



Working Over/In Water Critical Risk Standard

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1. PURPOSE

PMNZ recognises that the risks associated with Work Over/In Water can result in injury or death. This is typically as the result of an unplanned water entry or a loss of control during a diving operation. PMNZ has multiple activities that require work over/in water. The focus of this critical risk standard relates to the prevention and/or mitigation of an unplanned water entry from a landside structure or PMNZ vessel and ensuring safe dive operations.

The purpose of this Standard is to manage the health and safety risks associated with working over/in water.

2. SCOPE

This standard applies to all PMNZ sites and operations including diving.

This standard excludes health & safety risks to marina customers and members of public accessing marina jetties. Public safety is managed through the marina rules and onsite signage.

If PMNZ is involved in any Project requiring work over/in water, managed by any third party, PMNZ will ensure that the standards and policies of the controlling PCBU are consistent with those of PMNZ. PMNZ will consult, communicate and coordinate with other PCBUs and stakeholders as required to meet overlapping duties.

3. AUTHORITIES AND RESPONSIBILITIES

Role	Responsibilities
The Company (PCBU) & Officers	<p>The PCBU & Officers of PMNZ have a responsibility to:</p> <ul style="list-style-type: none"> exercise due diligence to ensure all duties and obligations under HSWA 2015 are met including eliminating/minimising risks to health & safety so far as is reasonably practicable.
Senior Leadership Team	<p>Senior Managers are responsible for:</p> <ul style="list-style-type: none"> ensuring the requirements of this standard are adhered to. ensuring that adequate resources are available to ensure the full implementation of this standard.
Critical Risk Sponsor	<p>Critical Risk Sponsors have responsibility to:</p> <ul style="list-style-type: none"> report on critical control effectiveness monthly, including critical control performance highlighted by incident data. ensure all ongoing actions determined by the CRC panel are implemented effectively.
Critical Risk Owner	<p>The Lifting Operations Critical Risk Owner is responsible for:</p> <ul style="list-style-type: none"> ensuring this standard is implemented, kept up to date, and reported on. providing coaching to managers as required.

Managers	Managers have a responsibility to: <ul style="list-style-type: none">▪ ensure the requirements of this standard are met within their area of responsibility
Workers	Workers have a responsibility to: <ul style="list-style-type: none">▪ ensure the requirements of this Standard are applied where relevant to their roles.▪ seek further information and advice if they do not believe they are competent to participate in a confined space entry.

4. WORKING OVER/IN WATER OPERATIONS

4.1 PMNZ ACTIVITIES INVOLVING WORK OVER/IN WATER

The following are activities at PMNZ that involve work over/in water:

- Mooring Operations including line handling and gangway installation.
- Log Recovery.
- Infrastructure maintenance and construction on wharfs, jetties, revetments & launching ramps.
- Maintenance activities on PMNZ vessels.
- Accessing PMNZ vessels.
- Operating PMNZ vessels.
- Pilot transfer.
- Patrols and inspection on wharfs & jetties.
- Cargo handling on wharfs.
- Operation of marina travel-lift.
- Dive operations – vessel maintenance.
- Dive operations – infrastructure maintenance and construction.
- Dive operations – biosecurity.

4.2 RISKS ASSOCIATED WITH WORKING OVER/IN WATER OPERATIONS

The following provides an overview of the key risks associated with working over/in water operations including but not limited to:

- Unplanned water entry (UWE) resulting in drowning.
- UWE during pilot transfer resulting in fall/crush injuries.
- Falling from a structure or vessel and suffering injuries prior to entering the water.
- Submerged hazards causing puncture injuries or entanglement.
- Hypothermia from overexposure to water.

- Dive Operations – various risks associated with procedural or equipment failure during a dive operation.
- Dive Operations – Interface with recreational vessels
- Dive Operations – Interface with commercial vessels including Cook Strait Ferries.

4.3 GENERAL REQUIREMENTS FOR WORKING OVER/IN WATER

The following sets out general minimum requirements for the control of risks associated with working over/in water:

- Complete a water entry permit for all situations involving a worker entering the water above gum boot depth.
- Dive operations comply with the PMNZ Dive Coordination SOP.
- All temporary access and/or work platform over water must be provided using certified scaffold or a structure designed and approved by a temporary works design engineer.
- Restricted access to wharfs (restricted operational areas) and induct authorised workers.
- Personal flotation devices (PFD) compliant with section 4.4.5 must be worn by workers on wharfs, quays, jetties and the travel-lift dock. MPV operators that remain inside the cab are not required to wear a PFD. PFD requirements on PMNZ vessels is stipulated within each vessels Maritime Transport Operator Plan (MTOP).
- If any of the landside examples above are equipped with edge protection such as balustrade or safety rail, then the requirement to wear a PFD is not mandatory.
- Lone worker restrictions as per section 4.4.8

4.3.1 CRITICAL CONTROLS FOR MANAGING THE RISKS OF WORKING OVER/IN WATER

4.3.2 WATER ENTRY PERMIT TO WORK

Prior to any worker entering the water a water entry permit by be completed and issued. The water entry permit won't be authorised until:

- The PMNZ manager for the operational area has been notified a minimum of 24 hours before the water entry is planned.
- Risk assessment has been completed.
- Safe system of work such as a dive plan or SWMS has been developed and briefing will be provided to water entry team.
- Emergency response procedure in place.
- Procedure with the Dive coordination SOP has been followed including comms with all affected parties and minimum separation distances with vessels.
- Weather conditions are suitable and are continuously monitored (actual and forecast).
- Regulator notification for construction diving.

4.3.3 SAFE SYSTEM OF WORK

As stated in the Water Entry Permit template a safe system of work (SSOW) is required for all instances of water entry above gum boot depth. All SSOWs for water entry must be task and site specific and not of a generic nature. A Dive plan is required for all dive operations and SWMS for water entry not involving sub surface work.

4.3.4 DIVING CONTRACTOR – MINIMUM REQUIREMENTS

- All dive operations are compliant with the NZS2299.1 - 2015 Occupational Diving Operations .
- Dive Operations comply with Maritime Rules Part 91 - Navigational Safety Rules.
- Minimum manning levels comply with NZS2299.1 - 3 persons.
- All diving within the port zone must be completed using Surface Supplied Breathing Apparatus (SSBA).
- Two-way comms device between dive supervisor and divers.
- Must maintain & make available training records on request.
- Must maintain & make available annual servicing records on request.

4.3.5 DIVE COORDINATION SOP

All dive operations within the Port Zone must follow the PMNZ Dive Coordination SOP. The dive coordination SOP describes the following procedures:

- Communication between Dive Supervisor, Picton Harbour Radio and Cook Strait Ferries.
- Minimum separation distances from all vessels including Cook Strait Ferries.

4.3.6 PERSONAL FLOTATION DEVICE (PFD)

Personal flotation devices must be designed to keep the wearer vertical during unconsciousness and must have a water activated switch or achieve buoyancy by a semi-rigid foam. The following types of PFDs meet these requirements:

- Type 401 Inflatable – Fitted with water activated switch and a crotch strap.
- Type 402 Semi Rigid – Fitted with crotch strap.

All PFDs must be serviced and inspected as per the manufacturer's instructions and replaced as required.

4.3.7 RESCUE EQUIPMENT

Rescue equipment as listed below must be provided and maintained at all PMNZ sites where work over/in water occurs such as wharfs, quays and jetties:

- Fixed rescue ladders.
- Water rescue throw rings and/or rescue throw bags.
- Water rescue boat for over water construction/maintenance activities with a duration in excess of 5 x days.

The position and number of rescue devices should be determined in the relevant risk assessment.

4.3.8 EDGE PROTECTION

Wharfs and jetties and similar marine structures which provide berthing for vessels are required to have unprotected edges to ensure the area is free of obstacles during mooring and cargo handling operations. Where there is a vertical fall (greater than 1m) to water risk and the immediate area is not used for mooring or cargo handling activities then edge protection such as fixed balustrade should be installed. This may include ramps on to wharfs and quayside between jetties.

4.3.9 LONE WORKER

Work over/in water involving an actual work activity not just for the purposes of gaining access should not be carried out by a lone worker i.e. maintenance, construction, diving, cargo handling, operating a PMNZ vessel.

4.4 SAFETY IN DESIGN

Safety in design is about changing the health and safety outcomes throughout the lifecycle of a project or asset. This is achieved by embedding safety concepts at the earliest stages of project management. The Health and Safety at Work Act requirement is the designer must, so far as is practicable, ensure that the plant, building or structure is designed to be without risks to the health and safety of persons.

A Safety In Design (SID) process must be followed when changing or creating any plant or structure involving the critical risk of working over/in water. This may include wharfs, jetties and in particular berths and gangways for PMNZ vessels. PMNZ vessels must be berthed and accessed by infrastructure designed for that specific use.

4.5 EMERGENCY RESPONSE PLAN

Appropriate emergency response protocols reflecting the nature of potential incidents associated with working above/in water shall be identified and established, including but not limited to:

- Unplanned Water Entry (UWE) Waimahara Wharf

- UWE Waitohi Wharf
- PMNZ Vessel Person Overboard
- Pilot Transfer Person Overboard
- Marina UWE

Exercises for each of the emergency response protocols must be performed as per the PMNZ Emergency Response Plan.

5. TRAINING & COMPETENCY

All people involved in the planning, permitting, carrying out, and monitoring of working above/in water must have the skills and knowledge to understand the hazards and associated risks of working over/in water, and the control measures required to be implemented to effectively manage the risks associated with these activities.

Appropriate training must be completed by workers who:

- Plan water entry operations including those who undertake hazard identification or risk assessment.
- Set up and/or carry out work over/in water.
- Issue water entry permits.
- Receive water entry permits.
- Are involved in the communication process for water entry.

All persons with work activities related work over/in water shall be trained and assessed as competent to perform those activities. The following sets out minimum training requirements for work over/in water:

Permit Issuers	PMNZ Permit to Work system/issuers training. PMNZ Risk management
Permit Receiver	PMNZ Permit to Work system/receivers training.
Dive Vessel	PMNZ induction Dive Coordination SOP - Onboarding
Divers	PMNZ induction

All trained persons must have their competency reassessed every two years.

6. MONITORING AND REVIEW OF APPLICATION

Monitoring and review of application of this standard will be performed on a regular basis. The frequency of these will be dictated by the nature of the work over/in water and associated activity. The PMNZ Permit to Work System and Permit Issuer will determine the nature and frequency of

this for work carried out under a Water Entry Permit. The Critical Risk Management Framework will also provide guidance on critical control monitoring.

7. ASSOCIATED DOCUMENTS

- PMNZ Critical Risk Management Framework
- PMNZ Hazard and Risk Management Procedure
- PMNZ Permit to Work Procedure
- PMNZ Health and Safety Management System (HSMS)

8. REFERENCES

8.1 RELEVANT LEGISLATION

Legislation available at <http://www.legislation.govt.nz>

- Health and Safety at Work Act 2015
- Health and Safety at Work (General Risk and Workplace Management) Regulations 2016
- Health and Safety at Work (Worker Engagement, Participation and Representation) Regulations 2016

8.2 OTHER DOCUMENTS

- WorkSafe Approved Code of Practice for Load Lifting Rigging December 2012
- WorkSafe Approved Code of Practice for Cranes January 2010
- Maritime New Zealand Interim Technical Notice ITN-11-18: Standard for the inspection of wire rope used on ship's lifting appliances in New Zealand.

9. REVIEW

This document will be reviewed every two years or after any critical event associated with it. The Review will be performed by the Critical Risk Owner in consultation with key stakeholders, and any changes agreed by the Critical Risk Panel.

10. REVISION HISTORY

Version	Date	Brief Description of Changes	Owner
V001	10.04.24	New Document	GM-HSW