

# STANDARD TRAFFIC CONTROL

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## **DOCUMENT INFORMATION**

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#### 1 Purpose

This document describes the standards and procedures within Hunter Water Corporation (HWC) to manage risks associated with Traffic Control effectively. It represents the HWC Workplace Health and Safety (WHS) Management System's commitment to compliance with the NSW WHS Act and WHS Regulation.

### 2 Objectives

The objectives of this standard are to ensure that all areas, functions, and work processes that may have a Traffic Control risk are effectively managed to ensure the health and safety of Hunter Water people, contractors, and the general public.

Given this topic's complex nature, the primary reference document for this topic is the NSW Roads and Maritime Services (RMS) – Traffic Control at Work Sites Manual. This standard provides practical guidance to Hunter Water people on implementing this RMS Handbook.

#### 3 Scope

This Standard applies to all Hunter Water Business Units. This standard covers the requirements associated with Traffic Control within HWC.

#### 4 Lifesavers

The Hunter Water Lifesavers are a set of minimum behaviours related to high-risk activities.



I will always set up my worksite to protect people from vehicle and pedestrian traffic.

- // Select and apply the approved Traffic Control Plan (TCP) or identify exempt scenarios
- // Engage a specialist traffic control provider where Hunter Water published TCPs are not utilised
- // Set out traffic control signs and devices by placing the farthest controls out first and working back towards the work site

// Always stand clear of traffic and not turn my back



## 5 Definitions, Acronyms and Abbreviations

Term	Definition
Competency – Implement Traffic Control Plans (ITCP)	This course provides training for personnel required to select a Hunter Water-approved Traffic Control Plan (TCP) and set up and work with Traffic Control Guidance Schemes/Traffic Control Plans at a work site. Implementers can make minor adjustments per A.S 4.1.6 and Traffic Control at Worksites manual section 3.5.8 'Tolerances on positioning signs and devices. This course does not qualify a participant to control traffic with a Stop/Slow bat or modify existing TCP.
Competency – Prepare Work Zone Traffic Management Plans (PWZTMP	This course provides training for personnel required to design new traffic management plans and TCGS/TCPs for road works, produce major upgrades of standard plans and inspect TCPs on any road construction site. This course does not qualify a participant to control traffic with a Stop/Slow bat or set up work with TCPs. This program is suited to experienced traffic control/management operators.
Competency – Traffic Controller (TC)	This level of training is intended for personnel who are required to control traffic with a Stop/Slow bat. This course does not qualify a participant to set up or work with TCP.
Risk Observation	A Risk Observation is an observation checklist written for each Risk Standard. The FRO process has leaders complete scheduled observations and reinforce the critical elements of the RS. The process provides positive reinforcement and correct feedback to the observed and builds the leader's capability to conduct the observation.
Risk Standard (RS)	The Risk Standards are a Water Services Association Australia (WSAA) initiative to collectively identify the industry fatality potential topics and identify the critical controls (i.e. "must do's, golden rules, critical elements") to provide clarity to workers and leaders on the controls that will prevent fatality.
Hazard	A situation that can harm a person and the environment and damage property.
Line Leader	A Line Leader is a person with day-to-day supervisory responsibilities for workers within a functional area of the business. A Line Leader includes, but is not limited to, Gangers, Area Coordinators, and Work Group Leaders.
Manager	A person is responsible for managing a functional area of the business, including the workers within the relevant functional area. This includes, but is not limited to, Group Managers, Business Unit Managers, department managers, and Project Managers. A manager is also considered a worker. However, managers may have additional responsibilities for implementing the WHS Management System and any other duties as an officer of the business.
PCBU	A 'person conducting a business or undertaking' (PCBU) is a legal term under WHS laws for individuals, businesses or organisations conducting business. A person who performs work for a PCBU is considered a worker.
Plan – Pedestrian Movement Plan (PMP)	A diagram showing the allocated travel paths for workers and pedestrians around or through a work site. A PMP may be superimposed or combined with a TCP.







Term	Definition
Risk	Risk is the likelihood and consequence of injury or harm when exposed to a hazard.
Risk Control	This means acting to eliminate health and safety risks so far as is reasonably practicable and, if that is not possible, minimising the risks so far as is reasonably practicable. Eliminating a hazard will also eliminate any risks associated with that hazard.
Traffic Control Plan (TCP)	A document that shows the traffic control arrangement for a particular work site. Hunter Water TCPs are of a similar format to the ones contained in the RMS Traffic Control Handbook.
Traffic Control	A person assigned the task of directing traffic or pedestrians past a hazard or obstruction by the use of bats or other means

#### 6 Roles and Responsibilities

Roles and Responsibilities can be located in the WHSMA Manual.

Individual guidance booklets are in the Responsibility, Accountability, and Authority Manual HW2021-534.

## 7 Key Elements – Managing the Risks Associated with Traffic Control

#### 7.1 Traffic Management

Hunter Water assets such as sewer and water installations are predominantly accessed by road, thus introducing a driving risk – refer to the Standard and Risk Standard for Safe Driving.

When workers attend a worksite, there could be a potential risk to Hunter Water workers and contractors from vehicle collisions and unsafe interactions with the public. The Risk Standard that covers this topic is Traffic Control.

There could also be a potential risk from public road users and pedestrians being distracted by Hunter Waterworks or the worksite altering traffic conditions contributing to an incident.

For this, standard vehicles and pedestrians are considered traffic.

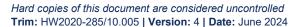
#### 7.2 Principals of Traffic Management

Depending on the circumstances, traffic may be managed at a worksite in one of the following ways:

- Adequate separation of the Hunter Waterworks from traffic so there is no interaction or requirement for traffic control – this concept may be supplemented by worksite delineation by Hunter Water
- Movement of traffic through the work area i.e. over the area being worked on
- Movement of traffic around the work area i.e. via a detour, side-track or another carriageway
- Movement past the work area on the same carriageway, to the side and not directly over the work area.

Controls must be selected by the hierarchy of control. Unless there is no practical alternative, traffic through a work area should only be considered on lightly trafficked roads where traffic can be adequately controlled.

Planning for traffic management must be considered at all stages of the works as conditions at the worksite and traffic numbers vary. Traffic management must be part of programmed job planning and pre-task risk assessments. If the required traffic controls cannot be established, the workers should relocate to a safe position and contact their supervisor.



The necessary level of traffic control must be implemented to keep workers, public pedestrians and road users safe.

The Hunter Water Traffic Management approach aims for practical implementation and compliance with the NSW Roads and Maritime Services (RMS) – Traffic Control at Worksites Manual and local Municipal Council requirements.

#### 7.3 Process for Implementing Traffic Management

#### 7.3.1 Job Planning

Traffic requirements must be considered as part of the planning and scheduling process to assess the planned work and determine levels of manning, resourcing, materials, customer notification and additional requirements such as Traffic Control service providers.

For jobs not pre-determined for a Traffic Control service provider, the work group leader, from a safe location (not impeding or affecting traffic), completes the on-site pre-task risk assessment (PTRA) to identify the hazards and controls related to the task. This may include traffic, in which case an "Implement Traffic Control Plan" (ITCP) trained person must select the relevant TCP.

The ITCP should review the following (but not limited to) considerations when selecting the TCP:

- The type of traffic pedestrian, bicycle, vehicle, etc.
- Will the work area be clear of traffic, adjacent to traffic, on traffic-filled roads or work sites with mobile plant? This will determine whether static signs are required and their location
- The approach speed of traffic is a significant factor the higher the speed, the less time there will be to work on the road between gaps in traffic if necessary. The speed of approaching/passing traffic affects sign size and spacing, length of transitions, queuing problems and driver sight distance
- The traffic volume at the time of the work. Average Daily Traffic (ADT) figures may not be relevant if the work is undertaken in peak periods, where hourly counts will be necessary
- The clearance between workers and passing traffic has a significant influence on methods of work and the amount of equipment needed
- The sight distance to the work from all approaches is possibly the most critical factor in all traffic management
- The proximity to nearby intersections, school zones, driveways, bus stops, etc
- Putting yourself in the eyes of the pedestrian or driver approaching the worksite. What would be their reasonable reaction and behaviour?

Select the applicable TCP and review for its applicability to the environment and traffic conditions.

If adjustments to the TCP are required, these must be made by a trained and competent ITCP-qualified person who makes any amendments within the permissible limits. Implementers can make minor adjustments to 'fine-tune' the TCP to suit the work site conditions.

Note: if the required modifications exceed the changes Implementers are permitted to make, contact your supervisor and arrange for the "Prepare a Work Zone Traffic Management Plan" (PWZTMP) trained person to complete the review and issue the TCP.

#### 7.3.2 Implement the TCP

The process for deploying the traffic controls should consider the sequence of placing and removing traffic controls to reduce the risks to the worker completing these tasks. Always face the traffic when placing equipment and never stand in the line of fire of oncoming traffic. Work vehicles with flashing amber lights activated to protect you when placing traffic controls wherever possible.

Refer to the TCP, go to the furthest upstream traffic location, place the "workman" sign, and work back from that point, setting the necessary equipment.

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When removing traffic control equipment, reverse this sequence.

#### 7.4 Roads Authorities

Different organisations own and manage the road network across the Hunter Water network.

#### 7.4.1 The RMS Manages State Records

These roads include National Highways, the primary arterial transport links between states, regional links across NSW, and significant urban arterial routes. The RMS maintains regional and Local Roads in the unincorporated area without Councils. The RMS owns and manages all traffic lights on all public roads in NSW.

The identification of these roads is available in documentation from the RMS. The identification is available in either spreadsheet or map form.

All RMS roads must be correctly identified, as all work undertaken on RMS roads must be done according to the RMS Manual – Traffic Control at Work Sites. While this document accurately reflects the requirements of the RMS Manual, the manual should be consulted where there is any doubt or conflict on control requirements. However, where the RMS manual does not guide traffic management, AS1742.3 must be consulted.

#### 7.4.2 Works on RMS Roads

RMS approval is required if the proposed activity:

Is on a State road

Is on a local road that may impact traffic flow on a State or Regional road

Occurs within 100m of a set of traffic lights

In general, any work that interferes with the regular use or operation of a classified road requires the approval of the RMS. Activities such as travelled lane closures, including mobile, short term and work under 5 minutes, require RMS approval. Even parking lane closures, where the travelled lane is not closed, may hurt traffic and need RMS approval.

For work carried out by Hunter Water in the normal course of its operations, the following process needs to be used:

- The RMS must approve a Road Occupancy Licence (ROL)
- The RMS requires a minimum of 10 working days to approve the occupation, so advance planning is required.
- The general phone number of the RMS is 131782.
- Copies of the application forms can be obtained from www.rms.nsw.gov.au
- If a Roadworks speed reduction is required, an Application for a Speed Zoning Authorisation (SZA) must be submitted to the Transport Management Centre (TMC). The SZA provides the legal framework to enable the application and enforcement of the lower speed limit and specifies any special conditions that apply.

Applicants must submit a Traffic Management Plan (TMP), which includes sufficient information to enable the RMS to make an informed decision on the scope and timing of the work. Depending on many site issues, the TMP can be very short or complex.

The TMP typically includes at least one Traffic Control Plan (TCP) to detail the traffic control safety measures applicable to the intended work.

The Road Occupancy Licence covers the impacts on traffic only. It is not an approval of the Traffic Control Plan. SafeWork NSW's code of practice for "Moving Plant on Construction Sites" states that work carried out on or near public roads should be carried out in accordance with the AS 1742 set of Standards and that TCPs should comply with AS 1742.3 as a minimum.



If you do not gain approval for your work, you will be carrying out Unauthorised Roadwork.

#### 7.5 Council Controlled Roads

Councils manage Local Roads. Local Government Councils also manage Regional Roads. These roads are sub-arterial links in major urban areas and intra-regional links in rural areas.

The Council may prescribe their requirements for traffic control on their roads, and Hunter Water should consult with them on this issue.

The RMS recommends that local governments adopt the RMS manual for uniformity in traffic management procedures and that the manual become the appropriate code of practice for the traffic control industry. Many Councils have adopted this recommendation as the manual, and the Australian Standard is now closely aligned. There is no doubt that WorkCover will adopt these documents if they are required to investigate a significant accident associated with traffic control.

#### 7.5.1 Work on Council Roads

The principles outlined above generally apply to work on council-owned roads. However, individual Councils may have particular processes and forms, and many councils charge fees for ROL applications. Some work may have to be approved by the council, and the RMS may request that it be notified of certain work, depending on its location.

#### 7.5.2 Consultation with Other Affected Parties

Apart from gaining approvals from the relevant road authorities, Hunter Water supervisors must consider all affected road users, including repeat and one-off road users. Work on heavily trafficked or high-speed roads must be discussed with the Local Police, who, apart from enforcing speed limits at the site, have the ultimate authority to permit ongoing work regarding public safety and traffic flow considerations.

Working at bus stops requires liaison with the State Transit Authority or local bus operators. Local businesses must be consulted, as the work may affect deliveries and departures from their premises. Some temporary lane and road closures may be on the local approaches to hospitals and fire stations.

In these cases, information covering the work durations and alternate routes must be provided to affected organisations.

#### 7.6 Traffic Control Plans

The RMS requires that TCPs use on their roads be based on the provisions of their manual, "Traffic Control at Worksites". Most Councils require the use of the RMS manual for TCPs. SafeWork NSW requires that TCPs are compliant with AS1742.3.

Hunter Water has consulted with workers and identified the more common situations where traffic is encountered and may need to be managed. Hunter Water has engaged an independent Traffic Control Consultant to develop a suite of TCP, which are available in a separate Hunter Water TCP library. The library will also include TCPs developed for routine work, which don't require any traffic controls, so that workers are clear on the triggers for traffic control, depending on the range of routine tasks they perform.

This library of TCP should be reviewed annually for suitability and following any traffic control related to high-potential incidents.

Both the RMS manual and Hunter Water library of TCP's are based on AS1742.3 2009. Where applicable, TCPs in the library are direct copies of RMS TCPs or specific TCPs based on the provisions of AS1742.3 2009. Plans based on either document are suitable for use on all public roads.

The objective is that the Hunter Water TCPs apply to most typical activities and require only minor adjustments permitted by an "Implement Traffic Control Plans" trained worker. If the type of work requires more than the permitted level of modifications, a "Prepare Work Zone Traffic Management Plan" trained person must be engaged to review the TCP.

It is likely that Traffic Control contractors will routinely use the RMS manual for TCPs on Hunter Water worksites.



Wherever possible, Hunter Water workers will refer to pre-prepared TCP; however, if the TCP is not applicable or the work is considered higher risk, the default position should be to not proceed with the work and to contact the relevant supervisor, who will arrange for a specific TCP and other supplementary controls to be provided or referral to an approved Traffic Control service provider.

#### 8 Training

Hunter Water persons supervising or coordinating Traffic Control and other earthworks should undergo specific training on Traffic Control techniques or incorporate the necessary competencies as part of construction Management Certificates or Civil or Geotechnical Engineering competencies.

#### 8.1 Types of Training

The RMS Traffic Control Training Course Overview V1.3 May 2016 provides for three levels of Traffic Control training.

#### 8.1.1 Traffic Controller (TC)

This level of training is intended for personnel who are required to control traffic with a Stop/Slow bat. This course does not qualify a participant to set up or work with TCPs.

#### 8.1.2 Implement Traffic Control Plans (ITCP)

This course provides training for personnel required to select a Hunter Water-approved TCP and set up and work with Traffic Control Guidance Schemes/Traffic Control Plans at a work site. Implementers can make minor adjustments per A.S 4.1.6 and Traffic Control at Worksites manual section 3.5.8 'Tolerances on positioning signs and devices. This course does not qualify a participant to control traffic with a Stop/Slow bat or modify existing traffic control plans.

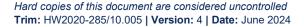
#### 8.1.3 Prepare Work Zone Traffic Management Plans (PWZTM)

This course provides training for personnel required to design new traffic management plans and TCGS/TCPs for road works, produce major upgrades of standard plans and inspect traffic control plans on any road construction site. This course does not qualify a participant to control traffic with a Stop/Slow bat or set up work with traffic control plans. This program is suited to experienced traffic control/management operators.

#### 8.2 Civil Maintenance

Table 2: Qualification requirements for civil maintenance roles

Role	Qualification
Civil Maintenance Planners	PWZTM
Levels 1B, 1A, 3	TC & ITCP
Level 4's, Level 5 & Supervisors (including reliefs)	TC & ITCP & PWZTM
Mains Jetter Truck – one of the two-person crew must hold PWZTM, the other ITCP	ITCP & PWZTM
Planning and Operations Engineers	ITCP



## 9 Monitoring and Review

#### Monitoring processes for this topic include:

- High Risk Audits
- Safe Behaviour Observations
- Field Interactions

#### Review processes for this topic include:

- Review of applicable injury and incident reports
- Review of hazard reports in Protecht
- Review of this standard and associated documents, Risk Register, Bow Tie diagrams following a high potential incident
- Engagement with the Field Safety Committee and any relevant sub-committees

#### 10 Related Documents

Document ID	Document Title
Assessment	Pre-Task Risk Assessment PTRA
Standard	Consultation, Cooperation, Participation and Coordination
Lifesavers	Hunter Water Lifesavers – Traffic Control
SWMS	Hunter Water SWMS – Traffic Control
Library	Hunter Water Specific – Traffic Control Plan Library
Standard	Risk Management
Standard	Notification, Investigation and Reporting of Incidents

## 11 Associated Regulations and Standards

Document ID	Document Title
Act	WHS Act 2011 (NSW)
Regulation	WHS Regulation 2017
Code of Practice	Code of Practice – Work Health and Safety Consultation, Cooperation and Coordination
Code of Practice	Code of Practice - How to Manage work, health and safety risks
Code of Practice	Code of Practice - Traffic Control Work
Manual	RMS Traffic Control at Worksites Manual – Version 6.1 February 2022
Training	RMS Traffic Control Training – Training Course Overview June 2019

