Risk Assessment - Mechanical Handling of Track Components

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Lifting/moving track components with RRV/Telehandler/360 digger

Type	Hazard Cause	Persons Affected	Control Measures	L S T Overall	Additional Control Measures	L S T Overall	Owner/Action
Health and Safety	Overturning of lifting plant vehicle Working on uneven ground whilst lifting loads	Volunteers & Staff	1) CRITICAL - Elimination: Lifting plant not to be used on uneven ground with slopes greater than 8 degrees without further risk assessment. - Effective 2) CRITICAL - Administrative: Plant operators are trained and competent in vehicle use. - Effective 3) CRITICAL - Administrative: Longitudinal load alarm system on telehandler tested daily and used to detect limits of longitudinal load capacity when lifting loads. - Effective 4) CRITICAL - Administrative: Designated controller/banksman working with the lifting plant can help sight ground hazards and assist in making decisions on lifting and movement.. - Effective 5) CRITICAL - Administrative: Telehandler has lateral level gauge with guidance on operating limits for lifting and travelling with loads. - Effective 6) CRITICAL - PPE: Plant operator always to use seat belt when working in vehicle. - Effective	2 x 4 = 8 Medium - Risk to be minimised and controlled so far as is reasonably practical.	None	n n n	n/a
Health and Safety	Personnel struck by plant vehicle Movement of vehicle in proximity of personnel working in the vicinity	Volunteers & Staff	1) CRITICAL - Administrative: Telehandler operators are trained and competent in vehicle use. - Effective 2) CRITICAL - Administrative: Designated controller/banksman working with the plant and help sight personnel. - Effective 3) CRITICAL - Administrative: Activity is planned and reported in daily brief to operating teams. - Effective 4) CRITICAL - Administrative: Telehandler mirrors checked at the start of every day in use and maintained in good working order. - Effective 5) CRITICAL - Administrative: Activity is planned and assessed in daily risk briefing by PIC - Effective 6) CRITICAL - PPE: Personnel wearing hiviz clothing, protective boots and gloves. - Effective	2 x 4 = 8 Medium - Risk to be minimised and controlled so far as is reasonably practical.	None	n n n	n/a
Health and Safety	Contact with gas/electric/water utility service Collision of vehicle with unsighted utility service	Volunteers & Staff	1) CRITICAL - Administrative: Telehandler operators are trained and competent in vehicle use. - Effective 2) CRITICAL - Administrative: Underground services are identified on new sites and marked to prevent damage. - Effective 3) CRITICAL - Administrative: Site risk assessments and briefings at the start of each day of use identify overhead services and precautions. - Effective	2 x 3 = 6 Medium - Risk to be minimised and controlled so far as is reasonably practical.	1) Administrative: Locations around overhead services marked with gateway/barriers to prevent unintentional working in close proximity. - Effective	2 x 3 = 6 Medium - Risk to be minimised and controlled so far as is reasonably practical.	n/a

Type	Hazard Cause	Persons Affected	Control Measures	L S T Overall	Additional Control Measures	L S T Overall	Owner/Action
Health and Safety	Personnel impacted by swinging or dropped load. Lifting equipment failure whilst under load.	Volunteers & Staff	1) CRITICAL - Engineering: Standard lifting activities have a load plan in place to identify required lifting equipment and minimize risk of equipment overload. - Effective 2) CRITICAL - Engineering: A tag line should be used to control unwarranted movement of suspended load to keep it under control. - Effective 3) CRITICAL - Administrative: Telehandler operators are trained and competent in vehicle use and lifting practices. - Effective 4) CRITICAL - Administrative: Designated controller/banksman working with the plant and lifting activities to reduce risk to personnel from impact by load. - Effective 5) CRITICAL - Administrative: Lifting equipment is appropriately maintained and certified for use. - Effective 6) CRITICAL - PPE: Personnel wearing hiviz clothing, protective boots, hard hats and gloves. - Effective	3 x 3 = 9 Medium - Risk to be minimised and controlled so far as is reasonably practical.	None	n n n	n/a
Health and Safety	Personnel falling from height whilst slinging load Trip, slip, or fall whilst handling lifting equipment	Volunteers & Staff	1) CRITICAL - Elimination: Access to raised areas is suitable for personnel access for attaching lifting gear to loads. Portable ladders available if needed for easy access. - Effective 2) CRITICAL - Elimination: Personnel wearing hiviz clothing, protective boots, hard hats and gloves. - Effective 3) CRITICAL - Administrative: Rigging personnel stand clear of loads when being lifted and reduce hand contact to prevent pinch/shoves from load. - Effective 4) CRITICAL - Administrative: Personnel accessing raised areas have completed 'working at height' competency training. - Effective	3 x 2 = 6 Medium - Risk to be minimised and controlled so far as is reasonably practical.	None	n n n	n/a
Finance	Dropped load Failure of lifting equipment	Volunteers & Staff	1) CRITICAL - Administrative: Telehandler operators are trained and competent in vehicle use. - Effective 2) CRITICAL - Administrative: Designated controller/banksman working with the plant and help sight lifting snagging risks. - Effective 3) CRITICAL - Administrative: Lifting equipment is appropriately maintained and certified for use. - Effective 4) CRITICAL - PPE: Personnel wearing hiviz clothing, protective boots, hard hats and gloves. - Effective	3 x 3 = 9 Medium - Risk to be minimised and controlled so far as is reasonably practical.	None	n n n	n/a
Finance	Rail vehicle impacted by plant or load Vehicle movement, swinging load or dropped load impacts rail vehicle	Volunteers & Staff	1) CRITICAL - Engineering: A tag line should be used to control unwarranted movement of suspended load to keep it under control. - Effective 2) CRITICAL - Administrative: Telehandler operators are trained and competent in vehicle use. - Effective 3) CRITICAL - Administrative: Designated controller/banksman working with the plant and help sight lifting impact risks. - Effective 4) CRITICAL - Administrative: Rail vehicles sound warning horn/whistle and require acknowledgement before moving train. - Effective	3 x 3 = 9 Medium - Risk to be minimised and controlled so far as is reasonably practical.	None	n n n	n/a
Operations	Plant vehicle hit by passing train Train unsighted by plant operator or banksman	Passengers	1) CRITICAL - Administrative: Telehandler operators are trained and competent in vehicle use. - Effective 2) CRITICAL - Administrative: Designated controller/banksman working with the plant and help sight rail vehicle movements. - Effective 3) CRITICAL - Administrative: Plant lineside activity is planned and reported in daily brief to operating teams. - Effective 4) CRITICAL - Administrative: Train crew sound warning horn and expect response from lineside team before proceeding. - Effective	2 x 5 = 10 Medium - Risk to be minimised and controlled so far as is reasonably practical.	1) Administrative: Mechanised plant not to be allowed within 6ft of a live line unless a line block is in place. - Effective	2 x 4 = 8 Medium - Risk to be minimised and controlled so far as is reasonably practical.	n/a

Transportation of 7.5m rail lifting beam

Type	Hazard Cause	Persons Affected	Control Measures	L S T Overall	Additional Control Measures	L S T Overall	Owner/Action
Health and Safety	Impact of rail beam on rail infrastructure. Unsighted interference or unexpected movement	Volunteers, Staff & Contractors	1) CRITICAL - Elimination: Rail beam transportation over extended distances outside of site area performed with rail vehicle, ironman or trolleys. - Effective 2) CRITICAL - Administrative: Plant operators are trained and competent in vehicle use. - Effective 3) CRITICAL - Administrative: Designated controller/banksman working with the plant and help sight interference with railway infrastructure.. - Effective	3 x 2 = 6 Medium - Risk to be minimised and controlled so far as is reasonably practical.	None	n n n	n/a
Health and Safety	Overturning of lifting plant overloading or uneven ground causes instability	Volunteers & Staff	1) CRITICAL - Administrative: Telehandler operators are trained and competent in vehicle use. - Effective 2) CRITICAL - Administrative: Designated controller/banksman working with the plant to help identify stability issues. - Effective 3) CRITICAL - Administrative: Longitudinal load alarm system on telehandler tested daily and used to detect limits of longitudinal load capacity when lifting loads. - Effective 4) CRITICAL - Administrative: Lateral level gauge available to ensure lifts are made within plant operational limits. - Effective	3 x 3 = 9 Medium - Risk to be minimised and controlled so far as is reasonably practical.	None	n n n	n/a

Lifting and moving track components by contractor

Type	Hazard Cause	Persons Affected	Control Measures	L S T Overall	Additional Control Measures	L S T Overall	Owner/Action
Health and Safety	Overturning of contractor vehicle Working on uneven ground whilst lifting loads	Volunteers, Staff & Contractors	1) CRITICAL - Administrative: Contractor operator is trained and competent in vehicle use. - Effective 2) CRITICAL - Administrative: Designated controller/banksman working with the contractor to help sight instability risks. - Effective	2 x 4 = 8 Medium - Risk to be minimised and controlled so far as is reasonably practical.	None	n n n	n/a
Health and Safety	Personnel injury from load or vehicle movement Unsighted interference or unexpected movement	Volunteers, Staff & Contractors	1) CRITICAL - Administrative: Contractor operators are trained and competent in vehicle use. - Effective 2) CRITICAL - Administrative: Designated controller/banksman working with the contractor to plan lifting activities and be interface with GWSR team during lifting activities. - Effective 3) CRITICAL - PPE: Personnel wearing hiviz clothing, protective boots, hard hats and gloves. - Effective	2 x 4 = 8 Medium - Risk to be minimised and controlled so far as is reasonably practical.	None	n n n	n/a
Health and Safety	Collision with rail vehicle Unsighted rail vehicle movement	Everyone	1) CRITICAL - Administrative: Activity is planned and reported in daily brief to operating teams. - Effective 2) CRITICAL - Administrative: Track possession obtained for contractor access to running line areas and use of RRVs. - Effective 3) CRITICAL - Administrative: Designated controller/banksman working with the plant and help sight rail vehicle movements. - Effective	2 x 4 = 8 Medium - Risk to be minimised and controlled so far as is reasonably practical.	None	n n n	n/a

COSHH Assessments

There are no COSHH assessments associated with this risk assessment.

Reference Documents

• Guide to working with or around machinery -

Ends