Transfer Resurfacing Machines

SWMS number:
SMS-06-SW-1074

SWMS Name:
Transfer Resurfacing Machines

SWMS Team:
Track Review Team

Custodian (Position):
Track Works Manager Commercial / Renewals

Assumptions:
Site specific risks are addressed and assessed in pre- work briefing

Approving Authority (Position):
Safety and Quality Manager, Commercial / Renewals

Content reviewed by Technical expert (SME) and RailCorp safety professional (position including Div/Group)
Track Works Manager & SEQ Coordinator Asset Management Group Commercial / Renewals

Applicable Standards, Codes of Practice and guidance:
- OH&S Act 2000
- OH&S Regulation 2001
- SMS and Network Rules
- Rail Safety Regulation
- RailCorp Safety Policy
- RailCorp Network Rules & Procedures
- RailCorp Safety Management System.
- MSDS for all chemicals and hazardous Substances used on site

Plant/Equipment/Tools:
- Track Machines (TJ, BX, DS)
- Gang Bus
- RMV (Car)
- Minor Plant
- Torches
- Hard Hat mounted Lights

Records/Reporting:
- Worksite Protection Plan
- Pre-Work Brief
- Daily Plant Check List
- Material Safety Data Sheets

Permits/licences required:
- Track Vehicle Operator Drivers Licence

Inspection requirements:
Nil

Service schedule:
Resurfacing Team Leader

MIMS or METRE Ref:
Nil

Training/Qualifications required:
- Construction Industry Induction
- Track Safety Awareness or
- RISI (Rail Industry Safety Induction)
- Applicable plant and safeworking competencies
- Track Machine Competency Training

PPE required:
- Safety Boots
- High visibility orange vest
- Hard hats
- Safety Glasses
- Protective Clothing
- Hearing protection (as required)
- Gloves (as required)
- During all Site Works a FIRST AIDER MUST be Present

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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	Arrive at machine location	▪ Struck by train ▪ Slips, trips and falls ▪ Insufficient lighting	A	▪ Staff to be vigilant ▪ Must be briefed prior to entry to danger zone ▪ PPE (Safety boots, hard hats, HV vests, eye protection) ▪ Hand lamps and hard hat mounted lights supplied for night work	B -	All staff involved in Transfer	RailCorp Network Rules and Procedures

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6	Site review and induction briefing	▪ Struck by train ▪ Slips, trips and falls ▪ Insufficient lighting	A	▪ Staff to be vigilant ▪ Must be briefed prior to entry to danger zone ▪ PPE (Safety boots, hard hats, HV vests, eye protection) ▪ Hand lamps and hard hat mounted lights supplied for night work	B -	Protection Officer	RailCorp Network Rules and Procedures
7	Machine start up	▪ Struck by train ▪ Slips, trips and falls ▪ Insufficient lighting ▪ Noise ▪ Pinch points ▪ Machine Part failure (eg. blown hydraulic hose) ▪ Handling lubricants	A	▪ Staff to be vigilant ▪ Must be briefed on entry to stabling location and danger zone ▪ PPE (Safety boots, hard hats, HV vests, eye protection) ▪ Hand lamps to be used for night work ▪ Refer to appropriate MSDS ▪ Machine pre-operating checklist ▪ Machine start up procedure	B -	Track Machine Operator	• Fuel and Hydraulic Oil MSDS • Appropriate Plant Documents including Instruction Manual

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8	Coupling up machines (only applicable for consist capable machines)	▪ Being crushed in auto coupler ▪ Air hose joints breaking apart ▪ Struck by train ▪ Pinch points ▪ Electrocution ▪ Slips, trips and falls ▪ Brake failure	A	▪ Don't stand between machines when coupling, safe place to side of machine ▪ One person to direct movement of machines ▪ Only use hand signals, no mobile phones or radios ▪ Only shunt one machines at a time ▪ Test coupling before connecting air hose ▪ Stand clear of hoses when opening air valves ▪ Prework briefing ▪ PPE (Safety boots, Hard Hats, HV vests, eye protection and gloves) ▪ Brake continuity test ▪ Be familiar with manufacturers amalgamation procedure	C +	▪ Track Machine Operator • Instructed by competent person	

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9	Obtain track possession and implement protection, transfer machines and staff to work site	▪ Struck by train ▪ Collision with other plant ▪ Derailment ▪ Striking workers with track machines ▪ Slips, trips and falls ▪ Insufficient lighting ▪ Access and egress to machines ▪ Insufficient seating	A	▪ Staff to be vigilant ▪ PPE (Safety boots, hard hats, HV vests, eye protection) ▪ Hand lamps to be used for night work ▪ TVO accreditation and safeworking procedures ▪ Prework briefing ▪ Entry and exit to machines by ladders only. Machine MUST be stationary (reference) • Seating with functional seatbelts only to be used	B -	• Track Machine Operator • Traffic Officer • Protection officer	• RailCorp Network Rules and Procedures • Lessons Learnt Fact Sheet AMG 02/ 06 dated 21/8/2006

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10	Travel machines	▪ Excessive usage of brakes ▪ Other work sites, plant ▪ Incorrect speeds ▪ Weather / Conditions ▪ Objects on track ▪ Mobile phones, radios ▪ Incorrect information ▪ Excessive machine noise ▪ Non-secured objects on board machines	A	▪ Working to correct brake procedures (reference procedure/ operating manual) ▪ Prework briefing ▪ Ask questions ▪ Obey track speeds ▪ Assess site conditions and adjust as required ▪ Only required staff on machines ▪ No hand held phones to be used while operating ▪ Correct radio protocol ▪ Seat belts to be worn. Seating with functional seatbelts only to be used ▪ PPE (Safety boots, hard hats, HV vests, eye protection, hearing protection) ▪ Storage containers and mounted equipment brackets to be used for storing objects on board	B -	▪ Track Machine Operator • Traffic Officer • Protection officer	RailCorp Network Rules and Procedures

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11	Problem in transfer	▪ Machine failure ▪ Derailment ▪ Collision ▪ Environmental	A	▪ Do not exit machine without safeworking controls ▪ Protect transfer track and adjacent lines in accordance with network rule ▪ Seat belts to be worn ▪ Carry spill kit ▪ Maintain machines in working order ▪ Observe fire extinguishers test date and gauge ▪ Prework briefing ▪ Refer to appropriate MSDS (No's) ▪ Notify the plant mechanic (if rostered) ▪ Notify Network Control	B -	▪ Track Machine Operator • Traffic Officer • Protection Officer • Plant Mechanic (if rostered)	RailCorp Network Rules and Procedures
12	Stable machines	▪ Struck by train ▪ Slips, trips and falls ▪ Insufficient lighting ▪ Environmental	A	▪ Staff to be vigilant ▪ Must be briefed on entry to danger zone ▪ PPE (safety boots, Hard Hats, HV vests, eye protection) ▪ Hand lamps supplied for night work ▪ Correctly secure machines including warm down ▪ Put out protection ▪ Hand back track	B -	▪ Track Machine Operator • Traffic Officer • Protection Officer • All staff involved in Transfer	Appropriate Plant Documents including Procedure /Operating Manual

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

RailCorp Level 2 Risk Matrix - Regional & Local (Workplace)

		Likelihood/Frequency					
	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-

Extreme
High
Medium
Low

Definition for Use - Regional & Local level (Workplace)

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 liklihood 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 matricies).

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.