



Unload Concrete Sleeper Train

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 [Protocol for Entering the ARTC Rail Corridor](#) and the [Business Rules for Working in the ARTC Rail Corridor](#)

Minimum Personal Protective Equipment (PPE) requirements must also be met in line with the [Personal Protective Equipment \(PPE\) Work Instruction](#).

Work Activity:	Unload Concrete Sleeper Train		WMS No: WHS-WI-340
Coverage:	ARTC employees, and contractors directly managed by ARTC on Inland Rail P2N Project		Version No: 1
Developed by:	Ken Gallacher	Approved by:	Colin Forde, Programme Construction and Safety Manager Date Approved: 03.07.2018

<i>What are the tasks involved?</i>	<i>What are the hazards and risks?</i>	<i>What are the control measures?</i>	<i>Related Documents</i>
List the work tasks in logical order	Identify the hazards and risks that may cause harm	Describe what will be done to control the risk. What will you do to make the activity as safe as possible?	List specific sections of documents if critical to the control measure (include hyperlinks)
Pre-work briefing	Site movements & site-specific hazards including buried services & overheads, vehicle movements	All workers to sign on to a pre-work brief conducted by the Protection Officer – only workers whom have signed on can work.	
Worksite protection plan (WPP)	Workers misunderstanding the pre-work brief & WPP	Explain the WPP at length & any safe working requirements. Question staff on protection arrangements & locations of safe places. Ensure plan is understood by all & no staff can work unless briefed by the PO – no such thing as a silly question in this industry.	Pre-work brief & WPP brief
Communications /radio check	Break down in site communication resulting in serious injury or worse.	Radio check with all personnel on site prior to works commencing & the proper use of the phenetic alphabet. All site vehicles to have unique call signs for safe passage through work site (as per the site brief)	
Plant operations in the corridor	Site break downs causing delays	Pre-start checks & maintenance of machinery	Pre-start check sheet completed by the plant operator.



<i>What are the tasks involved?</i>	<i>What are the hazards and risks?</i>	<i>What are the control measures?</i>	<i>Related Documents</i>
Personnel protective equipment (PPE)	dust in eyes, strike on head from falling object, sunburn	<p>Workers to wear the correct PPE on site at all times. For work inside the rail corridor full reflective high visibility PPE is required. This includes the following:</p> <ul style="list-style-type: none"> • Long and Longs' - ARTC safety orange reflective shirt with rail cross on the back (or long sleeve shirt with ARTC reflective orange safety vest) and long pants (ARTC cargo pants or jeans) • Ankle height safety boots (lace up only) • Gloves (carried and worn when required) • Safety glasses to be worn at all times • ARTC hard hat with brim to be worn at all times • Hearing protection (carried and worn when required) • ICE boot tag (current IR safety initiative) • Additional PPE items specific to the task being undertaken as outlined in risk assessments. 	Pre-works briefing, risk assessments (where required).
Positioning of engineering train onto worksite.	Personnel hit by train & level crossing interface with public	Communications & pre-start briefing, use of NSW road to the rules at passive level crossings. Site team in a position of safety until otherwise instructed by the PO	ARTC Network rules & procedures
De-strapping of sleeper wagons prior to any machine works.	Falling gluts loosened by journey. Loose underfoot on ballast causing sprains Pinch points & trapping of digits.	<p>Observing load prior to de-strapping & correct PPE.</p> <p>Proper de-strapping technique.</p> <p>Good positioning while standing on the ballast shoulder.</p>	manual handling
Positioning of sleeper unloading excavator on site in readiness for unloading.	Uneven surface or incline causing roll over/tipping.	Prepared surface or a level location identified by the site supervisor & machine operator which will be briefed out at the pre-start briefing.	
Removal of concrete sleepers from engineering train/flat wagons	Load moving during transit – loose load	Good observation & separation of personnel & machinery (10m minimum) PPE usage- competent/trained operators.	



<i>What are the tasks involved?</i>	<i>What are the hazards and risks?</i>	<i>What are the control measures?</i>	<i>Related Documents</i>
	<p>Load falling from sleeper grab & causing serious injury (or worse) to personnel</p> <p>Contact with overhead services (power lines etc)</p> <p>Actions on unauthorised public access or vehicles on worksite.</p>	<p>Separation of site personnel & beyond slewing radius of the excavator & per the pre-start brief.</p> <p>Spotter in place when required & correct positioning of unloading excavator as per the site brief & site visit.</p> <p>Escalate to the PO or site supervisor – stand down all activities until told to proceed by the PO & supervisor.</p>	
Storing of sleepers using front end loaders (FEL's)	<p>Collision between the 2 FEL's or personnel strike.</p> <p>Dust caused by multiple vehicle movements causing poor site visibility and hazard to adjacent main roads & public property's.</p>	<p>Good communication between plant & personnel as per the site briefing. Ensure plant /human separation at all times. (minimum 10m)</p> <p>Dust suppression cart at all times when necessary due to climatic conditions</p>	
Continuous re-positioning of sleeper train for offloading.	Machine or personnel being struck by train.	All activities in & around the sleeper train will cease under the PO's instructions until he/she authorises works to re-commence after the train move. (staff to be 10m minimum away from train in a POS)	ARTC Network rules & procedures.
Collection of returnable consumables to Rocla via the sleeper train. (mainly 3m lengths of hard wood glut's)	Muscle strains, back injury's & splinters	Manual handling & use of the FEL's to facilitate the lifting & the correct use of PPE (gloves to mitigate the splinters)	manual handling
Machines tracking over buried services within the corridor (mainly the gas line running from North to South)	Rupturing the gas line as there is an 8t axle load	No tracking over the pipe unless it has been agreed at the pre-start & the 8t axle load ruling is obeyed. Pot holing /services located & clearly marked & briefed out prior to works commencing. (exclusion zone away from pipe line set up)	Pre-works briefing
4-wheel drive vehicles carrying out	Getting bogged due to heavy rain	No vehicles will be allowed into the corridor post inclement	ARTC Environmental



<i>What are the tasks involved?</i>	<i>What are the hazards and risks?</i>	<i>What are the control measures?</i>	<i>Related Documents</i>
works in the corridor (surveying, inspection or supervising etc) post prolonged rainy periods.	Damage to vegetation due to unauthorised diversions.	weather until the PO & site supervisor have agreed it's safe to access & egress. Minimise diversion's & only use authorised tracks	policies. Inland Rail Driving and Vehicle Safety Standard,
Working in the rail corridor affected by drugs & alcohol	Risk to other site personnel as well as yourself causing injury or fatality.	Mandatory & random tests carried out at site – these are regulated by ARTC's Alcohol & drug programme and random testing from ComCare or ONRSR. Workers taking prescription medication need to declare the medication to their supervisor. A decision as to the workers ability to safely carry out work while taking the medication will be made by the supervisor in conjunction with ARTCs Chief Medical Officer / Medvet.	ARTC Alcohol & drug procedure's
Working in the danger zone	Struck by train or mobile plant/rail traffic	Application of ARTC Network rules & procedures. All workers to adhere to instructions as per safety brief & worksite protection plan (WPP). Workers to follow the directions of the Protection Officer, and retreat to the dedicated safe zone when instructed.	Pre-work brief & WPP



References	
Standards, Codes of Practice, Guidance:	Plant / Equipment / Tools: 1 x 30t excavator fitted with a hydraulic sleeper lifter which has been modified by Harrybilt Design modification cert no HB-DMC-51
Training Requirements:	Inspection / Testing requirements: Plant Maintenance Procedures describe plant safety and inspection requirements, including: <ul style="list-style-type: none">- general plant requirements EPP-32-03 General Plant Requirements- annual inspections using EPP3202F-02 Plant Inspection Requirements- daily inspections using EPP3202F-03 Daily Plant Record Book, and- on-site inspections using EPP3202F-05 On-Site Plant Inspection Report.