

Business / Operating unit: Drakensberg Pumped Storage Scheme				Department / Area: Valve Hall				Occupational Health and Safety Baseline Risk Assessment																Next Review Date (every 2 years): 01-Mar-24				Template Identifier: 240-70044802	
Date: 01-Mar-22				Prepared by: Phillie Mbanjwa, Ritta Zimu, Sithembile Rahlao, Zandile Mnuakwa, Zama Mkhize, Phumlani Ntombela, Andre Van Tonder, Jeff Phungula, Steven Malatsi, Kwanele Nkosi, Tholisiile Mjilo, Sifiso Dlamini, Siphamandla Kuenene, Charles Wewase, Mukesh Goorhoo				Authorised by:				Name: Maremane Tsotetsi Designation: Plant Manager <small>see 'revision' worksheet for signature</small>				Document Identifier: 31A/2812 Rev: 8				Revision number: 3		Revision date: 31-May-24							
Refer to Occupational Health and Safety Risk assessment procedure 32-520																													
List activity	Activity type (Routine / Non-routine)	Hazard nr	Hazard Identification					Risk Nr	Associated risk	Risk type	Cause(s) of the risk	OH&S opportunities	Exposed group/ employees	Risk Owner	Exposure patterns	What are the possible consequences?	Existing Controls					Additional Controls or Tasks Aimed at improving Existing Controls	Monitoring Mechanisms	Control Owner	Legal and Other Requirements	Target Date	Current Status	Integrated Risk Management (IRM) reference number	
List specific activities to be performed taking into consideration the equipment to be used, the personnel involved in the task.	Indicate R or N 1. Routine activities and situations create hazards through day-to-day operations and normal work activities; 2. Non-routine activities and situations are occasional or unplanned.	#	Anything with potential to cause of harm. Note: A hazard can pose more than one risk.	#	A chance that injury, ill health or damage could occur as a result of uncontrolled hazard.	Safety or health	What causes the risk to come into effect?	OH&S opportunities that can enhance OH&S performance and lead to hazard elimination and risk reduction.	Who is exposed to the hazard i.e. visitors, members of the public, etc.	Who is accountable for making sure the controls and monitors are: - in place, - implemented, - regularly reviewed for effectiveness.	The frequency and duration the person/group is exposed to the hazard e.g. Daily for 3 hrs.	Consider the worse case scenario without controls?	Include: - Elimination Controls (controls implemented to eliminate hazards or reduce the likelihood of the risk occurring), and - Reduction Controls (controls implemented to reduce the immediate impact of the risk occurring) Elimination Substitution Engineering controls Administrative controls Personal protective equipment (PPE) NB: The risk shall be evaluated, assessed and rated again once additional controls have been implemented.	Consequence	Likelihood	Risk Priority Rating	Include: - Elimination Controls (controls implemented to eliminate hazards or reduce the likelihood of the risk occurring) - Reduction Controls (controls implemented to reduce the immediate impact of the risk occurring) Elimination Substitution Engineering controls Personal protective equipment (PPE) NB: The risk shall be evaluated, assessed and rated again once additional controls have been implemented.	How we know if we are succeeding. Include comments on effectiveness. This may include i.e. measurements, inspections, supervision where necessary.	Person allocated the responsibility for implementing the agreed controls	Where relevant, list the relevant legislative and/or Eskom requirements that prescribe the control.	Once a date has been agreed to, this can not be changed	Pending, In Progress, Complete	Where applicable, add IRM system reference number for tracking of treatment actions.						
Working or walking in the valve hall	N	1	Noise	1	Noise Induced hearing loss	Health	High noise level from running units	None	Employee/ Contractors/ Visitors	Supervisor/ Manager	Daily for 2 hrs	LTI	Wearing hearing protection, signage, awareness	4	B	III	F	Task specific risk assessment	Behavioural safety observations, inspections	Supervisor/ Manager	Occupational Health and Safety Act, 1993 (Act No. 85 of 1993) - Noise Induced Hearing Loss Regulations	None	Complete	None					
Lighting Maintenance	R	1	Working at heights	1	Falling from height	Safety	Incorrect use of step ladder or using unsafe ladder	None	Employees	Supervisor/ Manager	Monthly, thr	LTI	Ladder inspections, training	4	B	III	F	Task specific risk assessment	Behavioural safety observations, inspection check sheets, training records	Supervisor/ Manager	Occupational Health and Safety Act, 1993 (Act No. 85 of 1993) - GN R1031 - GSRR	None	Complete	None					
				2	Falling from the man cage	Safety	Tipping of the man cage	Working at heights rescue training	Employees	Supervisor/ Manager	Monthly, thr	LTI	Safety clearance for working at height and use of rope to balance the man cage	4	B	III	F	Task specific risk assessment	Behavioural safety observations and continuous supervision	Supervisor/ Manager	Occupational Health and Safety Act, 1993 (Act No. 85 of 1993) - GN R1031 - GSRR	None	Complete	None					
		2	Working on live circuits	1	Electric shock	Safety	Contact	None	Employees	Supervisor/ Manager	Monthly, thr	LTI	Isolation, test before touch	4	B	III	F	Task specific risk assessment	Behavioural safety observations, training records	Supervisor/ Manager	Occupational Health and Safety Act, 1993 (Act No. 85 of 1993) & Plant Safety Regulations	None	Complete	None					
				3	Climbing the stairs while carrying equipment	Safety	Slippery surface, not applying three point contact	None	Employees	Supervisor/ Manager	Monthly, thr	LTI	Non slippery pads installed, cleaning of oil from the stairs, facing the stairs when climbing down, use tool bucket	4	B	III	P	Tools to be lowered using the rope	Behavioural safety observations, Plant inspections	Supervisor/ Manager	Occupational Health and Safety Act, 1993 (Act No. 85 of 1993) - National Building Regulations and Building Standards Act 103 of 1977	None	Complete	None					
Spherical Valve plug, upstream seal, downstream seal, bypass valve and servo maintenance	R	1	Wet and slippery working surfaces	1	Slip and fall	Safety	Oil spill on the floor mixed with water	None	Employee/ Contractors	Supervisor/ Manager	Quarterly, 12 hrs	LTI, Medical, first aid incident	Inspection and cleaning	4	B	III	F	Task specific risk assessment	Behavioural safety observations, Plant inspections	Supervisor/ Manager	Occupational Health and Safety Act, 1993 (Act No. 85 of 1993) - National Building Regulations and Building Standards Act 103 of 1977	None	Complete	None					
		2	Confined space	1	Suffocate	Health	Lack of oxygen	Rescue team on site	Employee/ Contractors	Supervisor/ Manager	18 monthly, 8hrs	Fatality	Gas test to be done before entry and continuously during the task	5	A	III	F	Task specific risk assessment and maintaining communication with people inside the confined space. Confined space rescue training to be done.	Behavioural safety observations, continuous supervision	Supervisor/ Manager	Occupational Health and Safety Act, 1993 (Act No. 85 of 1993) - GN R1031 - GSRR 1996A GN R85 Construction Regulation 2014	None	Complete	None					
		3	Crawling under the main valve	1	Hurry due to bumping against	Safety	Constrained area of work	None	Employee/ Contractors	Supervisor/ Manager	18 monthly, 2hrs	Medical	Risk assessment and PPE	3	A	IV	F	Task specific risk assessment	Behavioural safety observations	Supervisor/ Manager	Occupational Health and Safety Act, 1993 (Act No. 85 of 1993) - GN R1031 - GSRR 1996A GN R85 Construction Regulation 2014	None	Complete	None					
		4	Working at height	1	Falling	Safety	Working on elevated surface	Working at heights rescue training	Employee/ Contractors	Supervisor/ Manager	18 monthly, 8hrs	LTI	Safety clearance for Working at height	4	B	III	F	Task specific risk assessment	Behavioural safety observations, continuous supervision	Supervisor/ Manager	Occupational Health and Safety Act, 1993 (Act No. 85 of 1993) - GN R1031 - GSRR	None	Complete	None					
		5	Using the stairs	1	Falling	Safety	Slippery surface, not applying three point contact	None	Employee/ Contractors	Supervisor/ Manager	18 monthly, 8hrs	LTI	Apply three point contact	4	B	III	F	Do not carry tools while using stairs	Behavioural safety observations, continuous supervision	Supervisor/ Manager	Occupational Health and Safety Act, 1993 (Act No. 85 of 1993) - National Building Regulations and Building Standards Act 103 of 1977	None	Complete	None					
		6	Carrying heavy bolts and nuts	1	Bolt, nut or tools falling	Safety	Wrong technique of carrying	None	Employee/ Contractors	Supervisor/ Manager	18 monthly, 8hrs	LTI	Using chain block and crane beam to move bolts and nuts	4	B	III	F	Task specific risk assessment	Behavioural safety observations, continuous supervision	Supervisor/ Manager	Occupational Health and Safety Act, 1993 (Act No. 85 of 1993) - National Building Regulations and Building Standards Act 103 of 1977	None	Complete	None					
Removal and replacement of valves	N	1	Access	1	Tripping and Falling	Safety	Slippery surface, not applying three point contact	None	Employee/ Contractors	Supervisor/ Manager	18 monthly, 8hrs	LTI	Apply three point contact, safety clearance for working at height	4	B	III	F	Task specific risk assessment	Behavioural safety observations, continuous supervision	Supervisor/ Manager	Occupational Health and Safety Act, 1993 (Act No. 85 of 1993) - National Building Regulations and Building Standards Act 103 of 1977	None	Complete	None					
		2	Lifting and rigging	1	Struck by, caught in between	Safety	Incorrect rigging	None	Employee/ Contractors	Supervisor/ Manager	18 monthly, 8hrs	LTI	Training	4	B	III	F	Task specific risk assessment	Behavioural safety observations	Supervisor/ Manager	Occupational Health and Safety Act, 1993 (Act No. 85 of 1993) - GN R84 Construction Regulation 2014, Driven Machinery	None	Complete	None					
		3	Confined area	1	Struck against	Safety	Limited space	None	Employee/ Contractors	Supervisor/ Manager	18 monthly, 8hrs	Medical	Risk assessment	3	B	III	F	Task specific risk assessment	Behavioural safety observations	Supervisor/ Manager	Occupational Health and Safety Act, 1993 (Act No. 85 of 1993) - GN R1031 - GSRR 1996A GN R85 Construction Regulation 2014	None	Complete	None					
				2	Tripping and falling	Safety	Slippery surface	None	Employee/ Contractors	Supervisor/ Manager	18 monthly, 8hrs	Medical	Risk assessment	3	B	III	F	Task specific risk assessment	Behavioural safety observations	Supervisor/ Manager	Occupational Health and Safety Act, 1993 (Act No. 85 of 1993) - National Building Regulations and Building Standards Act 103 of 1977	None	Complete	None					
Removal and replacement of pumps for maintenance	R	1	Access	1	Tripping and Falling	Safety	Slippery surface, not applying three point contact	None	Employee/ Contractors	Supervisor/ Manager	18 monthly, 8hrs	LTI	Apply three point contact, safety clearance for working at height	4	B	III	F	Task specific risk assessment	Behavioural safety observations, continuous supervision	Supervisor/ Manager	Occupational Health and Safety Act, 1993 (Act No. 85 of 1993) - National Building Regulations and Building Standards Act 103 of 1977	None	Complete	None					
Removal and replacement of motors for maintenance	R	1	Access	1	Tripping and Falling	Safety	Slippery surface, not applying three point contact	None	Employee/ Contractors	Supervisor/ Manager	18 monthly, 8hrs	LTI	Apply three point contact, safety clearance for working at height	4	B	III	F	Task specific risk assessment	Behavioural safety observations, continuous supervision	Supervisor/ Manager	Occupational Health and Safety Act, 1993 (Act No. 85 of 1993) - National Building Regulations and Building Standards Act 103 of 1977	None	Complete	None					
Spherical Valve Isolations	N	1	Applying servo arm lock nuts	1	Struck by falling Lock nuts	Safety	Heavy lock nuts	None	Employees	Supervisor/ Manager	Quarterly, thr	LTI	Risk assessment	4	B	III	F	To develop a local instruction	Behavioural safety observations	Supervisor/ Manager	Occupational Health and Safety Act, 1993 (Act No. 85 of 1993) - GN R1031 - GSRR 1996A GN R84 Construction Regulation 2014	None	Complete	None					
				2	Caught in between	Safety	Limited space	None	Employees	Supervisor/ Manager	Quarterly, thr	LTI	Risk assessment	4	B	III	F	To develop a local instruction	Behavioural safety observations	Supervisor/ Manager	Occupational Health and Safety Act, 1993 (Act No. 85 of 1993) - GN R1031 - GSRR 1996A GN R85 Construction Regulation 2014	None	Complete	None					
	R	2	Access	1	Tripping and Falling	Safety	Slippery surface, not applying three point contact	None	Employees	Supervisor/ Manager	Quarterly, thr	LTI	Apply three point contact, safety clearance for working at height	4	B	III	F	Task specific risk assessment	Behavioural safety observations, continuous supervision	Supervisor/ Manager	Occupational Health and Safety Act, 1993 (Act No. 85 of 1993) - National Building Regulations and Building Standards Act 103 of 1977	None	Complete	None					
				3	Poor lighting	Safety	Poor visibility	None	Employees	Supervisor/ Manager	Quarterly, thr	Medical	Use of torches	3	B	III	F	Task specific risk assessment	Behavioural safety observations	Supervisor/ Manager	Occupational Health and Safety Act, 1993 (Act No. 85 of 1993) - GN R1031 - GSRR	None	Complete	None					
				4	Draining of the vessels	1	Noise induced hearing loss	Health	Draining of high pressure air	None	Employee/ Contractors/ Visitors	Supervisor/ Manager	36monthly, 8hrs	New Mis	Wear hearing protection	1	A	IV	F	Task specific risk assessment	Medical surveys	Supervisor/ Manager	Occupational Health and Safety Act, 1993 (Act No. 85 of 1993) - Noise Induced Hearing Loss Regulations	None	Complete	None			
				5	High Pressurised air	1	Contact with high pressure air	Safety	Equipment failure	None	Employee/ Contractors	Supervisor/ Manager	36monthly, 8hrs	LTI	Following the correct Procedure	4	B	III	F	Task specific risk assessment	Behavioural safety observations and continuous supervision	Supervisor/ Manager	Occupational Health and Safety Act, 1993 (Act No. 85 of 1993) - GN R734 Pressure Equipment Regulation 2009	None	Complete	None			
				6	Working at heights	1	Falling from height	Safety	Incorrect use of ladder	Working at heights rescue training	Employees	Supervisor/ Manager	Quarterly, thr	LTI	Training, Ladder inspections and safety clearance for working at heights	4	B	III	F	Task specific risk assessment	Behavioural safety observations	Supervisor/ Manager	Occupational Health and Safety Act, 1993 (Act No. 85 of 1993) - GN R1031 - GSRR	None	Complete	None			
				7	Isolating/de-isolating electrical supplies	1	Electric shock	Safety	Contact	None	Employees	Supervisor/ Manager	Quarterly, thr	LTI	Isolation, test before touch	4	B	III	F	Task specific risk assessment	Behavioural safety observations, training records	Supervisor/ Manager	Occupational Health and Safety Act, 1993 (Act No. 85 of 1993) & Plant Safety Regulations	None	Complete	None			
Revoicing and replacing of the instruments	R	1	Climbing the stairs while carrying instruments	1	Falling and rolling down stairs	Safety	Carrying instruments and tools by hand while using stairs	None	Employees	Supervisor/ Manager	Quarterly, 2hrs	LTI	Risk assessment, tool bag, tool bucket	4	B	III	P	Lowering and lifting instruments and tools in a carry bag using a rope	Behavioural safety observations	Supervisor/ Manager	Occupational Health and Safety Act, 1993 (Act No. 85 of 1993) - GN R1031 General Safety Regulations 1996	None	Complete	None					
				2	Struck by falling instruments	Safety	Improper handling of instruments	None	Employees	Supervisor/ Manager	Quarterly, 2hrs	LTI	Risk assessment, tool bucket	4	B	III	P	Lowering and lifting instruments and tools in a carry bag using a rope	Behavioural safety observations	Supervisor/ Manager	Occupational Health and Safety Act, 1993 (Act No. 85 of 1993) - GN R1031 - GSRR 1996A GN R84 Construction Regulation, 2014	None	Complete	None					
		2	Working at height	1	Falling from height	Safety	Incorrect use of ladder	Working at heights rescue training	Employees	Supervisor/ Manager	Quarterly, 2hrs	LTI	Training, Ladder inspections and safety clearance for working at heights	4	B	III	F	Task specific risk assessment	Behavioural safety observations	Supervisor/ Manager	Occupational Health and Safety Act, 1993 (Act No. 85 of 1993) - GN R1031 - GSRR	None	Complete	None					
				4	Working at height	Safety	Incorrect use of ladders	Working at heights rescue training	Employee/ Contractors	Supervisor/ Manager	36monthly, 8hrs	Fatality	Ladder inspections, training, working at height safety clearance	5	B	III	F	Task specific risk assessment	Behavioural safety observations and continuous supervision	Supervisor/ Manager	Occupational Health and Safety Act, 1993 (Act No. 85 of 1993) - GN R1031 - GSRR 1996A GN R84 Construction Regulation 2014	None	Complete	To be registered on IRM					
Pressure testing of pressure vessels	R	1	Lifting up of the safety valve	1	Noise induced hearing loss	Health	Vessel over pressurised and valve calibrated to a wrong pressure	None	Employee/ Contractors/ Visitors	Supervisor/ Manager	36monthly, 8hrs	New Mis	Wear hearing protection	1	A	IV	F	Task specific risk assessment	Medical surveys	Supervisor/ Manager	Occupational Health and Safety Act, 1993 (Act No. 85 of 1993) - Noise Induced Hearing Loss Regulations	None	Complete	None					
				2	High Pressurised water	1	Contact with high pressure water	Safety	Crack on the vessel	None	Employee/ Contractors	Supervisor/ Manager	36monthly, 8hrs	LTI	Following the correct Procedure	4	B	III	F	Task specific risk assessment	Behavioural safety observations and continuous supervision	Supervisor/ Manager	Occupational Health and Safety Act, 1993 (Act No. 85 of 1993) - GN R734 Pressure Equipment Regulation 2009	None	Complete	None			
		3	Confined space	1	Suffocate	Health	Lack of oxygen	Rescue team on site	Employee/ Contractors	Supervisor/ Manager	36monthly, 8hrs	Medical	Gas test to be done before entry and continuously during the task environmental certificate to be issued. Continuous supervision.	3	B	III	F	Task specific risk assessment	Behavioural safety observations and continuous supervision	Supervisor/ Manager	Occupational Health and Safety Act, 1993 (Act No. 85 of 1993) - GN R1031 - GSRR 1996A GN R85 Construction Regulation 2014	None	Complete	None					
				4	Working at height	1	Fall from height	Safety	Incorrect use of ladders	Working at heights rescue training	Employee/ Contractors	Supervisor/ Manager	36monthly, 8hrs	Fatality	Ladder inspections, training, working at height safety clearance	5	B	III	F	Task specific risk assessment	Behavioural safety observations and continuous supervision	Supervisor/ Manager	Occupational Health and Safety Act, 1993 (Act No. 85 of 1993) - GN R1031 - GSRR 1996A GN R84 Construction Regulation 2014	None	Complete	To be registered on IRM			

Welding, cutting, and brazing operations	N	1	Metal fumes	1	Inhaling fumes	Health	Toxic fumes generated from the activity	None	Employees/ Contractors/ Visitors	Supervisor/ Manager	Weekly, 2hrs	Medical	PPE, barricading, PTW, hot work approval. Use of mobile fumes extraction unit	3	B	II	F	Task specific risk assessment	Behavioural safety observations	Supervisor/ Manager	Occupational Health and Safety Act, 1993 (Act No. 85 of 1993); NEMA Air Quality Act 39 of 2004; GN R1031 GSR 1986; Environmental Regulations for Workplaces 1987	None	Complete	None
		2	Ultraviolet (UV) radiation	1	Damage eye sight	Health	Exposure to UV light	None	Employees/ Contractors	Supervisor/ Manager	Weekly, 2hrs	Medical	Wearing Welding face shield, barricading	3	B	II	F	Task specific risk assessment	Behavioural safety observations	Supervisor/ Manager	Occupational Health and Safety Act, 1993 (Act No. 85 of 1993); GN R1031 GSR 1986; Environmental Regulations for Workplaces 1987	None	Complete	None
		3	Cutting	1	Burns	Safety	Contact with Hot metal or the cutting torch		Employees/ Contractors	Supervisor/ Manager	Weekly, 2hrs	LTi	Correct use of appropriate PPE for cutting with a cutting torch	4	B	II	F	Task specific risk assessment	Behavioural safety observations	Supervisor/ Manager	Occupational Health and Safety Act, 1993 (Act No. 85 of 1993); GN R1031 GSR 1986; Environmental Regulations for Workplaces 1987	None	Complete	None
		4	Caught in between and falling objects	1	Crushed toes and fingers	Safety	Incorrect handling of material		Employees/ Contractors	Supervisor/ Manager	Weekly, 2hrs	LTi	Use of correct PPE, Following correct work instruction	4	B	II	F	Task specific risk assessment	Behavioural safety observations	Supervisor/ Manager	Basic Conditions of Employment Act & Occupational Health and Safety Act, 1993 (Act No. 85 of 1993); GN R1031 GSR 1986; Environmental Regulations for Workplaces 1987	None	Complete	None
		5	Sparks	1	Eyes damage and burns	Safety	Flying sparks from welding		Employees/ Contractors	Supervisor/ Manager	Weekly, 2hrs	LTi	Use of correct PPE, Following correct work instruction/PTW, hot work approval,	4	B	II	F	Task specific risk assessment	Behavioural safety observations	Supervisor/ Manager	Occupational Health and Safety Act, 1993 (Act No. 85 of 1993); GN R1031 GSR 1986; Environmental Regulations for Workplaces 1987	None	Complete	None
Maintenance of DB's	R	1	Live circuits	1	Electrical shock	Safety	Contact with live circuits	None	Employees	Supervisor/ Manager	Six monthly, 8hrs	LTi	Permit to work, test before touch	4	B	II	F	Task specific risk assessment	Safety behavioural observations	Supervisor/ Manager	Occupational Health and Safety Act, 1993 (Act No. 85 of 1993)	None	Complete	None
Maintenance of Plugs	N	1	Live circuits	1	Electrical shock	Safety	Contact with live circuits	None	Employees	Supervisor/ Manager	Six monthly, 8hrs	LTi	Permit to work, test before touch	4	B	II	F	Task specific risk assessment	Safety behavioural observations	Supervisor/ Manager	Occupational Health and Safety Act, 1993 (Act No. 85 of 1993) & PSR	None	Complete	None
Use of Guillotine	N	1	Sharp edges from metal pieces	1	Cuts	Safety	Sharp edges from the cut metal pieces	None	Employees/ Contractors	Supervisor/ Manager	Quarterly, 4hrs	Medical	PPE, barricading	3	B	II	F	Task specific risk assessment	Safety behavioural observations	Supervisor/ Manager	Occupational Health and Safety Act, 1993 (Act No. 85 of 1993) & General Machinery Regulation, 1988 & Driven Machinery Regulations, 2015	None	Complete	None
		2	Cutting of the metal	1	Cutting of fingers	Safety	Co-ordination between hands and feet while cutting	None	Employees/ Contractors	Supervisor/ Manager	Quarterly, 4hrs	LTi	PPE, following the correct procedure	4	B	II	F	Task specific risk assessment	Safety behavioural observations	Supervisor/ Manager	Occupational Health and Safety Act, 1993 (Act No. 85 of 1993) & General Machinery Regulation, 1988 & Driven Machinery Regulations, 2015	None	Complete	None
Use of the Drilling machine	N	1	Supporting the work piece by hand	1	Cuts from a searing work piece	Safety	Not using a holding clamps	None	Employees/ Contractors	Supervisor/ Manager	Weekly, 2hrs	LTi	Wearing of hand gloves	4	B	II	F	Use of the clamps or the vice grip. Task specific risk assessment	Safety behavioural observations, Inspections	Supervisor/ Manager	Occupational Health and Safety Act, 1993 (Act No. 85 of 1993) & General Machinery Regulation, 1988 & Driven Machinery Regulations, 2015 & Electric Machinery Regulation, 2011	None	Complete	None
		2	Flying metal chips	1	Eye injury	Safety	Not wearing appropriate PPE during the activity	None	Employees/ Contractors	Supervisor/ Manager	Weekly, 2hrs	LTi	Wearing of goggles, training	4	B	II	F	Task specific risk assessment	Safety behavioural observations, Inspections	Supervisor/ Manager	Occupational Health and Safety Act, 1993 (Act No. 85 of 1993) & General Machinery Regulation, 1988 & Driven Machinery Regulation, 2015 & Electric Machinery Regulation, 2011	None	Complete	None
		3	Cleaning metal chips with bare hands	1	Cuts	Safety	Cleaning with a hand instead of brush	None	Employees/ Contractors	Supervisor/ Manager	Weekly, 2hrs	Medical	Wearing of hand gloves, training	3	B	II	F	Task specific risk assessment	Safety behavioural observations, Inspections	Supervisor/ Manager	Occupational Health and Safety Act, 1993 (Act No. 85 of 1993) & General Machinery Regulation, 1988 & Driven Machinery Regulation, 2015 & Electric Machinery Regulation, 2011	None	Complete	None
Dressing the grinding wheel	R	1	Flying particles	1	Injury from flying pieces of grinding stone	Safety	Flying pieces generated from dressing the wheel	None	Employees	Supervisor/ Manager	Quarterly, 1hr	LTi	Wearing of hand gloves and face shield, training	4	B	II	F	Task specific risk assessment	Safety behavioural observations, Inspections	Supervisor/ Manager	Occupational Health and Safety Act, 1993 (Act No. 85 of 1993) & Driven Machinery Regulations, 2015 & Electric Machinery Regulation, 2011	None	Complete	None
Use of the Grinding machine	N	1	Dressing the grinding wheel	1	Injury from flying pieces of grinding stone	Safety	Flying pieces generated from dressing the wheel		Employees	Supervisor/ Manager	Quarterly, 1hr	LTi	Wearing of hand gloves and face shield, training	4	B	II	F	Task specific risk assessment	Safety behavioural observations, Inspections	Supervisor/ Manager	Occupational Health and Safety Act, 1993 (Act No. 85 of 1993) & Driven Machinery Regulation, 2015 & Electric Machinery Regulation, 2011	None	Complete	None
		2	Breaking of grinding stone	1	Injury from flying pieces of grinding stone	Safety	Incorrect grinding method	None	Employees/ Contractors	Supervisor/ Manager	Weekly, 2hrs	LTi	Grinding wheel to be secured by guards, PPE, training	4	B	II	F	Task specific risk assessment	Safety behavioural observations, Inspections	Supervisor/ Manager	Occupational Health and Safety Act, 1993 (Act No. 85 of 1993) & Driven Machinery Regulations, 2015 & Electric Machinery Regulation, 2011	None	Complete	None
		3	Sparks from grinding	1	Eye injury	Safety	Flying sparks from grinding	None	Employees/ Contractors	Supervisor/ Manager	Weekly, 2hrs	Medical	Wearing of goggles	3	B	II	F	Task specific risk assessment	Safety behavioural observations	Supervisor/ Manager	Occupational Health and Safety Act, 1993 (Act No. 85 of 1993) & Driven Machinery Regulation, 2015 & Electric Machinery Regulation, 2011	None	Complete	None
Cutting of metal using Power saw	N	1	Contact with the machine while in operation	1	Hand injury	Safety	Not following the work instruction	None	Employees/ Contractors	Supervisor/ Manager	Monthly, 1hr	LTi	Risk assessment and PPE	4	B	II	F	Training, To develop a work instruction	Safety behavioural observations	Supervisor/ Manager	Occupational Health and Safety Act, 1993 (Act No. 85 of 1993) & Driven Machinery Regulations, 2015 & Electric Machinery Regulation, 2011	None	Complete	None
		2	Splashing of Cooling fluid	1	Cooling fluid splashing on to the eyes	Safety	Not following the work instruction	None	Employees/ Contractors	Supervisor/ Manager	Monthly, 1hr	Medical	Risk assessment and PPE	3	B	II	F	Training, To develop a work instruction	Safety behavioural observations	Supervisor/ Manager	Occupational Health and Safety Act, 1993 (Act No. 85 of 1993) & Driven Machinery Regulation, 2015 & Electric Machinery Regulation, 2011	None	Complete	None
Inspection of lifting equipment at the slink store	R	1	Removal and replacement	1	Tripping and falling	Safety	Poor housekeeping	None	Employees/ Contractors	Supervisor/ Manager	Quarterly, 8hrs	LTi	Ensure good housekeeping, STAR principle, area to be cordoned off, only person involved in the task to be allowed in the area	4	B	II	P	To inspect equipment one at a time	Behavioural safety observations	Supervisor/ Manager	Occupational Health and Safety Act, 1993 (Act No. 85 of 1993); Environmental regulation of Workplaces, 1987 & Facilities Regulations, 2004 & National Building Regulations and Building Standards Act, 1977	None	Complete	None
		2	Equipment falling		Safety	Incorrect handling,	None	Employees/ Contractors	Supervisor/ Manager	Quarterly, 8hrs	LTi	PPE	4	B	II	P	using of crane for heavy equipment	Behavioural safety observations	Supervisor/ Manager	Occupational Health and Safety Act, 1993 (Act No. 85 of 1993) - GN R1031 - GSR, 1986 & GN R84 Construction Regulation, 2014	None	Complete	None	
		3	Falling from height		Safety	Incorrect use of ladders	Working at heights rescue training	Employees/ Contractors	Supervisor/ Manager	Quarterly, 8hrs	LTi	Inspection of ladders, training on using ladders	4	A	IV	F	Task specific risk assessment	Inspections, training records and Behavioural safety observations	Supervisor/ Manager	Occupational Health and Safety Act, 1993 (Act No. 85 of 1993) - GN R1031 - GSR, 1986	None	Complete	None	
Removal and stacking of portable ladders	N	1	Lifting or handling ladders	1	Caught in between or struck by falling ladders	Safety	Improper handling of ladders	None	Employees/ Contractors	Supervisor/ Manager	Weekly, 8 hrs	Medical	Risk assessment	3	B	II	P	OE's	Behavioural safety observations, OE records	Supervisor/ Manager	Occupational Health and Safety Act, 1993 (Act No. 85 of 1993) - GN R1031 - GSR, 1986 & GN R84 Construction Regulation, 2014	None	Complete	None
Rigging and lifting	N	1	Position signalling by the rigger	1	Inadvertent movement of the load	Safety	Poor coordination between the crane driver and the rigger		Employees/ Contractors	Supervisor/ Manager	Weekly, 4 hrs	Fatality	Training, crane inspections	5	B	II	F	Task specific risk assessment, Declaration of fitness	Inspections, training records, OE's and Behavioural safety observations	Supervisor/ Manager	Occupational Health and Safety Act, 1993 (Act No. 85 of 1993); GN R84 Construction Regulation 2014; Driven Machinery Regulation 2015	None	Complete	To be registered on BIM
		2	Poor condition of the lifting equipment	1	Load falling	Safety	Loading equipment failure	None	Employees/ Contractors	Supervisor/ Manager	Weekly, 4 hrs	Fatality	Load testing, Training, inspections, use of correct lifting methods	5	B	II	F	Task specific risk assessment	Inspections, training records, OE's and Behavioural safety observations	Supervisor/ Manager	Occupational Health and Safety Act, 1993 (Act No. 85 of 1993); GN R84 Construction Regulation 2014; Driven Machinery Regulation 2015	None	Complete	To be registered on BIM
		3	Suspended load	1	Load falling	Safety	Crane failure, load improperly secured	None	Employees/ Contractors/ Visitors	Supervisor/ Manager	Weekly, 8 hrs	Fatality	Load testing of crane, inspections, rigging safety clearance, use of certified equipment	5	B	II	F	Task specific risk assessment, pre-work inspections	Load testing certificates, rigging safety clearance and inspection records	Supervisor/ Manager	Occupational Health and Safety Act, 1993 (Act No. 85 of 1993); GN R84 Construction Regulation 2014;	None	Complete	To be registered on BIM
		2	Struck by		Safety	People around the area where crane movement is taking place	None	Employees/ Contractors/ Visitors	Supervisor/ Manager	Weekly, 8 hrs	LTi	Crane driver and the rigger to ensure the area is safe to move the load	4	B	II	F	Task specific risk assessment	Safety behavioural observations	Supervisor/ Manager	Occupational Health and Safety Act, 1993 (Act No. 85 of 1993); GN R84 Construction Regulation 2014; Driven Machinery Regulation 2015	None	Complete	None	
	4	Driver Competency	1	Injury	Safety	Key not controlled	None	Employees	Supervisor/ Manager	Daily, 1hr	LTi	Key to be controlled by OPS	4	A	III	P	Key controlled using the key book	Monitor key is only issued to authorised crane drivers	Supervisor/ Manager	Occupational Health and Safety Act, 1993 (Act No. 85 of 1993); GN R84 Construction Regulation 2014;	None	Complete	None	
Spherical Valve 380V Board maintenance	R	1	Live circuits	1	Electrical shock	Safety	Contact with live circuits		Employees	Supervisor/ Manager	18 monthly, 8hrs	LTi	Permit to work, test before touch, Follow correct procedure	4	B	II	F	Task specific risk assessment	Safety behavioural observations	Supervisor/ Manager	Occupational Health and Safety Act, 1993 (Act No. 85 of 1993) & PSR	None	Complete	None
		2	Working with electrical cleaner	1	Contact with the chemical	Safety	Chemical splash	None	Employees/ Contractors	Supervisor/ Manager	18 monthly, 8hrs	Medical	PPE, following the correct procedure, Consult MSDS	3	B	II	F	Task specific risk assessment	Safety behavioural observations	Supervisor/ Manager	Occupational Health and Safety Act, 1993 (Act No. 85 of 1993); National Environmental Management, Air Quality Act 39 of 2004.	None	Complete	None
		2	Inhaling fumes		Health	Chemical fumes	None	Employees/ Contractors	Supervisor/ Manager	18 monthly, 8hrs	Medical	Wearing of the respirator, following the correct procedure, Consult MSDS	3	B	II	F	Task specific risk assessment	Safety behavioural observations	Supervisor/ Manager	Occupational Health and Safety Act, 1993 (Act No. 85 of 1993); National Environmental Management, Air Quality Act 39 of 2004.	None	Complete	None	
		3	Climbing the stairs while carrying tools and chemicals	1	Falling and rolling down stairs	Safety	Carrying tools and chemical by hand while using stairs	None	Employees	Supervisor/ Manager	18 monthly, 8hrs	LTi	Risk assessment, tool bucket	4	B	II	P	Lowering and lifting chemicals and tools using a rope	Behavioural safety observations	Supervisor/ Manager	Occupational Health and Safety Act, 1993 (Act No. 85 of 1993); National Environmental Management, Air Quality Act 39 of 2004.	None	Complete	None
	2	Struck by falling tools		Safety	Improper handling of tools and chemicals	None	Employees	Supervisor/ Manager	18 monthly, 8hrs	LTi	Risk assessment, tool bucket	4	B	II	P	Lowering and lifting chemicals and tools using a rope	Behavioural safety observations	Supervisor/ Manager	Occupational Health and Safety Act, 1993 (Act No. 85 of 1993); National Environmental Management, Air Quality Act 39 of 2004.	None	Complete	None		
Transferring oil into the bulk tanks	N	1	Opening manhole covers	1	Trip and fall	Safety	Floor plate removal	None	Employees/ Contractors	Supervisor/ Manager	6 Monthly, 8 hrs	Fatality	Risk assessment	5	B	II	P	Two man rule to be applied	Behavioural safety observations	Supervisor/ Manager	Occupational Health and Safety Act, 1993 (Act No. 85 of 1993) - National Building Regulations and Building Standards Act 103 of 1977	None	Complete	To be registered on BIM
		2	Struck by the floor plate		Safety	Swinging lifted floor plate	None	Employees/ Contractors	Supervisor/ Manager	6 Monthly, 8 hrs	Medical	Risk assessment	3	B	II	P	Proper rigging	Behavioural safety observations	Supervisor/ Manager	Occupational Health and Safety Act, 1993 (Act No. 85 of 1993) - GN R1031 - GSR, 1986 & GN R84 Construction Regulation, 2014	None	Complete	None	
		2	Slippery surface	1	Slip and fall	Safety	Oil spill	None	Employees/ Contractors	Supervisor/ Manager	6 Monthly, 8 hrs	Medical	Risk assessment, PPE	3	B	II	P	Housekeeping	Behavioural safety observations	Supervisor/ Manager	Occupational Health and Safety Act, 1993 (Act No. 85 of 1993) - National Building Regulations and Building Standards Act 103 of 1977	None	Complete	None

Handline of Gas bottles	N	1	Pressurized gas cylinder	1	Injury caused by exposure to gas under pressure	Safety	Pipe or connection rupture	None	Employees/ Contractors	Supervisor/ Manager	3 monthly, 2hrs	LTi	Risk assessment and PPE	4	B	II	F	Task specific risk assessment	Behavioural safety observations	Supervisor/ Manager	Occupational Health and Safety Act, 1993 (Act No. 95 of 1993) - Pressure Equipment Regulations, 2009	None	Complete	None
Testing of Fire Detectors	R	1	Working at heights	1	Falling from height	Safety	Missing a step while climbing up or down	Working at heights rescue training	Employees	Supervisor/ Manager	5 Weekly for 1 hr	LTi	Ladder training, inspections, safety clearance for working at heights	4	B	II	F	Task specific risk assessment	Behavioural safety observations, inspections	Supervisor/ Manager	Occupational Health and Safety Act, 1993 (Act No. 95 of 1993) - GN R1031 -GSR, 1986	None	Complete	None