

### Plant and Equipment – Using Mobile Plant (Linear Site)

#### Warning

You cannot undertake this activity in the rail corridor unless you have completed a pre work brief and work site protection plan. Reference should also be made to the <u>Protocol for Entering the ARTC Rail Corridor</u> and the <u>Business Rules for Working in the ARTC Rail Corridor</u> Minimum Personal Protective Equipment (PPE) requirements must also be met in line with the <u>Personal Protective Equipment (PPE) Work Instruction</u>.

Work Activity:	Plant and Equipment – Using Mobile Plant (Linear Site)         ARTC employees, and contractors directly managed by ARTC			WMS No: WHS-WI-132
Coverage:				Version No: 2.0
Developed by:	Corporate Work Health and Safety Manager	Approved by:	Executive General Manager Enterprise Services	Date Approved: 9 May 2016

Instructions			
efore applying this work	method statement, check that it is the right one for your worksite.		
here are three types of v	work method statements, for three different types of worksites, as follows:		
Site Type	Description	Examples	
Fixed Sites	<ul> <li>A larger worksite where there may be:</li> <li>more than 1 – 2 pieces of plant on site, and</li> <li>a larger number of workers on site.</li> <li>A fixed worksite may remain in place for a short time to a couple of days.</li> </ul>	<ul> <li>installing / replacing sleepers and turnout bearers</li> <li>level crossing upgrades</li> <li>major drainage upgrades</li> <li>placing ballast on track</li> <li>under cutting sites</li> </ul>	
Linear Sites	A worksite involving rail mounted activities which work on a continual basis through the corridor.	<ul> <li>ballast cleaning</li> <li>ballast / rail train unloading</li> <li>rail grinding</li> <li>resurfacing</li> </ul>	
Typically routine or periodic maintenance work. Maintenance Sites A maintenance site may involve 1 – 2 pieces of plant, supported by a maintenance team.		<ul> <li>delivery of track materials for a larger project</li> <li>removing foul ballast from the formation</li> <li>removing signal infrastructure (signal maintenance teams)</li> </ul>	

Speak with your supervisor if you are not sure which work method statement(s) apply to your work.

What are the tasks involved?	What are the hazards and risks?	What are the control measures?	Related Documents
		A site supervisor must physically attend and supervise sites where mobile plant will operate.	
	Sites not supervised	If the site supervisor is required to leave the site and no longer supervise the work then all mobile plant work must stop until the supervisor returns, unless the supervision role can be temporarily assigned to another worker and this clearly communicated to all on site.	
Plan the work	Access routes unsafe	The pre work brief must identify the planned location and movement of all mobile plant, and	
	Planned location / movement of mobile plant not understood	<ul> <li>determine exclusion / plant operating zone(s) to be applied (see further information below)</li> <li>confirm communication arrangements to be applied (see further information below)</li> <li>ensure that the operator of any mobile plant is competent</li> <li>confirm that any mobile plant is in good working order (note: orange flashing lights and audible travel beepers must be fitted and working)</li> </ul>	
	Exclusion zone / Plant Operating Zone not in place	Set up a suitable exclusion / plant operating zone (minimum 5 metres) around mobile plant before starting.	
Determine suitable exclusion zone(s) / plant operating zone	Exclusion zone / Plant Operating Zone not enforced	Limit / control the number of workers able to work within the exclusion / plant operating zone. (allow only the minimum number of workers that are required to safely complete the task)	
	Worker struck by mobile plant	A person must be nominated to ensure that only authorised workers (workers required to safely complete the task) may enter the plant operating zone.	
	Distraction resulting in:	Only site supervisors and protection officers may be permitted to use mobile phones. (other workers may use mobile phones only where agreed as part of the pre work brief).	
Confirm communication arrangements	<ul> <li>supervisor not enforcing exclusion / plant operating zone</li> </ul>	To use a mobile phone or a radio, workers must move to a safe place and remain stationary.	
Confirm communication arrangements	<ul> <li>mobile plant exceeding limits of authority</li> <li>workers entering exclusion /</li> </ul>	Site supervisors must stop work or delegate their responsibility before using a phone or radio.	
	plant operating zone in error	A mobile plant operator may use a radio only where they notify the supervisor and bring the mobile plant to a stop with the equipment in a safe position before doing so.	

What are the tasks involved?	What are the hazards and risks?	What are the control measures?	Related Documents
What are the tasks involved?	What are the hazards and risks? Plant Operator's view obstructed Fall from heights Communication impaired Attachments disconnecting Reversing movements Unexpected movements Rail Traffic	What are the control measures?         Always approach mobile plant from the direction in which the operator can see you.         Always maintain three points of contact when accessing plant.         Workers needing to work in the plant operating zone must have clear communication with the plant operator. Any non-verbal communication arrangements must be agreed beforehand.         Ensure locking pins or fully automatic quick hitches are in place for any attachments         Plant Operator to confirm a clear path is available before moving.         Plant Operator to sound horn before moving – 1 blast for forward, 3 blasts for reverse         Limit speed of mobile plant as suitable to proximity of workers to the machine.	
		Ensure mobile plant is protected from any rail traffic at all times. (including if required to cross railway track, or the event of a breakdown)	

### **Additional Controls**

The risk of being struck by plant can vary depending on a range of factors, including but not limited to:

- 1 The type of worksite
- 2 The location of the worksite
- 3 Track geometry (curvy / straight)
- 4 Surrounding topography (cuttings / embankments, deep cess)

There are a number of additional controls that may be considered to apply to the work, including:

Hazards	Control	Explanation
	Proximity Devices	Proximity devices can be used to sound warnings if a physical obstacle or worker is detected within a pre-determined area around the plant.
	Reversing Cameras	Using mobile plant fitted with reversing cameras can provide assistance for plant operators. Plant Operators should not rely on reversing cameras alone, however (do not stop visual checks and warning horn blasts)
Struck by Plant	Spotters / Observers	Assign an additional worker or workers to observe the operating range of the mobile plant and watch for potential obstructions. This would be appropriate for activities where multiple pieces of plant / equipment and/or work teams are working on site. The spotter / observer must remain outside of the exclusion zone and have radio contact with the plant operator.
	Visual Checks	Where short reversing movements are needed, require the Plant Operator to make a visual check in all directions before sounding the horn to warn of the intended movement: - visual check and one blast of the horn to move forward, - visual check and three blasts of the horn to move in reverse

References		
Standards, Codes of Practice, Guidance:	Plant / Equipment / Tools:	
Apply other work method statements in addition to this one as relevant to the work. (for example, loading / unloading plant and equipment, work in the rail corridor)	Additional PPE requirements to be determined, such as: - eye protection - gloves - hard hats - hearing protection - respiratory protection (such as a P2 dust mask)	
Training Requirements:	Inspection / Testing requirements:	
Check whether high-risk licenses are required and if so that workers have these. (The Commonwealth Work Health and Safety Regulation, <u>Schedule 3</u> , requires high-risk work licences for scaffolding, rigging, boom-type elevating work platform operation and fork lift truck operation). Check that workers have the information, training, instruction or supervision that is necessary to protect them from risks arising from the use of plant.	<ul> <li><u>Plant Maintenance Procedures</u> describe plant safety and inspection requirements, including:</li> <li>general plant requirements <u>EPP-32-03 General Plant Requirements</u></li> <li>annual inspections using <u>EPP3202F-02 Plant Inspection Requirements</u></li> <li>daily inspections using <u>EPP3202F-03 Daily Plant Record Book</u>, and</li> <li>on-site inspections using <u>EPP3202F-05 On-Site Plant Inspection Report</u>.</li> </ul>	