



WORKPLACE/TASK BASED RISK ASSESSMENT FOR USING A PETROL OR ELECTRIC PUMP

LOCATION: ANY CANAL/RIVERSIDE LOCATION

NOTES

1. This Risk Assessment is specifically for the use of a Pump (Petrol/Electric) on a KESCRG or WRG controlled site for the purposes of canal restoration.
2. This Risk Assessment should be included in the documentation taken to site and retained by the site leader.
3. There must be a review of this Risk Assessment following any site feedback or every 2 years, whichever comes first. Revision and date are shown in the header.
4. The 2 types of pump currently used are a 110V electric submersible pump and a petrol-driven self-priming centrifugal pump.

MANDATORY PPE

1. Hard Hat, Safety Boots and fastened High Viz Jacket (as with any site work)
2. Gloves

Risk Scoring Matrix

Likelihood	Meaning	Severity	Meaning
1	Possible	1	Minor cut or bruise/injury
2	More than possible	2	Cut/Injury, needs First Aid
3	Fair chance	3	Injury needing First Aid
4	Likely	4	Broken Limb/ Serious injury
5	Certain	5	Severe injury/Death



HAZARDS FROM ELECTRIC PUMPS

Ref no	HAZARD	LIK	SEV	RAT	EXISTING CONTROL MEASURES	ADDITIONAL CONTROL MEASURES REQUIRED	LIK	SEV	RAT
1.	Electric shock from cable or pump body, potentially fatal, or severe burns from entry/exit of current.	4	5	20	1. Pre-use checks on pump include checking electrical parts for cracks/defects etc. 2. Pre-use checks on cables mandatory. 3. All electrical items are PAT-tested, pre-use check includes verification of in-date PAT test. 4. Site equipment is all 110V, reducing potential for fatal shock	1. None 2. None 3. None 4. None See separate Risk Assessment for generator	1	3	3
2.	Hot parts on pump motor.	2	3	6	1. Pump motor operated part or fully immersed in cold water, acts to cool it. 2. Pump motor run hand hot, minimises potential for burns.	1. None 2. None.	1	2	2
3.	Pump rolling over, due to unstable positioning. Could damage pump/pipework.	1	2	2	1. 1. A monetary risk rather than an H & S risk.	1. None	N/A		
4.	Trip Hazard from cables or pump delivery hoses.	3	3	9	1. Pump placed away from work area 2. Cables positioned away from work area. Covered in SWI and on-site brief.	1. Site leader to agree location of pump pre-start. 2. Site Leader to check on site	1	2	2



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5	Electric shock from pump power cable/switches.	2	5	10	1. 110V machinery only to be used on site. 2. CEEFORM plug/sockets fitted, which are rain-resistant.	1. None 2. None .	1	3	3
6.	Manual handling of pump.	2	3	6	1. Pump is light, less than 10kg; single person lift.	1. None	1	3	3
7.	Bio-hazard/leptospirosis from handling contaminated pump/hoses.	2	5	10	1. PPE includes gloves. 2. Leptospirosis has a gestation period, is well documented in KESCRG & WRG websites. 3. Potential biohazard negated by hygiene and using gloves.	1. None 2. None 3. None	1	4	4



CONTROL MEASURES. HAZARDS FROM ELECTRIC PUMPS

Ref no	ADDITIONAL CONTROL MEASURE REQUIRED	BY WHOM	BY WHEN	STATUS (COMPLETED YES/NO)
1.	1. None 2. None 3. None 4. None			
2	1. None 2. None			
3	1. None			
4	1. Site Leader to check before work starts 2. Site Leader to check before work starts	1 & 2 . Site Leader	Before work starts	
5	1. None 2. None			
6	1. None			
7	1. None 2. None 3. None			



HAZARDS FROM PETROL-DRIVEN PUMPS

Ref no	HAZARD	LIK	SEV	RAT	EXISTING CONTROL MEASURES	ADDITIONAL CONTROL MEASURES REQUIRED	LIK	SEV	RAT
1.	Hot parts on pump exhaust, burns	4	3	12	1. Awareness. Covered in on-site brief. 2. Pump positioned away from walking route, minimising risk of slips/trips onto hot parts.	1. None 2. Best position determined by site leader pre-start on site.	1	3	3
2.	Trip Hazard from suction or pump delivery hoses.	3	3	9	1. Pump placed away from work area 2. Suction and delivery hoses positioned away from work area. Covered in SWI and on-site brief.	1. Site leader to agree location of pump and hoses pre-start. 2. Site Leader to check on site	1	3	3
3.	Dermatitis from petrol and lube oil.	2	2	4	1. General hygiene 2. Gloves as part of PPE 3. Minimise spillage by using funnels (in Kit Trailer)	1. None 2. None 3. None	1	2	2
4.	Manual handling of petrol pump from trailer/on site, potential lifting and twisting. Manual handling of full hoses.	4	4	16	1. Trailer kit includes a wheelbarrow to minimise lifting. 2. Pump has handles, easy to grip. 3. Pump is a 2-man lift, with 3 rd to steady wheelbarrow. 4. Drain hoses before handling.	1. None 2. None 3. None 4. None.	2	3	6
5	Inhalation of exhaust fumes, leading to asphyxiation	3	5	15	1. Pumps not used in confined spaces, i.e. not in lock chambers. 2. Pump positioned away from	1. Site leader to check pre-work 2. Site leader to check pre-work	1	3	3



					immediate working area, dispersing exhaust fumes.	Note. Site work is in the open air, so exhaust fumes are dispersed.			
6.	Fire from petrol and lube oil	3	4	12	1. SWI covers allowing pump to cool before filling. 2. Fuel in sealed containers, away from source of ignition. 3. Fuel stored away from pump. 4. Lube oil has high flashpoint, kept in small quantities in sealed containers.	1. None 2. None 3. Site leader to check on site. 4. None	1	4	4
7.	Noise from pump, leading to hearing impairment	3	3	9	1. Pump used in open air, away from work site so noise disperses.	1. None	1	1	1
8	Bio-hazard/leptospirosis from handling contaminated pump/hoses.	2	5	10	1. PPE includes gloves. 2. Leptospirosis has a gestation period, is well documented in KESCRG & WRG websites. 3. Potential biohazard negated by hygiene and using gloves.	1. None 2. None 3. None	1	4	4
9	Nips and minor cuts from “quick-fit” hose fittings	3	2	6	1. PPE includes gloves. 2. Design of hose fittings will minimise the risk.	1. None 2. None	1	2	2



CONTROL MEASURES. HAZARDS FROM PETROL-DRIVEN PUMP

Ref no	ADDITIONAL CONTROL MEASURE REQUIRED	BY WHOM	BY WHEN	STATUS (COMPLETED YES/NO)
1.	1. None 2. Site leader to check before work starts	2 Site leader	Pre-work	
2	1. None 2. Site leader to check before work starts	2 Site leader	Pre-work	
3	1. None 2. None 3. None			
4	1 – 4. None			
5	1. Site leader to check before work starts 2. Site leader to check before work starts	1 & 2 Site Leader	Pre-work	
6	1 & 2. None 3. Site leader to check before work starts 4. None	3. Site leader	Pre-work	
7	1. None			
8	1 - 3. None			
9	1. None 2. None			