



# Critical Risk Controls



GeelongPort



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# Introduction

GeelongPort is focused on preventing harm towards our people, with our biggest priority being the prevention of permanently disabling injury and fatality. The GeelongPort Critical Risk Controls (CRCs) have been developed after a review of permanent incapacity injuries and potentially fatal incidents across industry. The CRCs represent minimum controls for eight key risks that have the potential for fatality and permanently disabling injury.

- » For each of the eight key risks, minimum systemic controls have been identified, along with the associated behaviours (Life Saving Rules) that support them, to ensure no one is fatally or permanently injured at a GeelongPort site.
- » The controls (both Critical and Life Saving Rules) apply to everybody; employees, contractors, service providers and visitors.
- » Where you consider a task cannot be carried out safely, do not commence and/or do not continue to perform the task.

## CONTEXT

GeelongPort's CRCs do not sit in isolation from our other safety programs. All eight risks are included in a risk register, which is reviewed at least quarterly. Safety Engagements for each CRC have been developed and are tracked separately to build an understanding and embed compliance with the requirements. Our incident reporting is also reviewed monthly to assess CRC control effectiveness.

Finally, there is a self-assessment and external independent audit process to further embed and verify these controls.

## REQUIREMENTS

All CRCs require supporting behaviours. The behaviours that support these CRCs have been documented as the GeelongPort "Life Saving Rules." All rules are important, but some, such as these, are more important than others. They are expected to be visibly displayed, learned by all, and supported by everyone in our workplace. They exist to ensure all of our people go Home Safely Every Day.

No one is perfect, and there is no expectation of perfection; however, compliance with these requirements is expected, and deliberate non-compliance may result in disciplinary action. Therefore, there is no start and end date for CRC management. There is, however, a scored audit process and an expectation of continual improvement.

GeelongPort will ensure ongoing compliance is maintained and verify the CRC requirements are being met. GeelongPort seeks to eliminate critical risk from the business and ensure adequate resources and support are available to meet this important challenge.



**Brett Winter**  
GeelongPort CEO





Home Safely Every Day is a simple concept, but requires systematic and constant attention to ensure we achieve it. The CRC framework and full implementation provides us the means to ensure Home Safely Every Day are not just words, that we live and breathe it.

**Darren Green**

General Manager Maintenance,  
GeelongPort







# Confined Space Entry

Fatalities occur in and around Confined Spaces due to contaminated atmospheres that can asphyxiate, catch fire or explode. The risk of engulfment and/or entrapment for any persons within, and the restricted nature of access in and out of a Confined Space, can make rescue difficult and dangerous. Unplanned rescues have resulted in multiple fatality events.

## CRITICAL CONTROLS



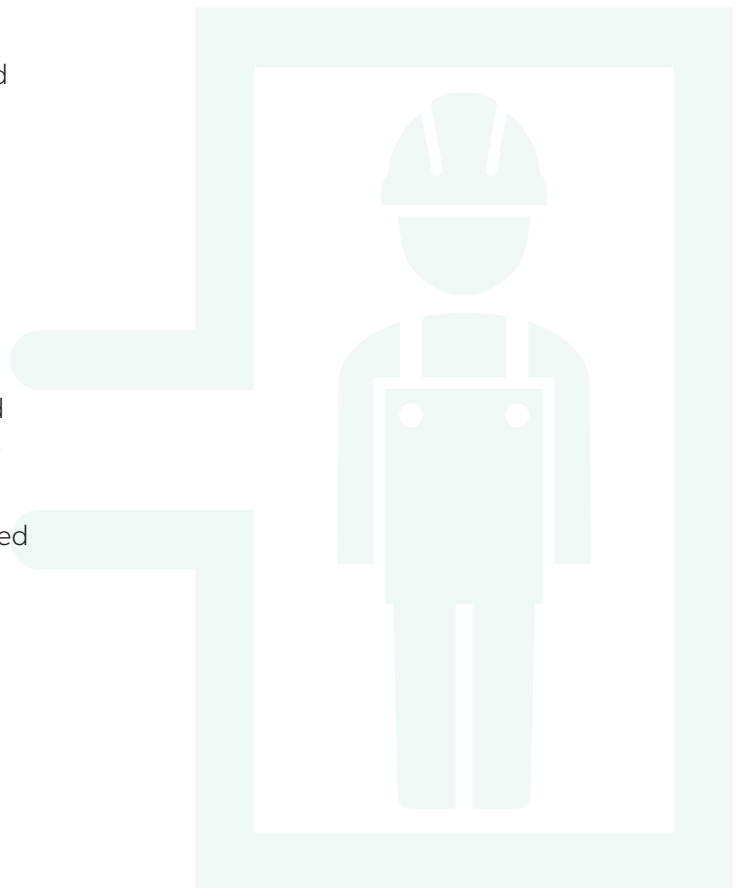
1. Confined Spaces are assessed, and any classified as Confined Spaces are identified with a sign affixed such as “Danger Confined Space – No entry without a permit” and have access to them restricted –locked if possible.
2. A register of all Confined Spaces identified must be maintained.
3. A Confined Space Entry Permit system must ensure:
  - a. approval is obtained by a trained and competent person prior to entry
  - b. all persons who enter are trained and competent
  - c. a job-specific JSEA/SWMS/SWI is completed for the task
  - d. a competent standby worker is appointed and present at the entry point for the duration of the work
  - e. whenever a hazardous atmosphere may be present, atmospheric monitoring is completed (which is for all Confined Spaces that are not deemed so due to engulfment risk)
  - f. an emergency rescue plan for the Confined Space work is documented with all required equipment readily accessible in case of an emergency

## LIFE SAVING RULES



1. You must be trained and competent to enter a Confined Space.
2. You must be identified on an approved Confined Space Entry Permit to enter a Confined Space.

**Note:** A vessel hold does not generally meet the definition of a Confined Space, however contaminated atmosphere issues may exist. Sites must ensure they identify, test and purge potential contaminated atmospheres in a ship’s hold prior to entry.







“The safety of ourselves, and the protection of our environment, will be the drivers of our cultural change for long term sustainable growth. The Critical Risk Controls ensure we focus on key standards today to deliver on our bright future of tomorrow.”

**Chris Anderson**

Head of Service Delivery, GeelongPort





# Work at Heights

Falls from height are a significant cause of fatality in the industry. A fall from a height of 2 metres creates an impact speed of more than 22 km /h, enough to cause a fatality. In fact, falls from 2 metres or less account for a significant proportion of all workplace fatalities.

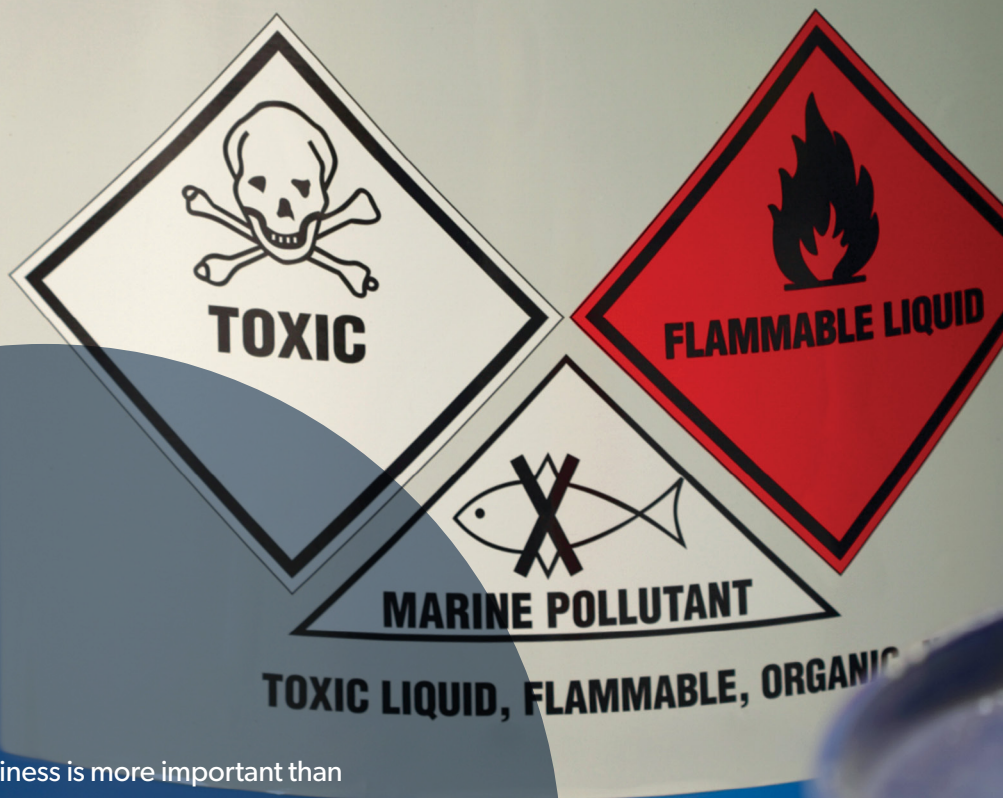
## CRITICAL CONTROLS

1. Fall prevention equipment must be:
    - a. attached to a certified anchor point or one approved by a competent person
    - b. inspected by the user prior to use, and if found to be defective, tagged out and placed in a designated 'out of service' area
    - c. inspected routinely and placed on a maintenance register
    - d. periodically inspected and tagged by a competent person
  2. Fall risks are assessed prior to commencing a task, and the following hierarchy of controls is applied;
    - a. do the work from the ground
    - b. provide a safe working area such as a work platform, scaffold or Elevated Work Platform (EWP)
    - c. use a work positioning system such as a travel restraint
    - d. use personal fall restraint equipment
    - e. Safe Work Instruction (SWI), training and assessment
  3. Where overhead work is being conducted, barricades and signage must be erected to protect workers from falling materials. Devices must be in place to stop tools and equipment from falling, such as kick-boards.
  4. A Work at Heights Permit system has been implemented for all work where there is potential to fall and/or when using fall restraint equipment, an EWP, Boom or Scissor Lift. The process must ensure:
    - a. approval is obtained by a trained and competent person prior to work
    - b. all workers who conduct work (or act as a spotter for work) are trained and assessed as competent
    - c. a rescue and retrieval plan is completed
    - d. a job specific JSEA/SWMS/SWI is completed for the task
- Note:** an SWI may be used instead of a permit for routine tasks provided it encompasses the points above and workers performing the task have been trained, assessed and deemed competent in it.

## LIFE SAVING RULES

1. You must be trained, competent and authorised to work where there is potential to fall or to use fall restraint equipment, an EWP, Boom or Scissor Lift.
2. You must work from dedicated work platforms, unless you can maintain 3 points of contact at all times and if a portable ladder is used, it is tied off or supported below.





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Nothing in our business is more important than the safety and wellbeing of our employees, and a serious incident can change people's lives forever. The CRC program focuses our efforts on those risks that can do the most harm to our people.

**Brett Winter**  
CEO, GeelongPort

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# Hazardous Chemicals

Hazardous Chemicals can cause fire or explosion if handled or stored incorrectly. They may also result in poisoning, illness or death if short and long term exposure limits are exceeded. In addition, there may be environmental impacts from improper storage, use and disposal.

## CRITICAL CONTROLS

- 1.** All hazardous chemicals or wastes on site are listed on a register with Safety Data Sheets (SDS) accessible for each.
- 2.** A risk assessment is completed for all hazardous chemicals that determines requirements for:
  - a. training
  - b. procedures for safe use, transport, storage and disposal
  - c. exposure and health monitoring
  - d. spill response and emergency management
  - e. personal protective equipment
- 3.** Hazardous Chemicals are clearly labelled, stored, segregated and disposed of in accordance with the SDS and legislative requirements.
- 4.** All manifest and placard requirements as defined by legislation are met.
- 5.** Customers, contractors and visitors must supply appropriate information related to any Hazardous Chemicals that they bring onto site.

## LIFE SAVING RULES

- 1.** You must comply with signage and SDS requirements when handling Hazardous Chemicals.







It is extremely rare for somebody to be injured by a safety risk that they weren't aware of. They are more likely to be injured by not understanding the level of risk exposure or by making decisions that do not address the risk. The CRC's empower all our people with the knowledge and tools to understand risk and make good decisions to create and maintain a safe workplace.

**Rod Simkin**

Engineering Manager, GeelongPort







# Lifting

Lifting is a major risk in the industry and occurs regularly in GeelongPort operations. Lifting has the potential to cause multiple fatalities through failures of lifting gear, crane failure, human error, load shifts and complexities with lifts of unknown weights and centres of gravity.

## CRITICAL CONTROLS

- 1.** All workers involved in Lifting operations are trained, assessed as competent and hold any required licenses and qualifications.
- 2.** All lifting and rigging gear is:
  - a. labelled with a Working Load Limit (**WLL**), used in accordance with the intended design purposes and specified limits
  - b. certified and tagged to the relevant AS/ NZS standards and be subject to routine maintenance (Note: Ship's gear may be used when compliant to MO32 of the Australian Maritime Safety Authority Regulations)
  - c. fit for purpose as verified through pre-operational inspections by a competent person (also applies to pre-slung cargo) and, if found to be defective, tagged out and placed in a designated 'out of service' area
- 3.** All lifts are documented in a risk assessment, and routine lifts are supported by an SWI that:
  - a. considers pick-up and lay-down areas within the crane's load lifting radius and lift path
  - b. details exclusion zones
  - c. identifies load dimensions including weight and centre of gravity
  - d. provides instruction relating to weather and wind conditions
  - e. details lifting configuration
  - f. ensures that lift plans are developed for non-routine lifts (which may be supplied by a third party)
  - g. ensures that lifts must not pass over people, occupied buildings or manned vehicles

## LIFE SAVING RULES

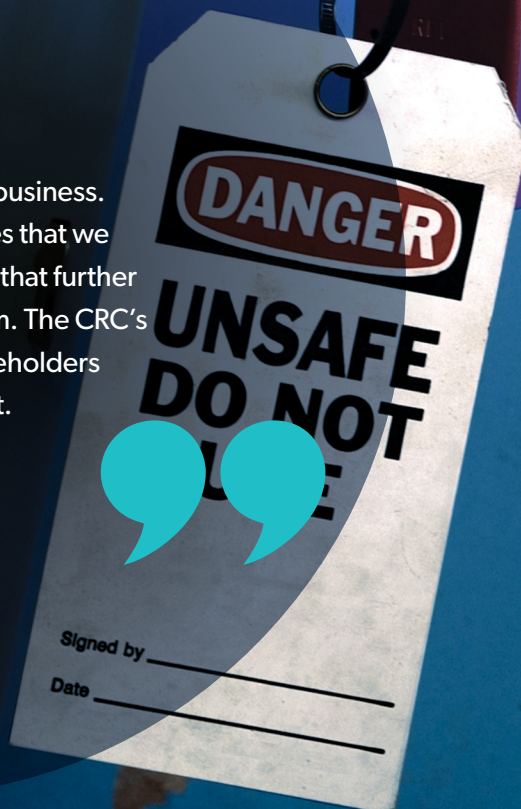
- 1.** You must ensure lifted items must not pass over people, occupied buildings or manned vehicles.
- 2.** You must keep clear from a suspended load (that is not pinned or secured) and not be under the load or in the line of fire.





Safety is our licence to do business. The CRC's program ensures that we have a level of compliance that further enhances our safety system. The CRC's will help to protect all stakeholders that interact within the Port.

**Stephen Anderson**  
CFO, GeelongPort





# Energy Isolation

Failure to isolate equipment effectively has the potential to cause multiple fatalities for anyone working on or near the equipment. Machinery can start or be started inadvertently, multiple handovers can occur between various parties, and persons working on equipment can often be out of view of operators.

## CRITICAL CONTROLS

- 1.** Isolation requirements are incorporated at the design, procurement and modification phases for plant and equipment.
- 2.** Energy sources and isolation points are clearly identified/labelled.
- 3.** Equipment isolation devices are robust and secure enough to withstand the elements and unintentional removal.
- 4.** All plant and equipment must be reduced to a zero energy (safe) state and stored energy removed prior to being worked on. This includes isolation of other plant and equipment near to the work area that poses a risk.
- 5.** Adequate personal isolation locking devices, tags and locks are provided and are uniquely keyed with no master keys available (unless under an authorised removal process).
- 6.** An isolation procedure must be in place based on risk that include, as a minimum:
  - a. verification testing for a safe state
  - b. a permit system and an isolation plan for complex and high risk isolations
  - c. processes for removal of isolation locks by an authorised person other than the originator, and for managing isolation breaches
  - d. roles and responsibilities for persons involved in isolation
  - e. training, competency and authorisation requirements
  - f. processes for the isolation of critical safety equipment (e.g. fire suppression, alarm systems etc)
  - g. processes for inching, barring and testing completed on equipment that has had guards, lanyards or other safety features disabled for maintenance purposes
  - h. start up, commissioning and handover to operations

## LIFE SAVING RULES

- 1.** You must isolate before you remove a guard or other safety device, or perform repairs and maintenance tasks on equipment.
- 2.** You must use an appropriate isolation device and not use control circuit devices (e.g. E stops, lanyards etc.) for Energy Isolation.







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Keeping safety at the forefront of our minds is essential in ensuring that everyone goes Home Safely Every Day. The CRC's increase the focus on high risks activities and help our people continually drive improvements that eliminate serious safety risks. Continually enhancing safety systems is something that will never stop.

**Darren Johnston**  
OHS Specialist, GeelongPort

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# Traffic Management

Serious or fatal incidents can occur when plant and equipment, or vehicles and plant and equipment collide on site. The risk is magnified further when pedestrians operate in the same area, and even further when cargo loading and unloading operations are conducted.

## CRITICAL CONTROLS

- 1.** A Site Traffic Management Plan (TMP) must be in place that:
  - a. is reviewed by site management at least bi-annually
  - b. communicated to all site users and displayed at key locations
  - c. included in the GeelongPort induction
- 2.** The TMP is based on a Traffic Interaction Risk Assessment that considers:
  - a. key interactions and intersections between vehicle/people, vehicle/vehicle, vehicle/critical object (e.g. LPG Tank, Electrical Sub Station) and vehicle/building or structure
  - b. areas subject to daily operational changes (e.g. R&D areas) have processes to manage and communicate these appropriately
  - c. personal use of electronic devices with a prohibition in areas where mobile plant and vehicles are operating
  - d. speed limits
  - e. safe zones during loading/unloading operations
  - f. communication protocols
  - g. visitor access and entry to Site
- 3.** All vehicle operators are inducted.
- 4.** Any person entering an operating area is inducted to the facility or escorted by an inducted employee.

## LIFE SAVING RULES

- 1.** You must comply with GeelongPort's TMP.







“ Safety doesn't happen by chance. The CRC program provides our people with information to better understand and manage critical risks. The CRC's help our people remain focused on what can hurt them and will support them in living a safe and healthy lifestyle.

**Adam Gordon**  
Operations Manager, GeelongPort “





# Mobile Plant

Mobile Plant is a significant risk of fatality or permanent injury. Blind spots, lack of visibility, restricted movement, load stability, rough terrain and failure of equipment are all factors that could contribute to a major incident.

## CRITICAL CONTROLS

1. All operators are licensed when required, trained and assessed as competent and authorised to operate Mobile Plant.
2. Vehicle pre-start checks are undertaken each operating shift and documented.
3. A process must be in place to describe minimum conditions for operation and the reporting of faults and removal of items from service.
4. Operators do not conduct maintenance activities (including tyre changes) unless they have been trained and specifically authorised to do so.
5. A risk assessment is completed for and prior to:
  - a. use of each type of Mobile Plant and any attachments
  - b. purchase of new Mobile Plant
  - c. undertaking a new process or task with Mobile Plant
6. SWI's are in place for all tasks involving Mobile Plant, which includes requirements for the use of attachments and changes by competent persons.
7. All Mobile Plant is procured in compliance with company specifications and are maintained to remain compliant to company and manufacturers instructions.

## LIFE SAVING RULES

1. You must use Mobile Plant in accordance with the Original Equipment Manufacturers (OEMs) specifications and recommendations.
2. You must wear a seat belt in Mobile Plant while it is operating (unless seat belts are not capable of being fitted).





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The Safety of all GeelongPort employee's and users of the Port is paramount. The CRC program enhances all our safety systems we currently have in place and use, ensuring we all go home safely every day to our loved ones.

**Gary Hayes**

Team leader, GeelongPort

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# Maintenance and Inspection

Repairs and maintenance are activities that result in many workplace fatalities, both when performing the work and when the standard of maintenance work is inadequate. With the significant number and highly varied nature of our equipment, the risk to our people if these activities are not carried out appropriately is significant.

## CRITICAL CONTROLS



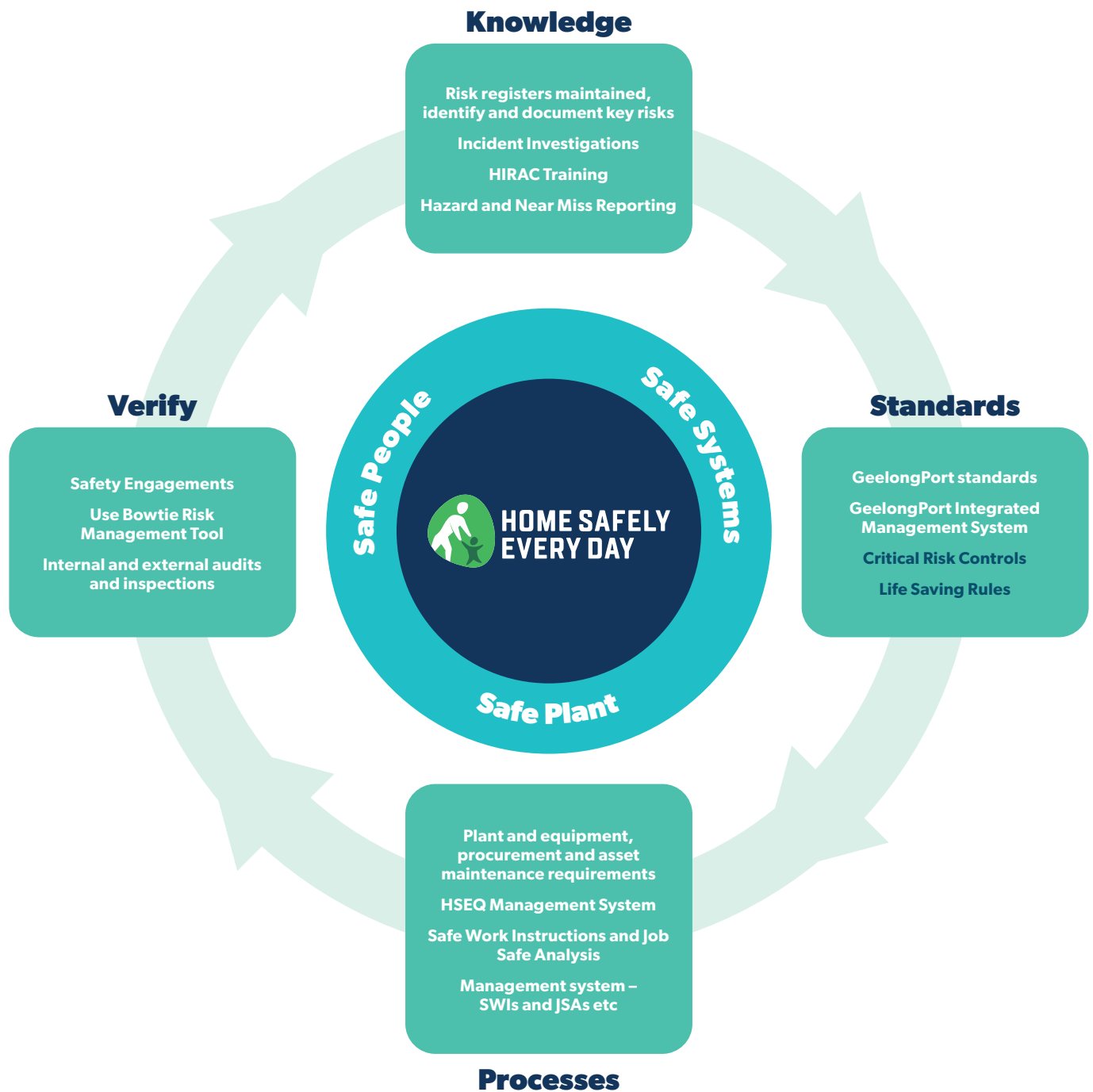
- 1.** A risk assessment is completed for all modifications to plant and is approved by an engineer.
- 2.** There must be a planned maintenance regime for all plant and equipment that meets OEM recommendations.
- 3.** All plant and equipment is registered in accordance with the relevant legislation in each state or jurisdiction and complies with the relevant legislative requirements and AS/NZS Standards.
- 4.** There must be a process in place to document the history of inspection, maintenance and modification, that it be maintained and readily available.
- 5.** There must be a process in place for handover and hand back, acceptance and verification of works and communication requirements between operations and maintenance functions.
- 6.** Equipment used for maintenance and inspection tasks is fit for purpose, calibrated, maintained and certified.
- 7.** Tasks are risk assessed and safe work processes are in place for maintenance and inspection activities.
- 8.** All personnel involved in maintenance and inspection are trained, competent and hold relevant qualifications to undertake the task.
- 9.** Tyre change, repair and inflation is completed by trained and competent persons with any inflation of a tyre on a rim over 20" dia is completed in a cage or equivalent.
- 10.** There must be a process in place to ensure all equipment that is 'out of service' or has restricted use conditions is tagged or isolated to prevent inappropriate use.
- 11.** All equipment or machinery used in maintenance or workshop activities complies with guarding and has operational instructions.
- 12.** There must be a process in place to ensure work permits and risk assessments are completed for any burning, welding or grinding work outside a dedicated hot work bay.

## LIFE SAVING RULES



- 1.** You must only perform maintenance work that you are trained and authorised to do.

# How the Critical Risk Controls integrate into our Safety Framework





# GeelongPort's Life Saving Rules



## CONFINED SPACE ENTRY

- You must be trained and competent to enter a Confined Space.
- You must be identified on an approved Confined Space Entry Permit to enter a Confined Space.



## WORKING AT HEIGHTS

- You must be trained and competent and authorised to work where there is potential to fall, to use fall restraint equipment, an EWP, Boom or Scissor Lift.
- You must work from dedicated work platforms, unless you can maintain 3 points of contact at all times and, if a portable ladder is used, it is tied off or supported below.



## HAZARDOUS CHEMICALS

- You must comply with signage and Safety Data Sheet requirements when handling chemicals.



## LIFTING

- You must ensure lifted items do not pass over people, occupied buildings or manned vehicles.
- You must keep clear from a suspended load (that is not pinned or secured) and not be under the load or in the line of fire.



## ENERGY ISOLATION

- You must isolate before you remove a guard, other safety device, or perform repairs and maintenance tasks on equipment.
- You must use an appropriate isolation device and not use control circuit devices (e.g E stops, lanyards etc.) for energy isolation.



## TRAFFIC MANAGEMENT

- You must comply with GeelongPort's Traffic Management Plan.
- You must use mobile phones (or similar personal devices) in hands free mode or not at all during vehicle operation.
- You must adhere to road rules including the wearing of seat belts at all times when operating a heavy vehicle.



## MOBILE PLANT

- You must use mobile plant in accordance with the Original Equipment Manufacturers specifications and recommendations.
- You must wear a seat belt in mobile plant while it is operating (unless seat belts are not capable of being fitted).



## MAINTENANCE AND INSPECTION

- You must only perform maintenance work that you are trained and authorised to do.

## Life Saving Rules Compliance

At GeelongPort, we must demonstrate "don't walk by" approach to non-compliance of our Life Saving Rules.

Breaches to Life Saving Rules are deemed to be a "Near Miss" incident and are to be reported and investigated. Each incident will be assessed on its merit. All "Near Miss" incidents are serious matters that should be well documented and embedded in our business.

The required response is to stop the activity, task or process immediately. The incident is to be reported to the Team Leader/Manager, the Operations/Maintenance General Manager and/or the HSEQ Manager. Work is NOT to recommence until all identified safety breaches have been controlled and approved by the Operations/Maintenance General Manager.

Failure to comply may result in disciplinary action for employees involved and Managers and Team Leaders who fail to enforce or tacitly accept them. Managers and Team Leaders who have a breach occur in their area will be expected to show evidence of the management of these issues via toolbox talks, engagements, or as a last resort warning letters and diary notes.

Thank you for your co-operation to ensure we all go Home Safely Every Day.













**GeelongPort**

The GeelongPort wave logo is a symbol of our enduring pursuit of prosperity for our customers, our people and the community.