



Principal Contractor Minimum Safety Requirements

Document control

Document summary

Title	Principal Contractor Minimum Safety Requirements
Version	5.01
Document status	Approved
Date of issue	27 July 2017

Document development

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	Grant Morey	Safety Advisor, Contractor Management and Infrastructure Projects	11.04.2019

Version control

Version	Author	Description	Date
1.00	Marcello Di Paolo	Original issued for comment	30.6.16
2.00	Marcello Di Paolo	Amendments made after initial comments.	5.07.16
3.00	P Johnston	Amendments made after 6 monthly review.	8/4/17
	T Brake	Review by Project Delivery (Draft issue)	1/6/17
4.00	Grant Morey	Reviewed in consultation with Project Delivery, PMO, Legal	30/10/2018
5.00	Grant Morey	Minor amendments/inclusion to sections: 3.3 (Working safety with asbestos containing materials) 3.6 (WHS performance reporting requirements) 11 (Alcohol and other drugs) 14.1 (Fixed scaffolding)	11/04/2019

5.01	Grant Morey	Minor amendments to section: 3.6 (WHS performance reporting requirements)	12/07/2019
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Document approval

Approved by	Title	Signature	Date
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1 Purpose

The purpose of this document is to ensure that all Contractors appointed by Icon Water as the WHS Principal Contractor fully understand Icon Water's minimum safety requirements. All WHS Principal Contractors must achieve or exceed the minimum safety requirements outlined in this document.

If the contract, law or best practice require a higher requirement than the minimum safety requirements outlined in this document, then the WHS Principal Contractor is required to comply with that higher requirement. If this is the case, Icon Water requests the WHS Principal Contractor notify Icon Water of the higher requirement.

It is the WHS Principal Contractor's responsibility to ensure that all Personnel are aware of and fully understand the safety requirements at the Site, which must meet the minimum requirements outlined in this document.

In this document, capitalised terms have the same meaning as in the relevant construction works contract entered into between Icon Water and the Contractor. This includes the terms Contractor, Icon Water Representative, WHS Principal Contractor, WHS Legislation, Personnel, Site and Works.

Any Icon Water documents and procedures referenced in this document must be made available to the WHS Principal Contractor upon request.

2 High risk construction activities

Under the WHS Legislation, High Risk Construction Activities require a Safe Work Method Statement (SWMS). Refer to Table 2.1 below.

Table 2.1 High risk construction activities

No:	High risk construction activities
1	The risk of a person falling more than 2 metres.
2	Involves or is likely to involve the disturbance of asbestos.
3	Work is carried out in or near a shaft or trench with an excavation depth greater than 1.5 metres or a tunnel.
4	Work is carried out in an area at a workplace in which there is any movement of powered mobile plant;
5	Work is carried out in or near a confined space.
6	Work is carried out in an area that may have a contaminated or flammable atmosphere.
7	Work is carried out on or near energised electrical installations or services.
8	Work is carried out in or near water or other liquid that involves a risk of drowning.
9	Work that involves diving.
10	Work is carried out on or near chemical, fuel or refrigerant lines.
11	Work is carried out on, in or adjacent to a road, railway, shipping lane or other traffic corridor that is in use by traffic other than pedestrian.
12	Work is carried out in an area in which there are artificial extremes of temperature.
13	Involves structural alterations or repairs that require temporary support to prevent collapse.
14	Involves demolition of an element of a structure that is load bearing or otherwise related to the physical integrity of the structure.
15	Involves tilt-up or precast concrete.
16	Work carried out on or near pressurised gas distribution mains or piping.
17	Involves the use of explosives.
18	Work on telecommunications tower.

3 General requirements

3.1 WHS induction card

As a prerequisite to working on site, all personnel must have satisfactorily completed a general construction industry induction training¹ and have the card with them at all times while on site.

A proof of training certificate is only valid for sixty (60) days; after which period a card must be produced.

A construction industry induction card issued in another state or territory within Australia is acceptable.

3.2 Asbestos awareness training

As a prerequisite to working on sites, all personnel must have satisfactorily completed an asbestos awareness training course and have evidence of doing so with them at all times while on Site.

Asbestos awareness training must comply with the legislative requirements².

If the site is known to contain asbestos, any visitors who have not received asbestos awareness training, and will not be carrying out physical work on site, must be accompanied at all times, by an asbestos awareness trained person.

3.3 Working Safety with Asbestos Containing Materials

From 1 July 2019, specific occupations³ must complete an approved training course in working safely with asbestos. This course will support workers not involved in asbestos removal but may disturb asbestos as part of minor routine work, such as drilling into a wall to install a cable.

This course is supplementary to the asbestos awareness training where all personnel must have satisfactorily completed the asbestos awareness course.

It is expected that interstate contractors make arrangements for their workers to complete the required training.

3.4 Daily pre-start meeting

A single daily pre-start meeting will be held each morning prior to works commencing with all personnel who will be on Site that day.

Any personnel who arrive on site to commence work after completion of the pre-start meeting must be taken through the contents of the meeting and are required to sign on to the pre-start meeting record with the time of their arrival being noted.

Participation in and signing onto the pre-start meeting is mandatory.

As a minimum, the pre-start meeting should address and document

- the key tasks, hazards and controls
- the different work groups on Site and identify any interactions

¹ Known as a white card in the ACT, it may be referred to as another colour card in other states/territories.

² Worksafe ACT Asbestos Awareness Training requirements - https://www.accesscanberra.act.gov.au/app/answers/detail/a_id/3093/

³ Worksafe ACT Working Safely with Asbestos Containing Materials (Occupations) - https://www.accesscanberra.act.gov.au/app/answers/detail/a_id/4722#!tabs-3

- any SWMS being used

3.5 Toolbox meeting

Toolbox meetings must:

- be carried out on a fortnightly basis as a minimum
- be documented (including date of meeting, agenda and attendees)

All personnel working on the site must attend and participate in toolbox meetings and sign onto the toolbox meeting attendance sheet.

In relation to actions raised at a toolbox meeting:

- all actions raised must be documented and tracked to their completion
- feedback on all actions raised must be provided to all Personnel at subsequent toolbox meetings.

3.6 WHS performance reporting requirements

The WHS Principal Contractor must provide monthly reports to the Icon Water Representative with the following minimum information:

- Total number of personnel inducted to site, by the contractor for the project?
- How many incidents have been reported by the contractor during the project?
-
- How many near misses have been reported?
- How many first aid injuries have occurred?
- How many medical treated injuries have occurred?

4 Inductions

4.1 General inductions

The WHS Principal Contractor must ensure that:

- all personnel complete a site specific induction prior to commencing on the site
- there is documented evidence of all induction which includes an induction register, induction forms, training matrix and proof of mandatory cards/licence, high risk licence, etc. to perform specific tasks.

Induction must include the following:

- Project specific induction conducted by the WHS Principal Contractor. The induction content must be reviewed by Icon Water.
- Icon Water specific hazardous substance induction(s) must be completed for all personnel who are working at sites which store hazardous substances in multiple locations and in large quantities. This will include, but is not limited to working on the Chlorine, Methanol or Sulphur Dioxide systems.

4.2 Visitor inductions

The WHS Principal Contractor must ensure that:

- all visitors are given an induction to site explaining site hazards and the emergency procedures. Visitors must also be accompanied at all times by a person who has been inducted to the site, being personnel or an inducted Icon Water employee.
- any tenderers/sales reps, etc. visiting the site are given an induction and must be accompanied at all times by a person who has been inducted to the site, being personnel or an inducted Icon Water employee.

4.3 Immunisation requirements

The WHS Principal Contractor must determine what vaccinations its personnel will obtain before commencing the works. Icon Water strongly recommends that all personnel working with or near sewage have undergone blood serology and/or have had vaccinations for:

- Hepatitis A and B
- Polio
- Tetanus.

5 Site facilities and amenities

5.1 Facilities

The WHS Principal Contractor must provide facilities that:

- comply with the [ACT Work Health and Safety \(Managing the Work Environment and Facilities\) Code of Practice 2011](#) (or NSW equivalent if the site, or part thereof, is located within NSW) including first aid room, meals room, drinking water, site office, toilets, etc.
- provide adequate signage, including site mandatory signage, personal protective equipment (PPE) signage, warning signage, pedestrian access signage, speed signage, emergency muster and assembly locations, etc.
- the site must be fenced and secured at all times with “D” type fencing unless otherwise specified and agreed to.
- provide safe access/egress for all personnel and appropriate signage to enable safe pedestrian access when required.
- provide adequate supply of clean drinking water.
- make available:
 - separate toilets in the following ratios
 - males – 1 per 15 males for closet pans and 1 per 20 males for urinals
 - females – 1 per 10 females for closet pans
 - unisex toilets – total number of people who normally work at the workplace is 10 or fewer, and there are two or fewer workers of one gender

Where toilets are provided, monitoring and removal of waste from the toilets must be controlled to mitigate the risk of overflows and environmental harm.

- provide handwashing facilities to enable workers to maintain good standard of personal hygiene. Should there be no hand washing facilities available then workers should have access to alternative hand hygiene facilities.
- provide temporary portable dining facilities for workers as per the [ACT Work Health and Safety \(Managing the Work Environment and Facilities\) Code of Practice 2011](#) (or NSW equivalent if the site, or part thereof, is located within NSW).
- provide access to private changing areas with seating and secure storage for personal belongings if Personnel have to change in and out of clothing due to the nature of their work.
- provide shower facilities if the works involve jobs that involve dirty, hot or hazardous work.

If Icon Water gives approval for use of Icon Water toilets, shower facilities, lunch rooms and/or other facilities the WHS Principal Contractor must ensure that all efforts are made to keep these areas in a clean and tidy state.

5.2 Lighting

The WHS Principal Contractor must provide lighting, including emergency lighting to all areas of the site to meet the minimum LUX levels set out below. If this cannot be achieved, suitable controls/delineation must be provided to prevent access to the room/area.

Minimum LUX levels:

- general access ways and base lighting to rooms, stairways: 40 LUX
- typical building work (e.g. bricklaying, plastering, gyprock and electrical): 160 LUX.

5.3 Housekeeping

The WHS Principal Contractor must ensure that:

- spills on floors are cleaned up immediately
- walkways are kept clear of obstructions
- work material is neatly stored
- all waste is regularly removed
- access to operational areas, assets and emergency facilities is not impeded.

5.4 Parking

The WHS Principal Contractor must ensure that:

- when works are undertaken on any Icon Water site:
 - parking arrangements are delineated and agreed with Icon Water
 - personnel park only in approved areas (where prescribed in the DA)
 - all deliveries are scheduled during agreed hours
 - the location of all laydown areas are approved by Icon Water.
- when works are undertaken in public areas, parking arrangements are delineated and agreed with the relevant Government Directorate

6 Incidents/Events

The WHS Principal Contractor must ensure that:

- all incidents, near misses or dangerous occurrences including environmental events are reported to the site supervisor/Icon Water Representative as soon as reasonably practicable, but within three hours of the incident occurring.
- all 'notifiable incidents' are promptly reported to the safety regulator as required under the WHS Legislation. The incident site must be preserved until an inspector arrives or directs otherwise.
- for all incidents, near misses or dangerous occurrences, an incident report is issued to the Icon Water Representative within 5 working days of the incident occurring. The report must provide details of the incident as well as results of any investigations into causes and any recommendations or strategies for future prevention.

7 Safe Work Method Statements

The WHS Principal Contractor must develop, maintain and continually update a project specific risk register (Construction Hazard Register) including all risk information provided by Icon Water (eg. CHAIR, DOAR, HAZOP etc).

Safe Work Method Statements (SWMS) are legally required for all high risk construction activities.

SWMS must reflect the activities and controls actually selected for the work tasks on site.

Icon Water may ask to review any SWMS from time to time as part of its normal surveillance activities, but this does not in any way remove or reduce the obligations of the WHS Principal Contractor under the contract or the WHS Legislation.

SWMS must be signed onto by all personnel performing the task or affected by the task. SWMS must be reviewed when changes are identified and all changes must be communicated to relevant personnel.

SWMS must be written in consultation with the personnel performing the tasks.

SWMS are a live document and must be maintained at the site. It is expected that all SWMS in use on any given day will have been reviewed (within 7 days) and re-signed.

The appropriate nominated controls must be in place prior to commencement and maintained throughout the duration of the works as appropriate. The WHS Principal Contractor must ensure that controls are not removed or altered until it is safe to do so.

The WHS Principal Contractor is required to review and approve all sub-contractor SWMS using a formal review process.

8 Emergency Management

The WHS Principal Contractor must:

- provide a site specific Emergency Management Plan that aligns with the Icon Water Emergency Management Plan for the site (where relevant). The Icon Water Representative will provide a copy of the relevant Icon Water Emergency Management Plan. If the Icon Water Representative does not provide this, the WHS Principal Contractor must request a copy.
- ensure that emergency contact details including 24 hour contact details are outlined in the plan and displayed on site
- ensure that the emergency muster points are communicated to all personnel and ensure that personnel are aware of the muster point location and the emergency procedures for the site.
- during an emergency situation, ensure that all personnel immediately stop work, leave the area safe and make their way to the nearest muster point to await direction
- ensure that all personnel participate in emergency drills as required, with a minimum frequency of twice over the project life cycle or twice per year (whichever is the higher frequency).

8.1 Working during elevated fire danger periods

During the bush fire season, certain legislative provisions apply regarding the lighting of fires and to certain high risk activities likely to cause a fire. These provisions are specified in the Emergencies Act 2004 (ACT) and the Rural Fires Act 1997 (NSW). A number of provisions apply throughout the period while others only apply during a total fire ban (TOBAN).

WHS Principal Contractors must:

- ensure information is made available for workers regarding elevated fire danger periods
- establish requirements for training of relevant workers:
 - on bushfire awareness, which includes, work during elevated fire danger periods, and activities involving hot work
- ensure all workers are advised:
 - when the bush fire season is/isn't in effect
 - when a TOBAN has been declared
 - when other elevated fire danger conditions are in effect
- ensure appropriate controls are in place to eliminate or mitigate the potential for fire or injury due to fire during elevated fire danger
- *ensure appropriate approvals and controls are in place for*
 - approved tasks during a TOBAN
 - *urgent and essential work and travel during fire danger rating of SEVERE and above*
- ensure relevant authorities are notified of the use of fire or high risk activities for urgent and essential work during elevated fire danger.

A copy of the Icon Water “*Work during elevated fire danger periods*” procedure will be provided once a contractor has been selected through the tender process. If you do not received this by the Icon Water Representative, you must request a copy.

9 Permits

The WHS Principal Contractor must ensure the following Icon Water issued permits are in place before works are commenced:

- Icon Water Release for Work Permit – when working on Icon Water assets
- Icon Water Isolation Permit (if required) - when working on Icon Water assets

The WHS Principal Contractor must also ensure as a minimum that the following permits are obtained where applicable to the Works:

- Confined Space Entry Permit
- Isolation Permit when within the WHS Principal Contractor's designated authority
- Hot Works Permit
- Excavation Permit
- Penetration Permit.

Details of the WHS Principal Contractor's procedures and permits must be available for review by the Icon Water Representative on request.

10 Personal Protective Equipment (PPE)

The WHS Principal Contractor must ensure that:

- all personnel must comply with the following minimum PPE requirements:
 - ankle high safety boots.
 - high visibility clothing.
 - long sleeve shirt and long pants.
 - hard hat - dependent on risk assessment (task specific).
 - safety glasses
 - hearing protection (task specific)
 - gloves – dependant on risk assessment (task specific).
- any specific PPE required for any part of the works is indicated on the relevant SWMS
- any Safety Data Sheet (SDS) which requires specific PPE is complied with
- double eye protection is used for all grinding/cutting activities
- headphones are not worn
- all visitors to site are informed of the minimum PPE requirements
- 100% cotton PPE is worn in switchboard rooms and other defined areas to be confirmed with the Icon Water Representative prior to commencement.
- all PPE clothing used for night shift work includes reflective strips.

11 Alcohol and other drugs

The WHS Principal Contractor must ensure that:

- They have an alcohol and other drugs testing process which meets the Icon Water requirements of:
 - having a breath alcohol concentration (BrAC) of 0.00%
 - not having drugs detectable in oral fluid above concentration limits as prescribed in Australian Standard (AS) 4760.
- If the WHS Principal Contractor undertakes an alcohol and other drugs test during the project, and a worker is identified to be in breach of the prescribed limits, the WHS Principal Contractor must notify the Icon Water Representative
- Testing must be undertaken at intervals where the frequency of testing will act as a deterrent.

12 Confined space

The WHS Principal Contractor must ensure that all confined space related work is undertaken in accordance with the following:

- all personnel must have received training to enter a confined space or to undertake a specific role associated with confined spaces
- an authorised confined space permit must be in place and must be available at point of entry
- isolations must be in place where and as required to protect personnel and other workers from sources of energy
- a standby person must be in place for all confined space entries, the standby person must never enter a confined space
- any work in the sewer network (or other locations where there is a risk of Volatile Organic Compounds (VOC)) must take into account the risks posed by VOC contamination and a VOC detection device must be used
- an emergency egress plan is required for all confined space entries and the emergency procedures must be understood by all relevant personnel. A rehearsal of the egress plan is mandatory
- a confined space risk assessment must be completed
- all gas monitoring units must be in date, regularly calibrated and ready for use. All gas monitoring units must be bump tested before each use
- all gas detector alarms during a confined space entry must be reported to the Icon Water Representative immediately.

13 Working at heights

The WHS Principal Contractor must ensure that all work undertaken at heights is undertaken in accordance with the following:

- all relevant personnel undertaking a task which requires the use of a safety harness must have received working at heights training
- all work that exposes personnel and other workers to a risk of injury due to a fall from one level to another must be risk assessed and the most adequate control must be in place
- any personnel within two metres of an unprotected edge is considered to be at risk and must be protected from falls
- an emergency egress plan must be established for each working at height activity that involves a risk of falling two or more meters
- personnel utilising personal fall prevention equipment must not work alone
- where Icon Water fixed davit bases are to be used, the WHS Principal Contractor must ensure that all davit / fall arrest equipment is supplied and used and must ensure compliance with Icon Water Approved Products List
- work is not permitted from a ladder unless three points of attachment can be maintained at all times or if other acceptable equipment is utilised such as platform ladders

13.1 Falling or dropped objects

The WHS Principal Contractor must ensure that:

- all situations where there is a potential for material and or equipment to be dropped must be subjected to a risk assessment prior to the commencement of work and that the most adequate control is in place
- exclusion zones are established below areas where objects may fall
- exclusion zones have appropriate signage and are continually monitored
- all materials and equipment is lowered in a controlled manner. Under no circumstance should materials or equipment be dropped
- equipment and material lanyards are used to secure objects preventing potential falls from height
- where the risk of falling or dropped objects has been identified, this is communicated at the pre-start meeting
- wearing of hard hats is considered and included within a SWMS or risk assessment where there is a risk of falling objects.

14 Scaffolding

The WHS Principal Contractor must ensure that all scaffolding is undertaken as below.

14.1 Fixed scaffolding

- Scaffolding of more than 4 meters in height must only be erected and dismantled by a scaffolder holding a high risk licence of the correct class.
- Scaffolds above four metres in height must be inspected and tagged.
- Inspection/Test tag (Scaff tag) must be displayed at any entry points on the scaffold.
- All scaffolds are to be inspected against the agreed design and survey:
 - prior to being used for the first time
 - every 30 days from the first inspection
 - after a severe weather event
 - after being modified
 - where an issue has been identified during a workplace inspection
 - after an incident.
- Inspections must be carried out by the certifying scaffolders for the scaffold supplier/subcontractor.
- Do not alter scaffold if you are not trained and do not alter other company scaffolds.
- Where practicable, stair access must be provided to all work platforms.
- Ladder access must only be provided where stair access is not practicable, ladders must be secured against displacement with all sole plates level and on solid ground.
- No scaffold is to be erected, altered or dismantled in adverse weather conditions.
- Scaffold is not to be used until the entire scaffold including the foundation has been inspected, approved for use and tags are in place.
- Scaffold that is incomplete and not approved for use must be tagged out of service and entry points must be closed with appropriate signage.
- Ground stability is to be checked prior to erection of scaffold.
- Exclusion zones must be established when erecting scaffold.

14.2 Mobile scaffold

Scaffolding less than 4 meters in height does not have to be erected by scaffolders holding a high risk license in the Scaffolding Work license class, but must be erected according to the relevant Australian Standard.

All wheels on a mobile scaffold must be locked or chocked against any possible movement.

All mobile scaffold should have a safe, secure means of access to the working platform.

Do not locate a mobile scaffold closer than 1 meter to any slab edge, penetration or other step down, unless a positive means to prevent it crossing that point, such as a fixed fence, rail or raised edge, is in place.

When moving a mobile scaffold:

- ensure that the scaffold is not being used and that all personnel are clear of the proposed new location
- all items on the scaffold must be secured
- stay well clear of power lines.

Scaffold guardrails are not to be used to gain extra height or to support equipment or loads.

15 Services

The WHS Principal Contractor must ensure that:

- all underground and overhead services must be confirmed and proved prior to commencement of Works.
- an excavation permit is completed before excavation works begin and signed by the supervisor, operator and spotter.
- all excavations or penetrations through ground and or concrete are properly planned with sufficient investigations taking place prior to commencement. These investigations must include:
 - locating available drawings of area and or structure,
 - Dial Before You Dig (DBYD), obtaining available diagrams and information from this service
 - discussion with Icon Water staff that are familiar with the area and or building
 - visual inspection of the area or building
 - non-destructive testing / service locating, and
 - proving location of services using hydro excavation prior to commencement.
- exclusion zones are utilised and adhered to
- services which are suspended following excavation are mechanically supported.
- where a service is encased in asbestos cement pipes, an asbestos plan is in place prior to proceeding beyond the potholing stage.
- when pipe bursting, all adjacent services are identified and protected from damage.
- it is aware of and complies with the electrical industry requirements regarding minimum approach distances and protocols around working near overhead and underground electrical services.

16 Excavations

The WHS Principal Contractor must ensure that it plans, risk assesses and controls all excavations in accordance with the following requirements:

- operators must be verified by the WHS Principal Contractor as competent. Details of competency must be provided to the Icon Water Representative on request.
- excavations greater than 1.5m in depth require specific adequate controls (such as benched, battered, or shored) before commencement of the excavations. If none of these controls can be achieved the excavation must be assessed by a qualified Geotechnical Engineer appointed by the WHS Principal Contractor for direction.
- for difficult soils or conditions where the standard controls cannot be implemented for any depth a qualified Geotechnical Engineer must be used.
- shoring must be adequate for the excavation, in good condition and have all necessary engineering approvals. Shoring must be installed by trained and competent persons.
- adequate barricading to control access to open excavations must be supplied, installed and maintained.
- open excavations must never be left unattended at any time without the appropriate cover/barricade in place.
- all barricades/covers are to be maintained for the full extent of the period they are in place. Covers/barricades used must be appropriate for the service intended.
- appropriate signage must be provided.
- all excavations must be closed/ backfilled as soon as practicable.
- soil heaps must be positioned away from the edge of the trench and outside of the zone of influence.
- safe access must be provided into excavations in accordance with the Work Health and Safety (Excavation Work Code of Practice) Approval 2015.
- a confined space assessment must be undertaken on all excavation work.

17 Electrical

The WHS Principal Contractor must ensure that.

- all electrical tools, equipment and electrical leads are tested and tagged and the tags are in date.
- all electrical equipment is thoroughly inspected prior to use.
- damaged equipment is not be used and is either removed from site or placed under quarantine and tagged out.
- all electrical leads are positioned to prevent mechanical damage, with lead stands and insulated lead hangers used where required. Where leads cannot be raised off the floor or the ground, another means of protection against mechanical damage, damage by liquid or high temperature must be provided. The use of all leads must be in accordance with Table 16.1.

Table 16.1: Maximum flexible extension cord lengths

Plug and socket rating (A)	Conductor area (mm ²)	Maximum length of single phase flexible extension cords (m)	
		General use. e.g. handheld power tool	Circuits where the safety of personnel utilising the equipment depends on the reliable starting of motors (e.g. Trailing cables from suspended scaffold or swing stages)
10	1.5	35	20
15	1.5	25	15
	2.5	40	25

- when working on electrical equipment, an electrician with an unrestricted licence (Qualified Supervisor in NSW) is onsite. Minimum ratio of licenced to un-licenced 1 : 3.
- industrial rated RCD (Residual Current Device) boxes are used for power supply to all electrical equipment.
- there is no working on live electrical equipment unless the WHS Principal Contractor has satisfied itself on reasonable grounds that it is necessary to work on live electrical equipment for the works and that this can be carried out safely. Low voltage (LV) rescue kits are required to be onsite if working on live LV equipment.
- conductive ladders (including wire-reinforced) are not used on, near or in the vicinity of exposed live electrical apparatus.
- installers of any data cables are licensed.

18 Mobile plant and equipment

The WHS Principal Contractor must ensure that the following requirements are met:

18.1 Plant and equipment inspections

- plant inspection and maintenance records must be provided prior to commencement.
- operators must be licenced, trained, authorised and verified as competent.
- all plant must be inspected daily prior to commencement of works.
- plant must have an Engineering Certification unless the WHS Principal Contractor has otherwise satisfied itself on reasonable grounds that the plant is in good repair and safe to use.
- reversing alarms and hazard lights must be in working order.
- maintenance works for all plant requiring maintenance must be carried out off site where possible. If this is not possible the WHS Principal Contractor must obtain approval from the Icon Water Representative and designate an area that is barricaded for maintenance on site.

18.2 Plant and equipment general

- a spotter must be in place when plant is operating.
- mobile phones and or portable electronic devices are banned while in the vicinity of or whilst operating mobile plant and equipment.
- personnel on foot in worksites and/or working in close proximity to mobile plant traffic must move to a safe position, (minimum of 10 metres) clear of all moving vehicles and mobile plant, before placing or receiving a mobile phone call.
- Roll Over Protection System (ROPS) and Falling Object Protection System (FOPS) must be in place as required and must be engineered and certified.
- Temporary Traffic Management (TTM) and/or Pedestrian Management Plan to be assessed by the WHS Principal Contractor and utilised where applicable.
- communication systems must be in place and tested prior to commencement.
- seat belts must be worn at all times when operating plant.

18.3 Plant and pedestrian interface

- vehicles, plant and equipment speed must be considered in the safety management plan.
- safe speed must be maintained at all times.
- set up delineation of plant, exclusion and no go zones must be identified prior to commencement of works and must be modified as site conditions change.
- no walking on site while using mobile phones or portable electrical devices.
- if personnel, other workers or visitors cannot be located at any time, work is to stop until the person is located.
- reversing to be kept to a minimum.

19 Lifting

The WHS Principal Contractor must ensure that the following requirements are met:

19.1 Licence

- Operators must hold national licence to perform high risk work, be suitably trained, authorised and verified as competent in the operation of the particular crane to be used.
- Dogging/rigging crew must be licenced, trained and competent and must be over 18 years of age. They must be trained and competent in slinging and rigging, and be familiar with the relevant standard hand signals and radio procedures.
- Crane operators are not permitted to do their own dogging work or supervise a trainee dogman.

19.2 Lift study

- All lifts must be appropriately planned and assessed.
- An engineered lift study must be conducted for any special lift (as set out below) and is required to be approved by the person in charge of the lift. A copy must be available on site at all times and must be provided to the Icon Water Representative on request. The person in charge of the lift and rigging must ensure the entire crew clearly understands all aspects of the lift by reviewing the lift study and SWMS.
- Where a lift may have the potential to impact on Icon Water assets, prior approval of the lift study and SWMS must be obtained from the Icon Water Representative.
- The lift study applies to individual special lifts and cannot be used multiple times for similar special lifts.
- A crane lift falls into the special lift category if:
 - multiple cranes are used in the lift.
 - it is a hazardous lift. Hazardous lifts involve one or more of:
 - close proximity to power lines
 - close proximity to trenches/excavations
 - lifts in or near heavily populated work areas
 - concrete pours with kibbles
 - lifts over critical services or significant structures
 - unusual, awkward or complicated structures
 - where specialist one-off lifting equipment is used
 - lifts when the ability of the ground to support the lifting equipment and suspended load is in question
 - loads lowered into or from a confined space
 - lifts over a building or facilities where there is a risk of persons being inside
 - loads that are lifted, placed or swung out of the crane operator's view
 - the lift load could shift or the centre of gravity could change during the lift
 - where the swing radius of one crane can intersect with the swing radius of a second crane
 - any work requiring the use of a man cage.

- it is a heavy lifts - where the total suspended load, including lifting gear, is greater than or equal to 75% of the crane capacity in a given configuration, or is greater than or equal to 20 tonnes.
- the lift is close to the capacity of crane - more than 80% of the rated capacity at any point of the lift.
- other lifts as designated by the Icon Water Representative and notified to the WHS Principal Contractor.

19.3 Suitability of ground

- Ensure that the setup area has been inspected for potential hazards and the inspection is documented. A risk assessment must be undertaken for all lifts to consider the suitability of the ground conditions to support the maximum point loading of the planned crane lift.
- Taking into account the lift load, unless the ground conditions are clearly suitable (e.g. hardstand road base and pavement), a qualified engineer must be engaged to sign off on the ground condition assessment prior to the lift commencing. This assessment must include (and not limited to):
 - a lift occurring on open ground where underground services are located under or in the immediate vicinity of the crane outriggers
 - the outrigger pad loading is above the acceptable capacity for the ground conditions
 - the crane is set up on a suspended slab/other structure, e.g. bridge or overpass
 - the lift is within 2 metres of an excavation, pit, sump or underground tank
 - the crane is located on uneven or sloping ground
 - the crane is located within 2 metres of an embankment
 - any other lift where the ground conditions are not hardstand, or on firm level ground.
- All lift routes must be established and delineated.

19.4 Lifting gear

- All lifting gear (shackles, slings, wire ropes, etc.) must be inspected regularly by a qualified and competent person with the inspection details documented and the items tagged.
- Slings must be immediately discarded when they are found to have any of the following faults:
 - label for the sling missing or is illegible
 - sling has been subject to heavy impact load
 - coupling components or fittings are distorted, cracked, fractured or excessively worn or corroded and/or
 - if fibres appear fused or glazed (which may indicate that the sling has been exposed to excessive heat).
- Tag lines must be knot free and must never be wrapped or secured in any form to a worker(s)
- If a lifting equipment failure arises during any part of a lifting operation, the event must be reported to the Icon Water Representative within 1 hour of occurring. All lifting equipment and devices involved in an event must be tagged out of service and quarantined for inspection and examination by a certified service provider.
- Any such event must also be reported as required to the WHS regulator.

19.5 Generally

- No person must pass under a suspended load, and loads must never pass over personnel or other workers.
- The method of communication to be utilised for each lift must be established and tested prior to commencement of each lift.
- Barricades and signage must be placed to demarcate the swing radius of cranes and other lifting equipment.
- The rated capacity of the crane/lifting equipment must not be exceeded at any time.
- Whilst under load, the boom must not be lowered below the horizontal plane that passes through its base pivot point.

20 Hazardous material

The WHS Principal Contractor must ensure that the following requirements are met:

20.1 General

- A Safety Data Sheet (SDS) must be provided for all chemicals brought to site. All dangerous and or hazardous substances brought to site must be documented on a register.
- SDS's must be current and not be older than 5 years.
- A risk assessment for all dangerous and or hazardous chemicals must be completed prior to use.
- All chemicals brought to site must be stored in properly labelled containers and stored in accordance with the SDS and comply with Globally Harmonised System (GHS) requirements.
- The WHS Principal Contractor must provide bunded storage as required for chemicals stored on site and ensure incompatible chemicals are not stored in the same area.
- The WHS Principal Contractor must refer to the Icon Water Work Instruction "*Environment incident response and notification*" (WI03.00.03) to understand the requirements when a spill occurs.
- All spills must be reported to the con Water Representative.
- Personnel must receive full information, instruction and training about hazards and risks and be made aware of the relevant risk assessment for the chemicals being used.
- Risk assessments may identify areas as exclusion zones depending on the type of chemical being used and risk to health.

20.2 Polycyclic Aromatic Hydrocarbon (PAH) requirements.

- Icon Water PAH procedure must be applied to all works that involve contact with PAH WI02.24.01 Management of Exposure to PAH from Coal Tar Products.

20.3 Lead-based paint

- If project requires the removal of lead-based paint, the WHS Principal Contractor must contact the Icon Water Representative.

20.4 Asbestos Containing Materials (ACM)

- If the WHS Principal Contractor finds potential ACM in or on the site, the WHS Principal Contractor must:
 - stop work and notify personnel not to approach the area
 - setup barricades and signage
 - arrange for the ACM to be tested by a qualified assessor
 - if confirmed as ACM, arrange for recommended controls to be carried out
 - not work in the affected area until a clearance certificate has been issued, where ACM has been removed from site.
 - notify the WHS regulator where required.
- All potential ACM found on site must be promptly reported to the Icon Water Representative as soon as reasonably practicable.
- Consult the relevant Asbestos Register.

21 Isolation

The WHS Principal Contractor must ensure that the following requirements are met:

- All work where personnel are potentially exposed to energy sources requires isolation and de-energisation of the energy source.
- For Work involving Icon Water assets:
 - for isolations, WHS Principal Contractors must be aware of Icon Water Isolation procedures.
 - all isolations must be implemented by Icon Water in conjunction with the WHS Principal Contractor.
 - the WHS Principal Contractor must supply their own personal locks (red) for all isolations. Locks must be individually keyed and assigned to the person using the lock.
 - an isolation plan must be in place and personnel must sign in and out as required under the plan during the works.
- WHS Principal Contractor isolation procedures would generally be used where all relevant assets are under the control of the WHS Principal Contractor.
- All services that are part of the isolation must be tested for dead.

22 Working over or near water

The WHS Principal Contractor must ensure that the following requirements are met:

- Minimise time spent working on or near the body of water.
- Documented emergency procedure must be in place and all personnel must be trained in the emergency procedure.
- Appropriate access equipment and rescue equipment must be provided.
- Personnel must be trained in the use of lifesaving and rescue equipment.
- Rescue equipment must be regularly checked and serviced.
- No lone working will take place on or near a body of water.
- The risks associated with PPE such as waders, wet and dry suits must be identified and controlled.
- Life vests are a mandatory requirement for any work where a person could fall into a body of water.
- The WHS Principal Contractor must assess whether safety lines and harnesses are required.
- The appropriate waterways licence must be in place if using boats on waterways.
- Boats must be fit for purpose, licenced and must have all required safety features including sufficient lifebuoys for all occupants of the boat.
- The WHS Principal Contractor must notify the Icon Water Representative if the work may involve the requirement for swift water rescue training.

23 Temporary traffic management plans

The WHS Principal Contractor must ensure that the following requirements are met:

- Temporary Traffic Management (TTM) plans must be designed and implemented by persons that are appropriately trained.
- A TTM system is required when working on public roads, road verges, road medians, footpaths, and bicycle paths. TTMs to be approved by the appropriate ACT or NSW agency.
- A TTM system may also be required for construction sites or controlling traffic on Icon Water operational sites and must be approved by the Icon Water Representative.
- Copies of the approved plans must be available on site.
- TTM plans must be live documents and must be updated/amended according to the actual site work conditions by the appropriately trained person.
- The WHS Principal Contractor must conduct regular compliance audits/inspections.

Appendix 1 – Performance reporting definitions

Total Recordable Injury Frequency Rate (TRIFR)



WSAA HS Benchmarking Indicator 1 Total Recordable Injury Frequency Rate (TRIFR)

Indicator -Total Recordable Injury Frequency Rate (TRIFR)

Definition

The Total number of recordable injuries reported as a frequency rate, based on the number of incidents per million hours worked. This measure is a 12 month rolling calculation.

Intent

The TRIFR indicator is aimed at measuring those incidents that either require medical treatment as a minimum, or require intervention where an employee is unable to return to their normal duties, or require alternate duties to be applied after a 24-hour period or one shift. The injuries recorded are those that are not first aid or reportable only, but all injuries that require some form of intervention.

Measurement

This indicator is aimed at measuring how many recordable injuries were recorded in the organisation. The measure is shown as a frequency rate per million man-hours worked. This measure is calculated as follows

$$\frac{\text{Number of recordable injuries in the period}}{\text{Number of man hours worked in the period}} \times 1\,000\,000$$

Indicator Data Set

The indicator will have two measurements for benchmarking

1. Internal workforce; and
2. Contracted or external workforce.

Both these measures will be benchmarked.

Inclusions

This HS indicator measure includes the following within its scope

- Fatalities;
- Lost time injuries;
- Medical treated injuries; and
- Injuries where an employee is placed on a suitable, restricted or alternate duties plan.

Recording Frequency

Where possible this measure is to be calculated and reported on a monthly basis. At a minimum, this measure is to be calculated and reported on a quarterly basis.



WSAA HS Benchmarking Indicator 8

WHS High Potential Incident Frequency Rate (HPIFR)

Indicator

WHS High Potential Incident Frequency Rate (HPIFR).

Definition

The number of class 1 actual or potential Health and Safety incidents. Reported as a frequency rate based on number of these incidents per million hours worked.

Intent

The WHS HPIFR indicator is aimed at measuring incidents based off their potential for serious injury/fatality/catastrophe, rather than merely the actual outcome. This measure aligns to organisations proactively recording and rating near misses and hazards to a risk score. This measure includes incidents where a serious rule violation, process breakdown, unsafe condition and/or at risk behaviour that has realistic potential to lead to a fatality or permanent impairment if uncontrolled release of damaging energy would have occurred.

Measurement

This indicator is aimed at measuring how many High Potential Incidents were recorded in the organisation. The measure is shown as a frequency rate per million man hours worked. This measure is calculated as follows:

$$\frac{\text{Number of High Potential incidents in the period}}{\text{Number of man hours worked in the period}} \times 1\,000\,000$$

Indicator Data Set

The indicator will have two measurements for benchmarking:

1. Internal workforce; and
2. Contracted or external workforce.

Both these measures will be benchmarked.

Inclusions

This WHS indicator measure includes the following within its scope:

- All incidents that have a potential of to lead to a fatality or permanent impairment; and
- All incidents that lead to a fatality or permanent impairment.

Reporting Frequency

Where possible this measure is to be calculated and reported on a monthly basis. At a minimum, this measure is to be calculated and reported on a quarterly basis.