

# Track Jacking Operation using Track Jack

Issue date: 11/04/08  
Review date: 18/02/11

<b>SWMS number:</b> SMS-06-SW-1068	<b>SWMS Name:</b> Track Jacking Operation using Track Jack			<b>SWMS Team:</b> Track Review Team
<b>Custodian (Position):</b> Track Works Manager Commercial / Renewals	<b>Assumptions:</b> Site specific risks are addressed and assessed in pre- work briefing			<b>Content reviewed by Technical expert (SME) and RailCorp safety professional (position including Div/Group)</b> Track Works Manager & SEQ Coordinator Asset Management Group Commercial / Renewals
<b>Approving Authority (Position):</b> Safety and Quality Manager, Commercial / Renewals	<b>Equipment/Plant/Tools:</b> <ul style="list-style-type: none"><li>• Track Jack</li><li>• Loader</li><li>• Ballast</li></ul>	<b>Records/Reporting:</b> <ul style="list-style-type: none"><li>• Worksite Protection Plan</li><li>• Pre-work Brief</li><li>• Services searches</li><li>• Electrical Permits</li><li>• Fuel and Hydraulic Oil MSDS</li><li>• Daily Plant Checklist</li></ul>	<b>Permits/licences required:</b> <ul style="list-style-type: none"><li>• Electrical Permit Holder</li><li>• Track Jack / Loader Plant Operators Certificate</li></ul>	<b>Personal Protective Equipment required:</b> <ul style="list-style-type: none"><li>• Safety Boots</li><li>• High Visibility Vests</li><li>• Hardhats</li><li>• Protective Clothing</li><li>• Safety Glasses</li></ul> <p>And as specified below.</p> <ul style="list-style-type: none"><li>• Gloves (as required)</li><li>• Dust Masks (as required)</li><li>• Hearing protection (as required)</li><li>• During all Site Works a FIRST AIDER MUST be Present</li></ul>
<b>Applicable Standards, Codes of Practice and guidance:</b> <ul style="list-style-type: none"><li>• OH&amp;S Act 2000</li><li>• OH&amp;S Regulation 2001</li><li>• SMS and Network Rules</li><li>• RailCorp Safety Policy</li><li>• RailCorp Network Rules &amp; Procedures</li><li>• RailCorp Safety Management System.</li><li>• MSDS for all chemicals and hazardous Substances used on site</li></ul>	<b>Inspection requirements</b> Nil	<b>Service schedule:</b> Nil	<b>Qualification required:</b> <ul style="list-style-type: none"><li>• Construction Industry Induction</li><li>• Track Safety Awareness or RISI (Rail Industry Safety Induction)</li></ul>	
		<b>MIMS or METRE Ref:</b> Nil		

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Number	Step	Hazard or human error (Safety/Environmental hazards identified, including physical environment, human errors, plant and equipment)	Risk ranking before controls	Control (to be Implemented to eliminate or reduce the risk to the lowest practicable level)	Risk ranking after controls	Responsibility	Job step to be completed In accordance with (name associated documentation)
1	Supervisor undertakes site pre-work briefing and gives local induction.	Staff not Listening to Pre-Work Brief	B -	Identify all hazards, Staff to ensure they are properly Briefed as to risks involving Worksite.	D	Team Leader / Work Group Leader / All Staff	Pre-Work Briefing SMS-06-FM-0163
2	Supervisor verifies competence of personnel doing the task and currency of permits for work.	Expired Competency Cards & Permits, Unqualified type of Personnel for the Task.	B -	Visual Inspection of Personnel Competency Cards & Currency of Permits	D	Team Leader / Work Group Leader	Safety Training & Competence SMS-11-SR-0128
3	Review SWMS and confirm it is current.	Use of a SWMS that is out of date	C -	Ensure SWMS is current and up to date.	D	Team Leader / Work Group Leader	SWMS & SWI's SMS-06-PR-0023
4	Verify that plant and equipment for the task is fit-for-purpose.	Plant & Equipment kept in poor working condition	C +	Conduct a Daily Plant Checklist	D	All Staff	Plant SMS-06-GD-0225
5	Process	•		•			Pre work Briefing SMS-06-FM-0163 RailCorp Network Rules and Procedures
6	Place track jack on track	<ul style="list-style-type: none"> <li>• Striking worker or object</li> <li>• Electrocution</li> <li>• Dropping / striking staff while lifting</li> </ul>	B+	<ul style="list-style-type: none"> <li>• Location sensor fitted to track jack. Machine stops automatically</li> <li>• Use restricted machine, power out permit or Authority to work under live power</li> <li>• Area to be free of people around location of lift</li> </ul>	C-	Certified Track Jack Operator All Staff	Plant SMS-06-GD-0225 Lifting Equipment Inspection SMS-16-FM-0089 Work Around Elect. Equip. SMS-06-GD-0268 Electrical Permits SMS-06-EN-0577
7	Lift track using track jack	<ul style="list-style-type: none"> <li>• Derailment</li> <li>• Striking worker or object</li> </ul>	B-	<ul style="list-style-type: none"> <li>• Correct operation of plant. Clamps in place when lifting, clamps released when travelling. Lift cylinders clear of obstructions while travelling</li> <li>• Location sensor fitted to track jack. Machine stops automatically. Staff clear of work location</li> </ul>	C-	Certified Track Jack Operator Team Leader / Work Group Leader	Plant SMS-06-GD-0225 Plant Risk Assessment SMS-06-GD-0403 PPE SMS-06-GD-0323

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8	Providing additional ballast to track.	<ul style="list-style-type: none"> <li>• People being struck by loader</li> <li>• Loader becoming unstable or rolling over</li> <li>• Ballast striking person</li> <li>• Striking live service</li> <li>• Electrocution</li> </ul>	B+	<ul style="list-style-type: none"> <li>• Staff kept clear of plant and ballast</li> <li>• Service searches completed and staff aware</li> <li>• Loader to operate within safe limits of plant and SWMS</li> <li>• Use restricted machine, power out permit or Authority to work under live power</li> </ul>	C-	<p>Certified Loader Operator Team Leader / Work Group Leader / All Staff</p>	Services Search Checklist SMS-06-FM-0384 Plant SMS-06-GD-0225 PPE SMS-06-GD-0323 Work Around Elect. Equip. SMS-06-GD-0268 Electrical Permits SMS-06-EN-0577
9	Site tidy up	<ul style="list-style-type: none"> <li>• Loader becoming unstable or rolling over</li> <li>• Ballast striking person</li> <li>• Striking live service</li> </ul>	B	<ul style="list-style-type: none"> <li>• Staff kept clear of plant and ballast</li> <li>• Service searches completed and staff aware</li> <li>• Loader to operate within safe limits of plant and SWMS</li> <li>• Restrictions on powerout</li> </ul>	C-	<p>Certified Loader Operator Team Leader / Work Group Leader / All Staff</p>	Plant SMS-06-GD-0225 PPE SMS-06-GD-0323 Work Around Elect. Equip. SMS-06-GD-0268 Electrical Permits SMS-06-EN-0577
	Site Specific Hazard						

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**NOTE: Each work group or team member must sign off on the SWMS to acknowledge they have been briefed about or instructed in the SWMS**

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RailCorp Level 2 Risk Matrix - Regional & Local (Workplace)		Likelihood/Frequency							Definition for Use - Regional & Local level (Workplace)	
		Event Frequency	Less than once every 1000 years	Once every 100 to 1,000 years	Once every 10 to 100 years	Once every 1 to 10 years	More than once per year up to and including 10 times per year	More than 10 times per year		
Consequence	Historical (Likelihood)	Unheard of in the rail industry	Has occurred once or twice in the rail industry	Has occurred many times in the rail industry, but not in NSW	Has occurred once or twice in NSW	Has occurred frequently in NSW	Has occurred frequently at specific locations	As an example, the Level 2 scale would be used when examining the risk of slips, trips and falls on specific RailCorp platforms within a region or at a particular station, or the risk of fire within a depot.		
	Workplace Predictive (Likelihood)	Not expected to occur	May occur only in exceptional circumstances	Could occur at some time but not likely	You would expect it to occur at least once in the next 10 years performing similar activities	You would expect it to occur at least once this year performing similar activities	You would expect it to occur at least once this month performing similar activities	There are 3 options for descriptors which can be used to determine the frequency category. One set of descriptors is provided for frequency, one for historical likelihood, and one for predictive likelihood in the workplace. Choose the most appropriate.		
		F1	F2	F3	F4	F5	F6	To score the risk, follow the steps:		
>10 Fatalities	C6	Disastrous	B-	B+	A	A	A	1. Identify the magnitude of the credible consequence if the risk were to occur. If applicable, risks should be considered in terms of the safety (this matrix), commercial and environmental impact (using other matrices).		
2-10 Fatalities	C5	Catastrophic	C+	B-	B+	A	A	2. Identify the likelihood of this level of consequence occurring. (This is done after considering the effectiveness of the current controls in place)		
1 Fatality (2-10 Major Injuries)	C4	Critical	C-	C+	B-	B+	A	3. Score the risk using the combination of likelihood and consequence ranking.		
1 Major Injury	C3	Major	D	C-	C+	B-	B+	Note: Where there are a range of credible consequences which may lead to a different level of risks and/or where the controls may be different. It may be useful to score the risk more than once.		
1 or more Minor Injuries	C2	Minor	D	D	C-	C+	B-			
First aid treatment, or illness/injury not requiring treatment	C1	Negligible	D	D	D	C-	C+	B-		