Risk Assessment - RRV Operations in Tunnel

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RRV and trailer movements into and around Greet tunnel

Type	Hazard Cause	Persons Affected	Control Measures	L S T Overall	Additional Control Measures	L S T Overall	Owner/Action
Health and Safety	Personnel struck by RRV vehicle or trailer Personnel working on or near track, unauthorized personnel, unseen personnel, poor visibility, uncontrolled vehicle, runaway trailer	Volunteers, Staff & Contractors	1) CRITICAL - Elimination: RRV operators are trained and competent in vehicle use. - Effective 2) CRITICAL - Elimination: RRV maintained in good condition and fully certified - Effective 3) CRITICAL - Elimination: RRV plant is checked daily and confirmed as fit for use by RRV operator prior to use. - Effective 4) CRITICAL - Elimination: RRV and trailer have working white and red lights for visibility - Effective 5) CRITICAL - Elimination: Banksman used to manage RRV vehicle movements - Effective 6) Elimination: Communication headsets available to use between RRV operator and banksman to minimise risk of miscommunication - Effective 7) Elimination: RRV vehicle has LED floodlighting on the working boom to provide visibility of working area - Effective 8) Elimination: Trailer to stay connected to RRV on running line and safety strop used to protect against broken towbar. - Effective 9) Elimination: Lighting on vehicles and carried by personnel to be managed to prevent dazzling. - Effective 10) CRITICAL - PPE: Personnel wearing hiviz clothing, protective boots, hard hats and gloves. - Effective	3 x 4 = 12 Medium - Risk to be minimised and controlled so far as is reasonably practical.	1) Elimination: Generator and temporary lighting setup in tunnel work area to maximize visibility of personnel and vehicle. - Effective 2) Elimination: Number of personnel working in the vicinity of the RRV vehicle minimised - Effective 3) Elimination: Extra training given to personnel for working in confined tunnel conditions. - Effective	2 x 4 = 8 Medium - Risk to be minimised and controlled so far as is reasonably practical.	n/a
Operations	Tunnel structure impacted by RRV boom RRV outside of loading gauge, movement into tunnel, unexpected movement of boom	Volunteers, Staff & Contractors	1) CRITICAL - Elimination: RRV operators are trained and competent in vehicle use. - Effective 2) CRITICAL - Elimination: RRV maintained in good condition and fully certified - Effective 3) Elimination: Use of electronic limits for boom height and slew on RRV to prevent boom moving outside of acceptable envelope within tunnel - Effective 4) Elimination: Lighting on vehicles and carried by personnel to be managed to prevent dazzling. - Effective	3 x 2 = 6 Medium - Risk to be minimised and controlled so far as is reasonably practical.	None	n n n	n/a
Operations	RRV or trailer derailment within tunnel Poor track condition, movement over disconnected rail, poor vehicle maintenance	Volunteers, Staff & Contractors	1) CRITICAL - Elimination: RRV operators are trained and competent in vehicle use. - Effective 2) CRITICAL - Elimination: RRV maintained in good condition and fully certified - Effective 3) CRITICAL - Elimination: RRV plant is checked daily and confirmed as fit for use by RRV operator prior to use. - Effective 4) CRITICAL - Elimination: Banksman used to manage RRV vehicle movements - Effective 5) CRITICAL - Elimination: Track is inspected and maintained to standard suitable for 25mph running - Effective 6) Elimination: Communication headsets available to use between RRV operator and banksman to minimise risk of miscommunication - Effective 7) Elimination: Lighting on vehicles and carried by personnel to be managed to prevent dazzling. - Effective	2 x 3 = 6 Medium - Risk to be minimised and controlled so far as is reasonably practical.	None	n n n	n/a

RRV and trailer performing equipment lifts within Greet tunnel

Gloucestershire Warwickshire Steam Railway Plc
Risk Assessment for RRV Operations in Tunnel - Permanent Way

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 load or RRV boom during lifts Unexpected motion, RRV unstable, unseen personnel, failure of lifting eqt.,	Volunteers, Staff & Contractors	1) CRITICAL - Elimination: RRV operators are trained and competent in vehicle use. - Effective 2) CRITICAL - Elimination: RRV maintained in good condition and fully certified - Effective 3) CRITICAL - Elimination: Lifting equipment is appropriately maintained and certified for use. - Effective 4) CRITICAL - Elimination: Lifting plan developed and reviewed and approved. - Effective 5) Elimination: Personnel to be excluded form working area and limit personnel near to the load once suspended. - Effective 6) Elimination: Communication headsets available to use between RRV operator and banksman to minimise risk of miscommunication - Effective 7) CRITICAL - Elimination: RRV and trailer have working white and red lights for visibility - Effective 8) CRITICAL - Elimination: RRV has LED flood lighting on boom to provide visibility of boom and load. - Effective 9) Elimination: Lighting on vehicles and carried by personnel to be managed to prevent dazzling. - Effective 10) 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.	1) Elimination: Generator and temporary lighting setup in tunnel work area to maximise visibility if personnel and vehicle. - Effective 2) Elimination: Perform test with RRV within tunnel to see levels of visibility and communication systems are working well. - Effective	2 x 4 = 8 Medium - Risk to be minimised and controlled so far as is reasonably practical.	n/a
Operations	Tunnel brickwork impact by RRV boom or load during lifts Uncontrolled boom movement, equipment failure, unseen tunnel boundary,	Volunteers, Staff & Contractors	1) CRITICAL - Elimination: RRV operators are trained and competent in vehicle use. - Effective 2) CRITICAL - Elimination: RRV maintained in good condition and fully certified - Effective 3) CRITICAL - Elimination: RRV has LED flood lighting on boom to provide visibility of boom and load. - Effective 4) Elimination: Use of electronic limits for boom height and slew on RRV to prevent boom moving outside of acceptable envelope within tunnel - Effective 5) CRITICAL - Elimination: Banksman/crane controller used to manage RRV vehicle lifting activity - Effective 6) Elimination: Lighting on vehicles and carried by personnel to be managed to prevent dazzling. - Effective	2 x 2 = 4 Low - Risk to be monitored to ensure it remains adequately controlled to an acceptable level.	None	n n n	n/a
Health and Safety	Personnel falling from height (trailer, wagon) Personnel rigging loads on trailer/wagon	Volunteers, Staff & Contractors	1) CRITICAL - Elimination: Personnel trained in 'working at height' situations - Effective 2) Elimination: Ladders used to access wagons - Effective 3) Elimination: Lighting on vehicles and carried by personnel to be managed to prevent dazzling. - 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 overcome by exhaust fumes Exposure to exhaust fumes when working for long periods in tunnel	Volunteers, Staff & Contractors	1) Elimination: Limit number of personnel working in the tunnel at any time - Effective 2) Elimination: Limit the time personnel are working in tunnel with RRV / generator equipment - Effective	3 x 4 = 12 Medium - Risk to be minimised and controlled so far as is reasonably practical.	1) Elimination: Provide some forced ventilation to prevent build up of fumes - Effective 2) Elimination: Monitor fume levels with monitoring equipment and warning alarm - Effective	n n n	n/a

COSHH Assessments

There are no COSHH assessments associated with this risk assessment.

Ends