

# Reloading Ballast Trains - Side Dump Wagons

Issue date: 10/04/08

Review date: 18/02/11

<b>SWMS number:</b> SMS-06-SW-1061	<b>SWMS Name:</b> Reloading Ballast Trains - Side Dump Wagons			<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>Approving Authority (Position):</b> Safety and Quality Manager, Commercial / Renewals	<b>Equipment/Plant/Tools:</b> <ul style="list-style-type: none"><li>• Ballast Train / SDW Train</li><li>• Excavator / Plant</li><li>• Hand Held Communication Devices</li><li>• Feeler Gauge</li><li>• Portable Lighting</li></ul>	<b>Records/Reporting:</b> <ul style="list-style-type: none"><li>• Worksite Protection Plan</li><li>• Pre-work Brief</li><li>• Production Report Form</li><li>• Daily Site Record</li><li>• Electrical Permits</li><li>• Fuel and Hydraulic Oil MSDS</li><li>• Daily Plant Checklist</li><li>• Site Specific Safety Management Plan</li></ul>	<b>Permits/licences required:</b> <ul style="list-style-type: none"><li>• Electrical Permit Holder</li><li>• Excavator / Plant Operator Certificate</li></ul>	<b>Content reviewed by Technical expert (SME) and RailCorp safety professional</b> (position including Div/Group) Track Works Manager & SEQ Coordinator Asset Management Group Commercial / Renewals
<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>• Rail Safety Regulation 2003</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><li>• Electrical Safety Instruction Section 2.7, PCPCOM01 Common Steps PCP, relevant Civil Standards, relevant technical standards</li><li>• EC14 – Guide to Electrical Workers Safety Equipment</li><li>• WorkCover NSW Plant Guide</li></ul>				
		<b>MIMS or METRE Ref:</b> Nil		<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> And as specified below. <ul style="list-style-type: none"><li>• Gloves (as required)</li><li>• Dust Masks (as required)</li><li>• Hearing protection (as required)</li></ul>

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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	Preparation of Loading Site	Unsuitable loading site (uneven ground, track curves with superelevation, excessive track level above access road, near electrical transmission lines, etc)	B+	Track geometry to be considered before selecting loading site. Loading site to be prepared by installing even level loading ramp	C-	Project Engineer / Work Group Leader	Workplace Risk Management SMS-06-PR-0104 Plant SMS-06-GD-0225 Work Around Elect. Equip. SMS-06-GD-0268
2	Movement of Ballast Train / SDW Train to stockpile / loading worksite	Struck by train	B+	Wear PPE as identified in SSMP. Discuss hazards during PWB. Stand clear of moving train	C-	Qualified Worker certified as min WPO02	PPE SMS-06-GD-0323 Pre work Briefing SMS-06-FM-0163
3	Communication between staff at stockpile / loading worksite during loading process	Incorrect information given to Train Driver during loading process Train moves while loading	C+	Discreet radio communication between Qualified Worker, Train Driver, and Plant Operator during loading operation	C-	Qualified Worker certified as min WPO02	Safety Communication. SMS-10-SR-0040
4	Loading of Ballast / SDW Train from Stockpile.	Dust inhalation during loading operation`	C+	Work group Leader ensures that materials is carried out safely	C-	Workgroup Leader	PPE SMS-06-GD-0323 Respiratory Protection SMS-06-SW-0535
		Uneven wagon loading or overloading of wagons	C+	Work group Leader and Plant Operator visually check that the material is loaded evenly in each wagon. Plant Operators to count bucket loads in each wagon to ensure wagons are not overloaded (54T in NDFF's and 40T in SDW's)	C-	Workgroup Leader	Plant SMS-06-GD-0225 The Worksite Supervisor ensures that the loading of the wagons is in accordance with RSS 0102 (to avoid uneven loading) and with CTN 01/01 (to avoid overloading of the wagons)
		Plant striking live OHW / transmission lines at loading point	B+	Qualified Worker on site to hold relevant electrical permit. Stockpile loading site to have appropriate electrical clearance	C-	Qualified Worker certified QEL29 Elect Permit Holding	Work Around Elect. Equip. SMS-06-GD-0268 Electrical Permits SMS-06-EN-0577
		Plant / people struck by moving plant	B+	Exclusion zone to be implemented around movement of multiple plant	C-	Workgroup Leader, all staff	Pre work Briefing SMS-06-FM-0163

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5		Fouling of live running line by Plant or materials while loading	B+	Plant Operator to communicate with Qualified Worker	C-	Qualified Worker certified as min WPO02 and Plant Operator	Pre work Briefing SMS-06-FM-0163 Network Rules & Procedures
		Wagons struck by plant	B+	Plant Operators to be briefed on procedure for loading	C-	Workgroup Leader	Plant SMS-06-GD-0225
	Movement of Ballast Train / SDW Train from stockpile / loading worksite	Struck by moving machinery	C+	Staff clear of machinery	C-	Qualified Worker certified as min WPO02	Pre work Briefing SMS-06-FM-0163 PPE SMS-06-GD-0323

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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**

Team member name (Please print)	Team Member signature	Instructor/ Briefer name	Date	Team member name (Please print)	Team Member signature	Instructor/ Briefer name	Date

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RailCorp Level 2 Risk Matrix - Regional & Local (Workplace)			Likelihood/Frequency							<u>Definition for Use - Regional &amp; Local level (Workplace)</u>  Used for workplace hazards and safety risks that do not consider the whole of the network. Indicatively this matrix is appropriate for use where the hazards under consideration are up to 10% of the total network exposure. This includes regional and local workplace risk assessments.  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.  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.  To score the risk, follow the steps:  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. Identify the likelihood of this level of consequence occurring. (This is done after considering the effectiveness of the current controls in place)  3. Score the risk using the combination of likelihood and consequence ranking.  Note: Where there are a range of credible consequences which may lead to a different level or risks and/or where the controls may be different. It may be useful to score the risk more than once.
			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	
			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	
			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	
				F1	F2	F3	F4	F5	F6	
Consequence			Incredible	Improbable	Remote	Occasional	Probable	Frequent		
>10 Fatalities	C6	Disastrous	B-	B+	A	A	A	A		
2-10 Fatalities	C5	Catastrophic	C+	B-	B+	A	A	A		
1 Fatality (2-10 Major Injuries)	C4	Critical	C-	C+	B-	B+	A	A		
1 Major Injury	C3	Major	D	C-	C+	B-	B+	A		
1 or more Minor Injuries	C2	Minor	D	D	C-	C+	B-	B+		
First aid treatment, or illness/injury not requiring treatment	C1	Negligible	D	D	D	C-	C+	B-		