



WORK IN, OVER OR ADJACENT TO WATER

PURPOSE AND SCOPE

This intent of the Primary Standard is to eliminate or minimise the risk of fatalities, injuries and events arising from work over, or adjacent to water and diving work. Working over and near to water may involve the following:

- Working on existing wharves or land-based structures adjacent to waterways
- Constructing new wharves and bridges
- Transporting materials, equipment and personnel to offshore job sites
- Working off barges and other marine vessels
- Diving operations.

1.0 CRITICAL CONTROLS

The following mandatory Critical Controls when implemented reduce the risk of Fatal and Severe Risks (FSRs). The following Critical Controls apply to managing work over or adjacent to water:

- Temporary works associated with works adjacent to or over water are effectively managed
- Personnel are trained and competent and where required, licensed for diving work and vessel operation (e.g. boatswain's or coxswain's qualifications)
- Emergency plan and equipment in place
- Risk of falling into water is managed
- Vessel management
- Personal floatation devices are worn over or adjacent to water

2.0 ADDITIONAL LOCAL CONTROLS

Local Controls support the Critical Controls, providing a measure of compliance with the relevant Primary Standards. The following additional Local Controls apply:

- Approved life buoys and lifelines are secured and correctly positioned adjacent to ladder access for work area, to be provided with sufficient line to reach the water level
- Fall protection such as hard barricades, harnesses or nets to be provided and maintained as necessary
- Work platforms to be fully decked and guarded and have sufficient edge protection in place
- Only quick release tool belts to be worn
- Ladders every 20m for access
- No person is allowed to work alone
- Resuscitation notice to be displayed adjacent to work area
- Power driven boat of sufficient size and containing life jackets and rescue equipment for occupants to be provided for spotting and rescue purposes
- Processes to monitor associated hazards e.g. water conditions, tides and weather to be in place

- Provide adequate lighting of the worksite
- If working at night, buoyancy devices are to be illuminated
- The size of vessel and environmental conditions shall be considered when selecting anchorage points or ground tackle for barges

2.1 DIVING

- All personnel conducting construction diving work must have a current certificate of medical fitness to dive and any work carried out by personnel must be within any limits stated in the certificate
- Persons conducting higher risk diving profile should ensure that the diving medical practitioner is aware of these profiles. Higher risk diving profiles include but are not limited to:
 - Decompression stop diving
 - Multiple ascents
 - Dives below 30m
 - Decompression using gases other than air
- Safe Work Method Statement (SWMS) is required for all diving work being undertaken
- A risk assessment is to be undertaken to identify risks specific to the activity being undertaken
- The SWMS and risk assessments are to be reviewed and approved by the Project Safety Manager/Project Leader before work commences
- A dive plan must be prepared by a competent person appointed to supervise the diving work
- Dive safety logs are kept for each dive
- Diving first aid equipment and trained personnel are available
- Propeller guards for relevant vessels
- Ensuring the master and relevant crew of any vessel is appropriately qualified and experienced
- Ensure divers are equipped with appropriate emergency breathing supplies and knives
- Use buoys or markers to separate diving activity from vessel activity
- Use appropriately sized and displayed flags to indicate diving activity and appropriate lights at night

2.2 TRANSPORTATION OF MATERIALS

Controls for transporting material include:

- Materials and equipment to be secured against movement
- Lashings to be of adequate type and strength
- Tank compartments to be either empty or completely full
- Covering to be of adequate strength and well secured
- Appropriate Marine Department to be advised of hazardous cargos

2.3 VESSEL MANAGEMENT

Owner or operators of domestic or commercial vessels under the Australian Maritime Safety Authority must have a Safety Management System (SMS) for each vessel. The SMS must outline safe operating procedures, the qualifications and training of the vessel's crew, vessel maintenance, emergency procedure, health and safety consideration, and a continuous improvement process. The SMS must contain the categories outlined in **Table 1**. The SMS must be in place and available at all times when works are occurring in, over or near water.

Table 1 Vessel Management SMS categories

| CATEGORY | DESCRIPTION |
|-----------------------------|--|
| VESSEL AND OPERATION | <ul style="list-style-type: none"> • Contact details • Risk assessment • Maintenance of vessel and equipment. |
| PEOPLE | <ul style="list-style-type: none"> • Responsibilities and designated person • Resource and personnel • Appropriate crewing. |
| PROCEDURES | <ul style="list-style-type: none"> • On-board operations • Emergency preparedness • Hazardous occurrences and non-conformances • Documentation • Review and evaluate. |

3.0 ROLES AND RESPONSIBILITIES

Table 2 Working In, Over or Adjacent to Water Roles and Responsibilities

| ROLE | RESPONSIBILITIES |
|--------------------------|--|
| COMPETENT PERSONS | <p>All personnel must hold relevant certification/competency to perform required diving works. This includes one or more of the following qualifications:</p> <ul style="list-style-type: none"> • A statement of attainment for a specified VET course for general diving work that includes the type of general diving work to be carried out by the person • A certificate for general diving work issued by a training organisation that mentions the subject areas covered in AS/NZS 4005.2:2000 (Training and Certification of Recreational Divers — Recreational SCUBA Dive Supervisor) • Training, qualification or experience, acquired sound knowledge and skill in relation to the following: <ul style="list-style-type: none"> — The application of diving physics — The use, inspection and maintenance of diving equipment (including emergency equipment) and air supply of the type to be used in the proposed general diving work — The use of decompression tables or dive computers — Dive planning — Ways of communicating with another diver and with people at the surface during general diving work — How to safely carry out general diving work of the type proposed to be carried out — Relevant diving experience as prescribed in Clauses 173 and 174 of WHS Regulations. |

| ROLE | RESPONSIBILITIES |
|------------|--|
| SUPERVISOR | <ul style="list-style-type: none"> Persons supervising diving work must be qualified as above and be experienced in the type of diving work to be supervised, in accordance with AS/NZS 2815.5 Training and certification of occupational divers Ensure that a dive safety log is kept for each dive. The information recorded must include: <ul style="list-style-type: none"> The divers name The name of any co-diver with whom the dive was conducted The name of any dive supervisor The date and location of the dive Time in and time out Maximum depth of the dive Any incident, problem, discomfort or injury experiences or suffered by the diver If the dive was done using a dive computer - the dive time If the dive was done using dive tables – the repetitive dive group, if available, and either the bottom time or the dive time |

4.0 REGULATIONS AND CODES

Key Regulations, Codes and Guidelines are as follows:

- Work Health and Safety Regulation 2011 (QLD, ACT), 2012 (SA) and 2017 (NSW, NT): Part 4.8 Diving work
- Work Health and Safety Regulation 2022 (WA): Part 4.8 Diving work
- Occupational Health and Safety Regulations 2017 (VIC): 5.1.3
- QLD Occupational Diving Work Code of Practice 2005
- AS 2815 Training and Certification of Occupational Divers
- AS/NZS 2299 Occupational Diving Operations Parts 1 and 2
- New Zealand Guidelines for Occupational Diving 2004
- Australian Maritime Safety Authority
- Marine Safety (Domestic Commercial Vessel) National Law Act 2021
- Marine Safety (Domestic Commercial Vessel) National Law Regulation 2013.

5.0 PLANS, FORMS AND TEMPLATES

For relevant plans, forms and templates see the Laing O'Rourke HSEMS at www.lorhsems.com.