Gloucestershire Warwickshire Steam Railway Plc
Risk Assessment for Welding inside locomotive tender tanks - Steam Loco

Risk Assessment - Welding inside locomotive tender tanks

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Repairs are often required inside the confined space of a tender water tank. This RA assess risks associated with that task and lists some control measures to be followed.

Department: Steam Loco
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Welding inside a tender tank

Type	Hazard Cause	Persons Affected	Control Measures	L S T Overall	Additional Control Measures	L S T Overall	Owner/Action
Health and Safety	Injury to workers Various means such as asphyxiation, burns, heat stroke, explosion, poisoning, physical harm etc.	Volunteers, Staff & Contractors	1) CRITICAL - Engineering: All equipment to be taken into the work area to be checked and be in good working order. - Effective 2) CRITICAL - Engineering: Any gas equipment to be used must be checked outside of the work area for leaks. - Effective 3) CRITICAL - Engineering: An air mover must be used to assist with ventilation. - Effective 4) CRITICAL - Engineering: There must be at least two openings in the tank to allow for air flow. - Effective 5) CRITICAL - Administrative: All workers must have completed successfully the GWSR Confined Space Working training - Effective 6) CRITICAL - Administrative: The Confined Space Working procedure and risk assessment are to be followed. - Effective 7) CRITICAL - Administrative: Workers to be fit and in good health. - Effective 8) CRITICAL - Administrative: The tank must be dry before entry is allowed and work starts. - Effective 9) Administrative: Take regular breaks to avoid heat exhaustion. - Effective 10) CRITICAL - Administrative: All portable equipment must be PATS tested. - Effective 11) CRITICAL - Administrative: No other work is allowed inside the tank when welding is undertaken. - Effective 12) CRITICAL - Administrative: Only those actually working on the task are allowed inside when welding is being carried out. - Effective 13) CRITICAL - PPE: Fire fighting equipment must be to hand. Be aware of the asphyxiation risk with some types of extinguisher. - Effective 14) CRITICAL - PPE: Fire retardant overalls/clothing must be worn. - Effective 15) CRITICAL - PPE: Boots, gloves to be used when welding. - Effective 16) CRITICAL - PPE: A welding visor must be used. - Effective	2 x 5 = 10 Medium - Risk to be minimised and controlled so far as is reasonably practical.	1) Engineering: Consider only using stick welding techniques to reduce chance of introducing flammable or asphyxiating gases, - Effective 2) Engineering: Cables for any equipment required should be run through a separate manway to the main access/egress manway. - Effective 3) Engineering: Consider other fixing methods for installation if welding can be avoided such as bolting. - Effective 4) Administrative: Only use 110V welding equipment if possible. - Effective 5) Administrative: Only use low voltage or battery lighting if available. - Effective 6) Administrative: Consider the impact of other work outside of the tender on this task and temporarily stop if required. - Effective 7) PPE: Those not welding but involved in the task should consider a bump cap and dust mask. - Effective	1 x 5 = 5 Low - Risk to be monitored to ensure it remains adequately controlled to an acceptable level.	n/a

Score and Control Measure Notes.
Medium risk. Consider further potential control measures.
If the job is well planned, monitored and executed, with extra controls, the risk is low but the potential consequence is always high.

COSHH Assessments

There are no COSHH assessments associated with this risk assessment.
Ends