Risk Assessment - Testing loco boilers when mounted on road vehicle trailers

Reference No: STE-45252-44
Version No: 1
Assessment Approver: Kevin 'Kev' Jarvis

Occasionally when boilers are returned to the railway from maintenance of site, they are steam tested on the back of the flat bed trailer that delivers them to the railway. This RA asses the risks associated with that activity.

Department: Steam Loco
Date Of Assessment: 22 November 2023
Review Due Before: 22 November 2026
Lead Assessor: Mark Young
Team: Kevin Jarvis

Loco boiler steam tested on lorry trailer

Type	Hazard Cause	Persons Affected	Control Measures	L S T Overall	Additional Control Measures	L S T Overall	Owner/Action
Health and Safety	Personal injury or infrastructure damage Fire, fall, collison, slips and trips	Volunteers & Staff	1) CRITICAL - Engineering: Coal to be provided from the telehandler bucket. The bucket must be positioned so as not to allow a fall situation to occur and also so that it does not move and strike workers when being unloaded by shovel. - Effective 2) CRITICAL - Engineering: Water to be provided from a fixed hose that must be used and laid out so as not to cause a trip hazard. - Effective 3) CRITICAL - Engineering: Staging or tied off ladders to be provided at any location around the trailer where access is required to the boiler or the flatbed of the trailer. - Effective 4) CRITICAL - Engineering: Activity area to be barrier taped or coned off so as not to allow those not involved in the task to approach the work area. - Effective 5) CRITICAL - Engineering: The boiler must be firmly and steadily mounted on the trailer so as not to move at any time. - Effective 6) CRITICAL - Engineering: The lorry trailer must not be allowed to move or be connected to or disconnected from a tractor unit during the activity. - Effective 7) CRITICAL - Administrative: Activity to be carried out on a non-running day when there are no members of the public on site. - Effective 8) CRITICAL - Administrative: Activity to be carried out in the main car park and well away from any other infrastructure. - Effective 9) Administrative: Activity to be carried out during daylight hours. - Effective 10) CRITICAL - Administrative: A suitably trained and competent member of footplate crew must oversee the activity. - Effective 11) CRITICAL - Administrative: Only GWSR work permit holders or approved contractors are to be involved in the activity. - Effective 12) CRITICAL - Administrative: All staff must have completed the GWSR Working at Height training. - Effective 13) CRITICAL - Administrative: No access is allowed to the top of the boiler other than by tied off ladders. - Effective 14) CRITICAL - Administrative: The flatbed of the trailer needs to be clear of any trip hazards. - Effective 15) CRITICAL - Administrative: When firing the boiler, due to the lack of a blower and hence any forced drafting, operatives should open the doors by standing to one side, open the doors slowly and be prepared for the possibility of flames emitting from the fire hole. - Effective 16) CRITICAL - Administrative: If access to the firebox is required before or after testing then the staff involved must have completed the GWSR Confined Space training and the Confined Space Procedure must be followed. - Effective 17) CRITICAL - PPE: Suitable PPE to be worn, including gloves, to reduce the risk of injury, especially from burns on areas of the boiler which would usually be clad. - Effective 18) CRITICAL - PPE: Fire extinguishers and/or hoses to be in place in close proximity to the activity. - Effective 19) CRITICAL - PPE: Flame retardant overalls to be worn. - Effective	2 x 3 = 6 Medium - Risk to be minimised and controlled so far as is reasonably practical.	1) Engineering: Car Park lighting to be utilised if activity runs over into hours of darkness. - Effective 2) Engineering: If temporary tarpaulins are provided to protect the boiler and/or staff from rain etc than it must be erected in such a way that it is kept well away from any hot surface to protect against fire.. - Effective	2 x 3 = 6 Medium - Risk to be minimised and controlled so far as is reasonably practical.	n/a

Score and Control Measure Notes.
Risk is manageable if control measures followed.
Risk remains the same.

COSHH Assessments

The following COSHH assessments are applicable to this risk assessment:

• COSHH-44635-72 - Coal (Sized) - Miller Argent

Ends