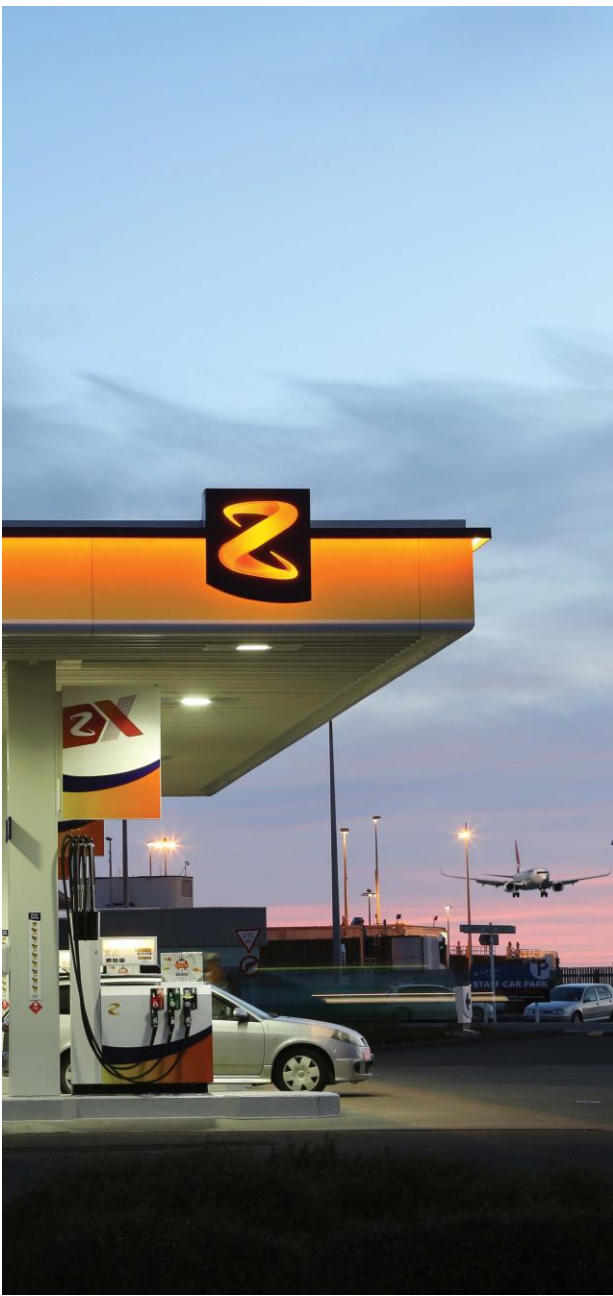


Working Near/Over/In Water

HS-IOA-GUI-020



Revision Summary

Version	Author	Reasons for Change	Approver	Date Approved
1.0	G Mancusi	New document	G Knox	2/12/2024



1: Purpose and scope

The purpose of this Safe Work Practice is to describe the methods for non-Routine work in areas where there is water below, nearby or workers are required to work in water. These scenarios are referred to as 'working in proximity of water' throughout this procedure.

In addition to the above, the intent of this document is to provide guidelines to minimise the likelihood of injury, to protect personnel working in proximity of water, and to prevent water ways from becoming polluted through construction or other work activities performed near water.

Factors requiring Risk Assessment

When assessing the risks of working in proximity of water, the factors that require consideration are:

- Depth of water
- Acceptable Wind Speeds (when working at heights or MEWP)
- Employees' ability to swim
- Type of work activity
- Work environment
- Tidal influences
- Type of plant or vessel used, its Safe working load and suitability for the task
- Temporary or permanent structures in place
- Environmental impact of the activity
- Weight of equipment and tools being used
- Weather conditions including current and forecast wind conditions for the period of work being carried out
- Licences/permits needed to carry out the work
- Experience of contractors/workers in working in proximity of water
- Any unique PPE requirements applicable to the task
- Other operations in vicinity of work being carried out

Other:

- Consideration to maritime new Zealand requirements for working vessels
- Any local port/harbourmaster requirements

Applicability

This document applies to all persons working for and on behalf of Z or its subsidiaries, i.e. employees, contractors, sub-contractors, and other third parties on premises operated by Z or its subsidiaries.

Compliance shall be the responsibility of all employees, contractors, or 3rd party working for or on a Z area of business. This document takes precedence only where its requirements exceed those of applicable laws and regulatory requirements.

All applicable laws and regulations shall be complied with when performing any work, either within or beyond the scope of this document.

Specific Activity	Definition
Working Near Water	Workers need to enter and work within two metres of an unprotected water's edge.
Working On Water	Workers are using a vessel or other means of transport.
Working In Water	Workers need to enter, walk, swim and undertake work in water.
Working over water	Workers are required to work from a structure (temporary or permanent) that is suspended directly over water. E.g a scaffold under wharf



2: Hazards



Applicable LifeSavers – TBC



3: Our Non-negotiables

1. **Minimum of two people at the work front, one as a designated spotter**
2. **Daily kick-off meeting with all involved.**
3. **We start work only when all required controls are in place.**
4. **If there's a doubt, we stop and talk to the experts.**
5. **We have a full rescue plan.**
6. **We know the tools we are using, including their rated capacity.**
7. **We consider the Centre of Gravity of the vessel and what can impact it.**
8. **We are clear on our due diligence responsibilities.**

4: Roles and responsibilities

General Manager-BU	<ul style="list-style-type: none"> Ensures the BU is compliant to the requirements of this procedure
Control Of Work and PCBU Specialist	<ul style="list-style-type: none"> Responsible for maintaining and confirming the implementation of this procedure
Senior Permit Issuer (SPI)	<ul style="list-style-type: none"> Conduct assurance checks to ensure any tasks that involves working in proximity of water is managed under the Z Permit to Work System (PTW). Coach the Permit Issuer and/or the Permit Holder if gaps are identified.
Permit Issuer (PI)	<ul style="list-style-type: none"> Confirm that the hazards associated with the specific task involving working in proximity of water have been identified and assessed and that the identified controls are adequate to perform the work in a safe and environmentally-sound manner prior to authorising and issuing the Permit to Work. Confirm appropriate rescue plan is documented and included in PTW documentation
Permit Holder (PH)	<ul style="list-style-type: none"> Complete a Hazard Identification and Task Risk Assessment (HITRA the Hierarchy of Control before commencing the task. Ensure only a competent person can perform work in proximity of water. Ensure all equipment used complies with relevant code of practice or regulation, is fit for purpose, well maintained and certified. Complete a Rescue Plan and ensure workers are familiar with the requirements
Standby person	<ul style="list-style-type: none"> Know the hazards specific to the works (e.g.: wharf area). Ensure the conditions and requirements listed on the permit are adhered to. Prevent the fouling of airlines and/or lifelines, when these are used. Evacuate the work area if hazardous conditions become present (e.g.: weather conditions change, tidal movements, etc.)



- Initiates the Rescue Plan procedures and deploys any equipment used for rescue, if necessary.
- Ensure unauthorised individuals do not enter the work area.
- Be familiar with Rescue Plan requirements and activate plan without hesitation should the need arise.
- Get help if an emergency develops, using the site emergency telephone number (where this exists), radio, or other pre-planned means. Under no circumstances shall the Standby Person enter the water or attempt rescue by entering the water unless backup support is present.
- Ensure workers are correctly wearing all Personal Protective Equipment, including any additional PPE identified in the HITRA.
- Maintain contact with Site office.

5: Requirements

All work in proximity of water entry shall be managed under the **Z Permit to Work System** (PTW).

A General Work Permit is required for all work that involves working in proximity of water.

Emergency Response Plan (ERP)

For all works undertaken in proximity of water - where there is a risk of a person or plant & equipment to fall into water or drown - an emergency response plan should be developed. The PI and PH need to consider all credible emergencies and have a written plan in place to identify required actions and resources. This could include but not limited to; identifying the First Aiders on site and means of contacting them; identifying location of first aid kit and other rescue equipment or resources; evacuating the area; calling for Emergency Services.

Rescue Plan

For all works in proximity of water, a rescue plan (using the template HS-IOA-FOR-005 or contractor equivalent) shall be developed and agreed. The rescue plan is to be rehearsed as far as is practicable without undue risk to personnel, to the extent that it provides confidence in its effectiveness. All those named in the rescue plan must be involved in the rehearsal.

Where a fall arrest system is to be used, a specific Rescue Plan is mandatory to rescue people who have fallen, are suspended in a harness, and could develop suspension trauma.

Works under a Wharf

Works under a wharf will need to be authorised by the relevant port authority, who will issue a specific permit - with any additional controls documented as part of the HITRA process.

Expected controls may include but not limited too; Personal Floatation Devices (PFD's), means of communication, rescue plan, safety watch.

5.1 Hierarchy of controls

At all times, when working in proximity of water, those involved should conduct a risk assessment and apply the "Hierarchy of Controls", in descending order.

Due to the nature of Z operations, non- routine work in proximity of water does not occur on a regular basis, hence why it requires **additional planning and preparation and** – when needed – **consultation with Subject Matter Experts in marine operations** such as Port Representatives.

5.1.1 Eliminate the risk

As a first step, check to see if the work can be done using equipment that eliminated the need for people to be in proximity of water, where there is a risk of falling into water and drowning.

5.1.2 Isolate the hazard

Isolate workers from the water edge by installing a guardrail or barrier. Where walkways/platforms or edge protection is not provided, other means of fall prevention must be used to ensure safe access subject to risk assessment (e.g. workboxes, harness with lanyards, static lines and cargo nets).

5.1.2.2 Under wharf pipelines

When the scope of work includes the inspection, replacement or removal of pipelines located under the wharf, there is a requirement to ensure that these assets do not present an additional risk to the workers. Additional isolation controls might be required to ensure that vapour or gas are not present.



5.1.3 Engineering and administrative controls

The provision of gangways, walkways, pontoons or scaffolding for access to temporary or permanent structures over water. The provision of lifebuoys for immediate use in emergency.

5.1.4 Use appropriate PPE

Specific PPE to be worn by workers when working in proximity of water include, Personal Floatation Devices, etc.

NOTE: Make sure that life jackets meet the current New Zealand Standard NZS 5823: 2005

5.2 Competency

Specialised training and competencies are required before an individual is to be assigned a specific PTWS operational responsibility. Table 1 specifies training requirements for personnel.

Table 1. Training and competency requirements for Working in Proximity of Water

Roles	What	Description
Person working near/in/over water		First Aid Training
		Applicable Port Induction
		Z Induction
	And Must be familiar with the Emergency Response and Rescue Plan	
Standby person (shore-based)		First Aid Training
		Applicable Port Induction
	And Must be familiar with the Emergency Response and Rescue Plan	
Vessel owner or skipper; person responsible for managing the vessel	SLP	Specified Limits Permit: issued by Maritime NZ; This covers commercial operations within restricted areas. NOTE: allow one month for the assessment of your specified limits permit application.
	SRL	Skipper Restricted Limits: Entry-level command certificate with engineering components. With SRL, you can perform a skipper's (master's) functions and duties on passenger and non-passenger ships less than 12 metres length overall, carrying up to 19 passengers within restricted limits (which includes both enclosed and inshore limits).
	If you require any further information about safety management systems, please contact your local Maritime Officer. Email: operators@maritimenz.govt.nz	

5.3 Fitness for work

- A competent person must be physically fit for the task, must have the ability to identify hazardous conditions, and must take action to maintain a safe workplace. They must be assessed by a medical practitioner as medically fit. Refer to ISN requirements for contractors.
- Fitness to work of the individuals undertaking activities in proximity of water must be considered as part of the HITRA

In order to ensure the health of the individual during the activity the HITRA must include requirements for:

- Rest periods must be agreed to enable regular rest and re-hydration.
- A protocol for workers to report immediately if experiencing fatigue, dizziness, or any other impairment.
- Workers exposure to extreme temperatures (acceptable is within 5°C to 42°C)



- If workers are exposed to extreme temperatures or physical demands, refer to **Managing Fatigue at Z guidelines** to address the risks of fatigue (HS-HAW-H-GUI-001).
- Workers must comply with **Z's Drug and Alcohol policy**. Z requires the performance of its staff, contractors and others on Z premises or operating equipment on Z's behalf to be unimpaired by alcohol or drugs.

5.4 Electrical equipment used in Proximity of Water

When inappropriate electrical equipment is used or placed near water, there is a greater risk of serious injury or death from an electric shock as water conducts electricity. Only use electrical equipment designed to operate in or around water and is connected to an electrical circuit containing a safety switch or residual current device (RCD), or fitted with a portable RCD. Portable RCD's should be tested daily or before each use (whichever is longer) using the inbuilt test button and inspected every three months by a competent person.

Electrical equipment not designed to operate in or around water must be located where it cannot come into contact with, fall or slide into water.

Where practicable, use pneumatic tools, battery powered tools or extra low voltage powered tools when working on or near water to minimise the risk of contact with electricity.

5.5 Diving

Z Energy personnel are not permitted to perform any diving work. Licensed contractors must be engaged for this purpose. Diving work must be performed in accordance with all legal requirements and applicable standards and codes.

5.6 Operating mobile plant on or near water

Where workers need to operate mobile plant (e.g. excavator, mobile crane) in close proximity to water it must be operated to conditions and manufactures specifications. A HITRA must be developed or reviewed and all the identified critical controls must be implemented and deemed as effective prior to commencing the work.

The following controls need to be considered:

- Walk through to assess the conditions of the work areas prior to commencing work.
- Fit for purpose equipment.
- Operating the plant to conditions.
- Establishment of exclusion zones and barriers to prevent falling into or submersion under water where reasonably practicable.
- A spotter to guide the operator and monitor person working in the vicinity.
- A lifejacket must be readily available for use.

5.7 When a Personal Floatation Device (PFD) must be worn

During Non- Routine work, A PFD must be worn at all times when:

- Working within **two metres** of an unprotected edge that is adjacent to a body of water into which a worker could fall into deep enough water to reasonably drown while carrying out the intended work.
- Both self-rescue or rescue by others is difficult without a lifejacket.

6: References

External References

- Health and Safety at Work Act 2015

ZORM Documents

- Z's Approach to managing operational risks
- Z's Approach to managing operational integrity
- Z's Permit to Work Manual
- Z's Drug and Alcohol Policy
- Managing fatigue at Z - QRG
- PPE Matrix - QRG
- PPE Specifications – QRG



Appendix A – Examples of work activities and controls

Scenario	Risks	Controls
Inspection of under wharf pipelines		
Maintenance		
Replacement of under wharf pipelines		
Erecting and dismantling scaffold		
Using stillage on a vessel		

