in safe work procedures, preventive maintenance and housekeeping procedures, warning signs.							
6	. Use of appropriate personal protective equipment:							
v .	E.g. gloves, ear plugs, ear muffs, goggles, face shields, hard hats, high visibility clothing, safety boots, sun hats, etc.							

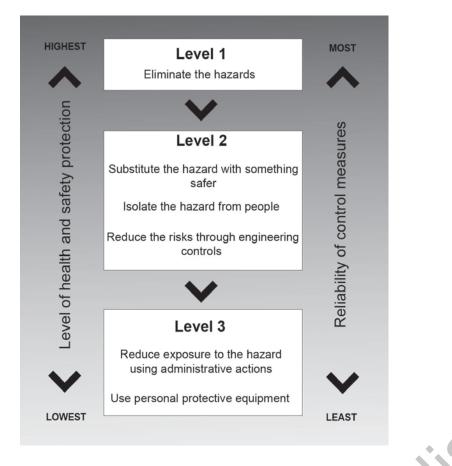
Step 4: Implement additional risk controls

Having identified the hazards in your workplace, assessed their risks and reviewed the existing controls, all hazards must be managed before people are hurt, become ill or there is damage to plant, property or the environment.

The management of risks in the workplace requires eliminating risks so far as reasonably practicable in the first instance. Where elimination is not possible, then risks should be minimised, so far as reasonably practicable.

All hazards that have been assessed should be dealt with in order of priority. The most effective control option/s should be selected to eliminate or minimise risks. The Hierarchy of Controls (see diagram below) ranks control options from highest level of protection and reliability to lowest. This should be used to determine the most effective control/s.

Hierarchy of Controls



Level 1 Control Measures – Eliminate the Hazard

The most effective control measures eliminate the hazard and associated risks. This can be achieved through removing the hazard or selecting alternate products or equipment to eliminate the risk. If a hazard cannot be eliminated then risks can be minimised by lower control measures

Level 2 Control Measures

These are used to minimise the risks and involve on or a combination of the following;

(i) Substitute the hazard: substitute a substance, method or material to reduce the risk or the hazard

(ii)Isolate the hazard: separate the hazard from the workplace or people, For example;

- 1. Product store room, kept locked except to an authorised person.
- 2. Lock out procedures on faulty equipment.
- **3.** Appropriate guarding for machinery.

(iii) Use engineering controls: modify existing machinery or plant or purchase different machinery or plant to provide a physical solution. For example;

1. Trolleys, hoists or cranes.

2. Guard rails.

Level 3 Control Measures

These are control options which should be considered last as they do not control the source of the hazard but rely on human behaviour or supervision and are therefore less effective. They include;

(IV) Administrative Procedures: develop work methods or procedures to reduce the conditions of risk, for example:

1. Written Safe Operating Procedures

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- 2. Job rotation to restrict hours worked on difficult jobs.
- **3.** Staff trained in the correct operating procedures.

(V) Use Personal Protective Equipment (PPE) and training in its use:

offer the lowest level of protection and should only be used as a last resort to deal with the hazard, where the hazard cannot be removed or reduced by any other means, for example:

1. Handling of chemicals – gloves, safety glasses, aprons.

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- 2. Protecting eyes from flying particles.
- 3. Protecting feet safety boots.

Consultation with workers is required in the selection and implementation of control measure in the workplace. Controls may need to be trialled to determine effectiveness and workers should be involved in the feedback process.

Each measure must have a designated person and date assigned for the implementation of controls. This ensures that all required safety measures will be completed and documented.

Step 5: Monitor and Review

Hazard identification, risk assessment and control are an on-going process. Therefore, regularly review the effectiveness of your hazard assessment and control measures. Make sure that you undertake a hazard and risk assessment when there is a change to the workplace including when work systems, incident, tools, machinery or equipment change. Provide additional supervision when new employees with reduced skill levels or knowledge are introduced to the workplace. The effectiveness of control measures can be checked through regular reviews as well as consultation with workers.

Maintaining records of the risk management process assists when undertaking subsequent reviews or risk assessments as it demonstrates decision making processes and informs how controls were intended to be implemented.