

Occupational Health and Safety Baseline Risk Assessment

Business / Operating unit: Drakensberg Pumped Storage Scheme

Department / Area: Lower Machine Hall

Next Review Date (every 2 years):01-Mar-24

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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	OHS opportunities	Exposed group/e 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: - Preventative Controls (controls implemented to eliminate hazards or reduce the likelihood of the risk occurring), and - Reactive Controls (controls implemented to reduce the immediate impact of the risk occurring) Elimination Substitution Engineering controls Administrative controls Personal protective equipment (PPE)	Consequence	Likelihood	Risk Priority Rating	RCE Risk Control Effectiveness	Include: - Preventative Controls (controls implemented to eliminate hazards or reduce the likelihood of the risk occurring), and - Reactive 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.	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 in the lower machine hall	N	1	Noise	1	Noise Induced hearing loss	Health	High noise level from running units	None	Employees/ Contractors/ Visitors	Supervisor/ Manager	Daily for 4 hrs	LTI	Wearing hearing protection, signage, awareness, periodical hearing test	4	2	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
Walking in the lower machine hall	N	1	Noise	1	Noise Induced hearing loss	Health	High noise level from running units	None	Employees/ Contractors/ Visitors	Supervisor/ Manager	Daily for 0.5 hr	LTI	Wearing hearing protection, signage, awareness	1	2	IV	F	None	Behavioural safety observations	Supervisor/ Manager	Occupational Health and Safety Act, 1993 (Act No. 85 of 1993) - Noise Induced Hearing Loss Regulations	None	Complete	None
Maintenance of service transformers	R	1	Working at heights	1	Falling from height	Safety	Missing a step while climbing up or down the ladder	Working at heights rescue training	Employees/ Contractors	Supervisor/ Manager	2 Yearly for 8 hrs	Medical	Working at heights Training, ladder inspections, safety clearance for working at heights	3	B	III	F	Task specific risk assessment	Behavioural safety observations, inspections	Supervisor/ Manager	Occupational Health and Safety Act, 1993 (Act No. 85 of 1993) - GN R1031 -GSR, 1986	None	Complete	None
		2	Test equipment and cables on the floor	1	Tripping and falling	Safety	Test equipment and cables on the walkway	None	Employees/ Contractors	Supervisor/ Manager	2 Yearly for 8 hrs	First Aid	Barricading	2	B	IV	F	Task specific risk assessment	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 Buidling Regulations and Building Standards Act 103 of 1977	None	Complete	None
Lighting maintenance in service transformer bay (Live chamber)	N	1	Lights located in a live chamber	1	Electrocution	Safety	Contact with electricity	None	Employees/ Contractors	Supervisor/ Manager	Six monthly for 4 hrs	Fatality	Work permit, Test before Touch,	5	B	II	F	Task specific risk assessment	Behavioural safety observations	Supervisor/ Manager	Occupational Health and Safety Act, 1993 (Act No. 85 of 1993); Operating Regulations for High Voltage Systems	None	Complete	To be registered on IRM
		2	Working at heights	1	Falling from height	Safety	Missing a step while climbing up or down, two man rule	Working at heights rescue training	Employees	Supervisor/ Manager	Six monthly for 4 hrs	LTI	Ladder training, inspections, safety clearance for working at heights	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) - GN R1031 -GSR, 1986	None	Complete	None
		3	Working on live circuits	1	Electric shock	Safety	Contact	None	Employees	Supervisor/ Manager	Six monthly for 4 hrs	LTI	Isolation, test before touch	4	B	III	F	Task specific risk assessment	Behavioural safety observations	Supervisor/ Manager	Occupational Health and Safety Act, 1993 (Act No. 85 of 1993) & Plant Safety Regulations	None	Complete	None
Fire detectors in service transformer bay (Live chamber)	N	1	Fire detectors located in a live chamber	1	Electrocution	Safety	Contact with electricity	None	Employees	Supervisor/ Manager	Six monthly for 1 hr	Fatality	Work permit, Test before Touch,	5	B	II	F	Task specific risk assessment	Behavioural safety observations	Supervisor/ Manager	Occupational Health and Safety Act, 1993 (Act No. 85 of 1993) & Operating Regulations For High Voltage Systems	None	Complete	To be registered on IRM
		2	Working at heights	1	Falling from height	Safety	Missing a step while climbing up or down, two man rule	Working at heights rescue training	Employees	Supervisor/ Manager	Six monthly for 1 hr	LTI	Ladder training, inspections, safety clearance for working at heights	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) - GN R1031 -GSR, 1986	None	Complete	None

Battery Room - batteries and lighting maintenance	R	1	Battery acid	1	Contact with battery acid	Safety	Improper handling of acid	None	Employees/ Contractors	Supervisor/ Manager	Monthly for 8 hrs	LTI	Acid proof PPE. Battery maintenance training. Permit to work restricted access	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 & Environmental regulation of Workplaces, 1987 & GN R1031 General Safety Regulations 1986 & Hazardous Substances Act 15 of 1973	None	Complete	None
		2	Working on live circuits	1	Electric shock	Safety	Contact	None	Employees/ Contractors	Supervisor/ Manager	Monthly for 8 hrs	LTI	Permit to work, restricted access	4	B	III	F	Task specific risk assessment	Behavioural safety observations	Supervisor/ Manager	Occupational Health and Safety Act, 1993 (Act No. 85 of 1993) & Plant Safety Regulations	None	Complete	None
		3	Hydrogen fumes	1	Explosions	Safety	Build up of fumes and Ignition of the gases	None	Employees/ Contractors	Supervisor/ Manager	Monthly for 8 hrs	LTI	Fire detection system, Fire extinguisher, PPE. Permit to work, restricted access, insulated tools, wooden ladders. Fans must be running, doors to remain open. Two-man rule.	4	B	III	F	Task specific risk assessment, two man rule	Behavioural safety observations	Supervisor/ Manager	Occupational Health and Safety Act, 1993 (Act No. 85 of 1993 & Environmental regulation of Workplaces, 1987 & GN R1031 General Safety Regulations 1986 & Hazardous Substances Act 15 of 1973	None	Complete	None
Cleaning of Floors	N	1	Oily floor	1	Slip and fall	Safety	Oil spill on the floor	None	Employees/ Contractors	Supervisor/ Manager	Weekly for 3 hrs	LTI	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	Soapy floor	1	Slip and fall	Safety	Soap and water used for cleaning	None	Employees/ Contractors	Supervisor/ Manager	Daily for 4 hrs	LTI	Signage	4	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
Maintenance of blowdown compressors	N	1	Rigging	1	Struck by	Safety	Equipment failure	None	Employees/ Contractors	Supervisor/ Manager	Yearly for 8 hours	Fatality	Rigging safety clearance, Risk assessment	5	B	II	P	New beams with a correct load rating to be installed	Engineering change process, 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	Ongoing	EC process ongoing	To be registered on IRM
		2	Working at heights	1	Falling from height	Safety	Missing a step while climbing up or down the ladder	None	Employees/ Contractors	Supervisor/ Manager	Yearly for 8 hours	LTI	Training, ladder inspections, safety clearance for working at heights	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) - GN R1031 -GSR, 1986	None	Complete	None
		3	Slippery working surfaces	1	Slip and fall	Safety	Oil spill on the floor	None	Employees/ Contractors	Supervisor/ Manager	Yearly for 8 hours	LTI	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
		4	Hot surfaces	1	Burns	Safety	Hot surface of the compressor	None	Employees/ Contractors	Supervisor/ Manager	Yearly for 8 hours	Medical	Isolation, cooling	3	B	III	F	Task specific risk assessment	Behavioural safety observations	Supervisor/ Manager	Occupational Health and Safety Act, 1993 (Act No. 85 of 1993)	None	Complete	None
Removal of oil drums	N	1	Rigging	1	Struck by	Safety	Equipment failure	None	Employees/ Contractors	Supervisor/ Manager	Weekly for 8 hours	LTI	Rigging safety clearance, Risk assessment	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 R84 Construction Regulation 2014; Driven Machinery Regulation 2015	None	Complete	None
Maintenance of station compressors	N	1	Rigging	1	Struck by	Safety	Equipment failure	None	Employees/ Contractors	Supervisor/ Manager	Yearly for 8 hours	LTI	Rigging safety clearance, Risk assessment	4	B	III	P	New beams with a correct load rating to be installed	Engineering change process, 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	None
		2	Slippery working surfaces	1	Slip and fall	Safety	Oil spill on the floor	None	Employees/ Contractors	Supervisor/ Manager	Yearly for 8 hours	LTI	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
		3	Hot surfaces	1	Burns	Safety	Hot surface of the compressor	None	Employees/ Contractors	Supervisor/ Manager	Yearly for 8 hours	First Aid	Isolation, cooling	2	B	IV	F	Task specific risk assessment	Behavioural safety observations	Supervisor/ Manager	Occupational Health and Safety Act, Act No. 85 of 1993	None	Complete	None
Liquid starter maintenance	R	1	Brine solution	1	Water under pressure when draining	Safety	Equipment failure	None	Employees/ Contractors	Supervisor/ Manager	18 Monthly, 8Hrs	Medical	Risk assessment, Inspections, Procedure & 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)	None	Complete	None

				2	Slip and fall due to brine solution leak during draining	Safety	Brine solution on the floor	None	Employees/ Contractors	Supervisor/ Manager	18 Monthly, 8Hrs	First Aid	Inspection and cleaning	2	B	IV	F	Task specific risk assessment	Behavioural safety observations	Supervisor/ Manager	Occupational Health and Safety Act, 1993 (Act No. 85 of 1993)	None	Complete	None
				3	Skin contact with brine solution	Safety	Inadvertently coming into contact with the brine solution	None	Employees/ Contractors	Supervisor/ Manager	18 Monthly, 8Hrs	First Aid	Safety Data Sheet	2	B	IV	F	Task specific risk assessment	Behavioural safety observations	Supervisor/ Manager	Occupational Health and Safety Act, 1993 (Act No. 85 of 1993)	None	Complete	None
		2	Live chamber	1	Electrocution	Safety	Contact with electricity	None	Employees/ Contractors	Supervisor/ Manager	18 Monthly, 8Hrs	Fatality	Work permit, Test before Touch	5	B	III	F	Task specific risk assessment	Behavioural safety observations	Supervisor/ Manager	Occupational Health and Safety Act, 1993 (Act No. 85 of 1993) & Operating Regulations For High Voltage Systems	None	Complete	None
		3	Working at heights	1	Falling from height	Safety	Missing a step while climbing up or down the ladder	Working at heights rescue training	Employees/ Contractors	Supervisor/ Manager	18 Monthly, 8Hrs	LTI	Training, ladder inspections, safety clearance for working at heights	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) - GN R1031 -GSR, 1986	None	Complete	None
		4	Rigging	1	Struck by	Safety	Equipment failure	None	Employees/ Contractors	Supervisor/ Manager	18 Monthly for 8 hrs	LTI	Rigging safety clearance, Risk assessment	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 R84 Construction Regulation 2014; Driven Machinery Regulation 2015	None	Complete	None
Hydraulic valves maintenance	R	1	Rigging of valve	1	Struck by	Safety	Equipment failure	Installation of rigging point	Employees/ Contractors	Supervisor/ Manager	18 Monthly for 8 hrs	LTI	Rigging safety clearance, Risk assessment	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 R84 Construction Regulation 2014; Driven Machinery Regulation 2015	None	Complete	None
		2	Working at heights	1	Falling from height	Safety	Missing a step while climbing up or down the ladder	Working at heights rescue training	Employees/ Contractors	Supervisor/ Manager	18 Monthly for 8 hrs	LTI	Training, ladder inspections, safety clearance for working at heights	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) - GN R1031 -GSR, 1986	None	Complete	None
		3	Valve under Hydraulic pressure	1	Contact with oil under pressure	Safety	Inadvertently coming into contact with the oil under pressure	None	Employees/ Contractors	Supervisor/ Manager	18 Monthly for 8 hrs	LTI	Permit to Work, depressurize system, Procedure & Supervision	4	B	III	F	Task specific risk assessment	Behavioural safety observations	Supervisor/ Manager	Occupational Health and Safety Act, 1993 (Act No. 85 of 1993; Plant Safety Regulations; GN R1031 General Safety Regulations 1986; Regulations For Hazardous Chemical Substance, 1995	None	Complete	None
		4	Valve under Air/water Pressure	1	Contact with air/water under pressure	Safety	Inadvertently coming into contact with the air/water under pressure	None	Employees/ Contractors	Supervisor/ Manager	18 Monthly for 8 hrs	LTI	Permit to Work, depressurize system, Procedure & Supervision	4	B	III	F	Task specific risk assessment	Behavioural safety observations	Supervisor/ Manager	Occupational Health and Safety Act, 1993 (Act No. 85 of 1993 & Plant Safety Regulations	None	Complete	None
		5	Use of tools when removing the valve	1	Spanner slipping and hurting your hand	Safety	Improper handling of tools	None	Employees/ Contractors	Supervisor/ Manager	18 Monthly for 8 hrs	Medical	Risk assessment , PPE and tool bag	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 General Safety Regulations 1986	None	Complete	None
		6	Limited space	1	Struck against or struck by	Safety	Valve location	None	Employees/ Contractors	Supervisor/ Manager	18 Monthly for 8 hrs	LTI	Risk assessment , 2M Rule, PPE, Procedure, Training & Supervision	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 - GSR, 1996& GN R85 Construction Regulation 2014	None	Complete	None
		7	Slippery surface	1	Slip and fall	Safety	Oil spill	None	Employees/ Contractors	Supervisor/ Manager	18 Monthly for 8 hrs	Medical	PPE, Risk assessment	3	B	III	F	Tasks 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
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	Employees/ Contractors	Supervisor/ Manager	36monthly, 8hrs	Near Miss	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	Equipment failure	None	Employees/ 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	Rescure team	Employees/ Contractors	Supervisor/ Manager	36monthly, 8hrs	Medical	Gas test to be done before entry and continuously during the task	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 - GSR, 1996& GN R85 Construction Regulation 2014	None	Complete	None
		4	Working at heights	1	Fall from height	Safety	Incorrect use of ladders	None	Employees/ Contractors	Supervisor/ Manager	36monthly, 8hrs	LTI	Ladder inspections, training, working at height safety clearance	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 -GSR, 1986	None	Complete	None

Lighting maintenance	R	1	Working at heights	1	Falling from height	Safety	Missing a step while climbing up or down. Not hooked up at height. Equipment falling while climbing up or down	Working at heights rescue training	Employees	Supervisor/ Manager	Quarterly, 1 hr	LTI	Hook up at height. Scaffold/ladder training, inspections, safety clearance for working at heights	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) - GN R1031 -GSR, 1986	None	Complete	None
		2	Working on live circuits	1	Electric shock	Safety	Contact	None	Employees	Supervisor/ Manager	Monthly, 1hr	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
Removing 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 for 2 hrs	LTI	Risk assessment, Tool bag and tool bucket	4	B	III	P	Carrying instruments and tools in a carry bag	Behavioural safety observations	Supervisor/ Manager	Occupational Health and Safety Act, 1993 (Act No. 85 of 1993; GN R1031 General Safety Regulations 1986	None	Complete	None
				2	Struck by falling instruments	Safety	Improper handling of instruments	None	Employees	Supervisor/ Manager	Quarterly for 2 hrs	LTI	Risk assessment	4	B	III	P	Carrying instruments and tools in a carry bag	Behavioural safety observations	Supervisor/ Manager	Occupational Health and Safety Act, 1993 (Act No. 85 of 1993; GN R1031 General Safety Regulations 1986	None	Complete	None
		2	Working at heights	1	Falling from height	Safety	Incorrect use of ladder	None	Employees	Supervisor/ Manager	Quarterly for 2 hrs	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 -GSR, 1986	None	Complete	None
				2	Struck by falling instruments or tools	Safety	Improper handling of instruments or tools	None	Employees	Supervisor/ Manager	Quarterly for 2 hrs	LTI	Risk assessment	4	B	III	P	Barricade the work area	Behavioural safety observations	Supervisor/ Manager	Occupational Health and Safety Act, 1993 (Act No. 85 of 1993) - GN R84 Construction Regulations 2014	None	Complete	None
		3	Use of tools when removing the instruments	1	Tool slipping and hurting your hand	Safety	Improper handling of tools	None	Employees	Supervisor/ Manager	Quarterly for 2 hrs	Medical	Risk assessment and PPE	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 General Safety Regulations 1986	None	Complete	None
		4	Slippery surface	1	Slip and fall	Safety	Oil spill	None	Employees	Supervisor/ Manager	Quarterly for 2 hrs	Medical	Risk assessment and PPE	3	B	III	F	Tasks specific risk assessment	Behavioural safety observations	Supervisor/ Manager	Occupational Health and Safety Act, 1993 (Act No. 85 of 1993) - National Buiding Regulations and Building Standards Act 103 of 1977	None	Complete	None
		5	Limited space	1	Struck against or struck by	Safety	Instruments location	None	Employees	Supervisor/ Manager	Quarterly for 2 hrs	Medical	Risk assessment , PPE, Training	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 R84 Construction Regulations 2014	None	Complete	None
		6	Equipment under Pressure	1	Contact with air/fluid under pressure	Safety	Inadvertently coming into contact with the air/fluid under pressure	None	Employees	Supervisor/ Manager	Quarterly for 2 hrs	LTI	Permit to Work, depressurize system, Procedure	4	B	III	F	Task specific risk assessment	Behavioural safety observations	Supervisor/ Manager	Occupational Health and Safety Act, 1993 (Act No. 85 of 1993 & Plant Safety Regulations	None	Complete	None
Cable Pulling and removal	N	1	Working at heights	1	Falling from height	Safety	Incorrect use of ladder/ scaffold	Working at heights rescue training	Employees/ Contractors	Supervisor/ Manager	5 Yearly for 8 hrs	LTI	Training, inspections and safety clearance for working at heights	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 -GSR, 1986	None	Complete	None
				2	Struck by falling tools	Safety	Improper handling of tools	None	Employees/ Contractors	Supervisor/ Manager	5 Yearly for 8 hrs	Medical	Risk assessment and PPE	3	B	III	F	Barricade the work area, strap the tools around the hand/structure	Behavioural safety observations	Supervisor/ Manager	Occupational Health and Safety Act, 1993 (Act No. 85 of 1993) - GN R84 Construction Regulations 2014	None	Complete	None
		2	Fibre glass	1	Skin irritation	Safety	Contact with fibre glass	None	Employees/ Contractors	Supervisor/ Manager	5 Yearly for 8 hrs	Medical	PPE, Awareness	3	B	III	F	Task specific risk assessment	Behavioural safety observations	Supervisor/ Manager	Occupational Health and Safety Act, 1993 (Act No. 85 of 1993) - Regulations For Hazardous Chemical Substances of 1995	None	Complete	None
				2	Lung infection	Health	Inhalation of fibre glass	None	Employees/ Contractors	Supervisor/ Manager	5 Yearly for 8 hrs	LTI	PPE, Awareness	4	B	III	F	Task specific risk assessment	Behavioural safety observations	Supervisor/ Manager	Occupational Health and Safety Act, 1993 (Act No. 85 of 1993) - Regulations For Hazardous Chemical Substances of 1995	None	Complete	None
Water plant operations	R	1	Working with chemicals	1	Chemical burn	Safety	Contact with chemicals	None	Employees/ Contractors	Supervisor/ Manager	Daily for 2 hrs	Medical	Risk assessment , Chemical resistance PPE, SDS	3	B	III	F	Task specific risk assessment, Training	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	Respiratory difficulty	Safety	Inhalation of chlorine	None	Employees/ Contractors	Supervisor/ Manager	Daily for 2 hrs	Medical	Use respirator, SDS	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 Environmental Management, Air Quality Act 39 of 2004.	None	Complete	None

		2	Wet and slippery surface	1	Slip and fall	Safety	Wetting the floor during draining of the tanks	None	Employees/ Contractors	Supervisor/ Manager	3 Yearly for 8 hrs	LTI		Risk assessment and PPE	4	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
Water plant maintenance	N	1	Working at heights	1	Falling from height	Safety	Incorrect use of ladder/ scaffold	Working at heights rescue training	Employees/ Contractors	Supervisor/ Manager	3 Yearly for 8 hrs	LTI	Training, inspections and safety clearance for working at heights	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 -GSR, 1986	None	Complete	None	
				2	Struck by falling tools	Safety	Improper handling of tools	None	Employees/ Contractors	Supervisor/ Manager	3 Yearly for 8 hrs	Medical	Risk assessment and PPE	3	B	III	F	Barricade the work area, strap the tools around the hand/structure	Behavioural safety observations	Supervisor/ Manager	Occupational Health and Safety Act, 1993 (Act No. 85 of 1993) - GN R84 Construction Regulations 2014	None	Complete	None		
		2	Wet and slippery surface	1	Slip and fall	Safety	Wetting the floor during draining of the tanks	None	Employees/ Contractors	Supervisor/ Manager	3 Yearly for 8 hrs	LTI	Risk assessment and PPE	4	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	
				3	Working with chemicals	1	Chemical burn	Safety	Contact with chemicals	None	Employees/ Contractors	Supervisor/ Manager	Daily for 2 hrs	Medical	Risk assessment , Chemical resistance PPE, SDS	3	B	III	F	Task specific risk assessment, Training	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	Respiratory difficulty	Safety	Inhalation of chlorine	None	Employees/ Contractors	Supervisor/ Manager	Daily for 2 hrs	Medical	Use respirator, SDS	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 Environmental Management, Air Quality Act 39 of 2004.	None	Complete	None			
Lower machine hall toilets and showers maintenance	N	1	Wet and slippery surface	1	Slip & Fall	Safety	Floor wet from cleaning water	None	Employees/ Contractors	Supervisor/ Manager	Daily for 3hrs	Medical	Two Man Rule & Slippery floor Signs	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	
				2	Hot water under pressure	1	Contact with Hot Water under pressure	Safety	Pipe burst	None	Employees/ Contractors	Supervisor/ Manager	5 Yearly for 8hrs	LTI	PTW, Drain pipe, PPE & Supervision	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 R734 Pressure Equipment Regulation,2009	None	Complete
		3	Use angle grinder	1	Dust inhalation	Health	Dust from the cutting wall	None	Employees/ Contractors	Supervisor/ Manager	5 Yearly for 8hrs	First Aid	Risk assessment, dust musk and PPE	2	B	IV	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	Dust going into your eyes	Safety	Flying debris from the cutting wall		Employees/ Contractors	Supervisor/ Manager	5 Yearly for 8hrs	LTI	PTW, Goggles, Work instruction, PPE & Supervision	4	B	III	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	Possible finger laceration	Safety	Improper handling of angle grinder	None	Employees/ Contractors	Supervisor/ Manager	5 Yearly for 8hrs	LTI	Risk assessment and PPE	4	B	III	F		Task specific risk assessment	Safety behavioural observations	Supervisor/ Manager	Occupational Health and Safety Act, 1993 (Act No. 85 of 1993; GN R1031 General Safety Regulations 1986	None	Complete	None	
4	Noise induced hearing loss	Health	Noise from the grinder	None	Employees/ Contractors	Supervisor/ Manager	5 Yearly for 8hrs	LTI	Risk assessment and PPE	4	B	III	F		Task specific risk assessment	Safety behavioural observations and periodical medicals	Supervisor/ Manager	Occupational Health and Safety Act, 1993 (Act No. 85 of 1993) - Noise Induced Hearing Loss Regulations	None	Complete	None					
Maintenance of pumps	N	1	Rigging	1	Struck by	Safety	Equipment failure	None	Employees/ Contractors	Supervisor/ Manager	4 yearly for 8 hours	LTI	Risk assessment, PPE, Inspection of lifting equipment, rigging safety clearance and 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 Regulation 2015	None	Complete	None	
				2	Pinch point	Safety	Caught in between	None	Employees/ Contractors	Supervisor/ Manager	4 yearly for 8 hours	Medical	Risk assessment and PPE	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 R84 Construction Regulation 2014; Driven Machinery Regulation 2015	None	Complete	None	

		2	Pump under pressure	1	Contact with water/oil under pressure	Safety	Equipment failure	None	Employees/ Contractors	Supervisor/ Manager	4 yearly for 8 hours	Medical	Risk assessment, Permit to work, PPE	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 R734 Pressure Equipment Regulation, 2009	None	Complete	None
		3	Working at height	1	Falling from height	Safety	Incorrect use of ladder	None	Employees/ Contractors	Supervisor/ Manager	4 Yearly for 8 hrs	LTI	Training, inspections and safety clearance for working at heights	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 -GSR, 1986	None	Complete	None
				2	Struck by falling equipment	Safety	Improper handling of equipment	None	Employees/ Contractors	Supervisor/ Manager	4 Yearly for 8 hrs	LTI	Risk assessment and PPE	4	B	III	F	Task specific risk assessment, Barricade the work area	Behavioural safety observations	Supervisor/ Manager	Occupational Health and Safety Act, 1993 (Act No. 85 of 1993; GN R1031 General Safety Regulations 1986	None	Complete	None
		4	Rotating equipment	1	Caught by rotating equipment	Safety	Inadvertent starting of equipment	None	Employees/ Contractors	Supervisor/ Manager	4 Yearly for 8 hrs	LTI	PTW, risk assessment, guard	4	B	III	F	Task specific risk assessment	Behavioural safety observations	Supervisor/ Manager	Occupational Health and Safety Act, 1993 (Act No. 85 of 1993; Electrical Machinery Regulations 2011; Driven Machinery Regulations 2015	None	Complete	None
		5	Use of tools when removing/installing the pump	1	Tool slipping and hurting your hand	Safety	Improper handling of tools	None	Employees/ Contractors	Supervisor/ Manager	4 Yearly for 8 hrs	Medical	Risk assessment and PPE	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 General Safety Regulations 1986	None	Complete	None
		6	Slippery working surfaces	1	Slip and fall	Safety	Oil spill on the floor	None	Employees/ Contractors	Supervisor/ Manager	4 Yearly for 8 hours	LTI	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
		7	Working in limited space	1	struck against or body strain	Safety	Poor ergonomics	None	Employees/ Contractors	Supervisor/ Manager	4 Yearly for 8 hours	LTI	Risk assessment, PPE, take regular breaks	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 - GN R1031 - GSR, 1996& GN R85 Construction Regulation 2014	None	Complete	None
Maintenance of motors	R	1	Access	1	Slipping and Falling	Safety	Slippery surface	None	Employees/ Contractors	Supervisor/ Manager	18 monthly, 8hrs	LTI	Apply three point contact, Oil resistant shoes	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 - Environmental regulation of Workplaces, 1987&Facilities Regulations, 2004& 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	Anchor points to be installed	Employees/ Contractors	Supervisor/ Manager	18 monthly, 8hrs	LTI	Rigging 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 Regulation 2015	None	Complete	None
		3	Live circuits	1	Electrical shock	Safety	Contact with live circuits	None	Employees/ Contractors	Supervisor/ Manager	18 monthly, 8hrs	LTI	Permit to work, isolation, test before touch	4	B	III	F	Task specific risk assessment	Behavioural safety observations	Supervisor/ Manager	Occupational Health and Safety Act, 1993 (Act No. 85 of 1993) & Plant Safety Regulations	None	Complete	None
		4	Slippery working surfaces	1	Slip and fall	Safety	Oil spill on the floor	None	Employees/ Contractors	Supervisor/ Manager	18 monthly, 8hrs	LTI	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
		5	Use of tools when removing/installing the motors	1	Tool slipping and hurting your hand	Safety	Improper handling of tools	None	Employees/ Contractors	Supervisor/ Manager	18 monthly, 8hrs	Medical	Risk assessment and PPE	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 General Safety Regulations 1986	None	Complete	None
Maintenance of valves	N	1	Working at heights	1	Falling from height	Safety	Incorrect use of ladder	None	Employees/ Contractors	Supervisor/ Manager	18 monthly, 8hrs	LTI	Training, inspections and safety clearance for working at heights	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 -GSR, 1986	None	Complete	None
				2	Struck by falling equipment	Safety	Improper handling of equipment	None	Employees/ Contractors	Supervisor/ Manager	18 monthly, 8hrs	LTI	Risk assessment and PPE	4	B	III	F	Task specific risk assessment, Barricade the work area	Behavioural safety observations	Supervisor/ Manager	Occupational Health and Safety Act, 1993 (Act No. 85 of 1993; GN R1031 General Safety Regulations 1986	None	Complete	None

		2	Access	1	Slipping and Falling	Safety	Slippery surface	None	Employees/ 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 - Environmental regulation of Workplaces, 1987&Facilities Regulations, 2004& National Building Regulations and Building Standards Act 103 of 1977	None	Complete	None
		3	Lifting and rigging	1	Struck by, caught in between	Safety	Incorrect rigging	Anchor points to be installed	Employees/ Contractors	Supervisor/ Manager	18 monthly, 8hrs	LTI	Rigging 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 Regulation 2015	None	Complete	None
		4	Slippery working surfaces	1	Slip and fall	Safety	Oil spill on the floor	None	Employees/ Contractors	Supervisor/ Manager	18 monthly, 8hrs	LTI	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
		5	Use of tools when removing/installing the valves	1	Tool slipping and hurting your hand	Safety	Improper handling of tools	None	Employees/ Contractors	Supervisor/ Manager	18 monthly, 8hrs	Medical	Risk assessment and PPE	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 General Safety Regulations 1986	None	Complete	None
		6	Working in limited space	1	Struck against or body strain	Safety	Poor ergonomics	Ergonomics risk assessment to be done	Employees/ Contractors	Supervisor/ Manager	18 monthly, 8hrs	LTI	Risk assessment, PPE, take regular breaks	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 - GN R1031 - GSR, 1996& GN R85 Construction Regulation 2014	None	Complete	None
Plugs maintenance	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	III	F	Task specific risk assessment	Behavioural safety observations	Supervisor/ Manager	Occupational Health and Safety Act, 1993 (Act No. 85 of 1993) & Plant Safety Regulations	None	Complete	None
Walking on stairways	N	1	Ascending or Descending stairs	1	Falling from stair case	Safety	Missing or misjudging steps	None	Employee/ Contractor/ Visitors	Supervisor/ Manager	Daily for 2 hrs	LTI	Use of handrails, 3 point contact, STAR principle & signage	4	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
Draft Tube maintenance	R	1	Use of tools when opening/closing the door	1	Tool slipping and hurting your hand	Safety	Improper handling of tools	None	Employees/ Contractors	Supervisor/ Manager	18 monthly for 8hrs	Medical	Risk assessment and PPE	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 General Safety Regulations 1986	None	Complete	None
		2	Noise from Pneumatic tool used for opening manhole	1	Noise induced hearing loss	Health	Noise from the pneumatic tool	None	Employees/ Contractors	Supervisor/ Manager	18 Monthly for 8 hrs	LTI	Risk assessment and PPE	4	B	III	F	Task specific risk assessment	Safety behavioural observations and periodical medicals	Supervisor/ Manager	Occupational Health and Safety Act, 1993 (Act No. 85 of 1993) - Noise Induced Hearing Loss Regulations	None	Complete	None
				2	Communication breakdown	Safety	Noise from the pneumatic tool	None	Employees/ Contractors/ Visitors	Supervisor/ Manager	18 Monthly for 8 hrs	Medical	Two way communication	3	B	III	F	Task specific risk assessment	Behavioural safety observations	Supervisor/ Manager	Occupational Health and Safety Act, 1993 (Act No. 85 of 1993) - Noise Induced Hearing Loss Regulations	None	Complete	None
		3	Poor lighting	1	Trip & Fall due to Poor lighting	Safety	No permanent lighting inside	None	Employees/ Contractors	Supervisor/ Manager	18 Monthly for 8 hrs	Medical	Use portable lighting, risk assessment	3	B	III	F	24V portable lighting to be used, Task specific risk assessment	Safety behavioural observations	Supervisor/ Manager	Occupational Health and Safety Act, 1993 (Act No. 85 of 1993 - GN R1031 - GSR	None	Complete	None
		4	Slippery working surfaces	1	Slip and fall	Safety	Water from the upstream	None	Employees/ Contractors	Supervisor/ Manager	18 Monthly for 8 hrs	LTI	Risk assessment and PPE	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
		5	Working at height	1	Falling from height	Safety	Incorrect use of ladder/ scaffold	Working at heights rescue training	Employees/ Contractors	Supervisor/ Manager	18 Monthly for 8 hrs	Medical	Working at heights training, inspections and safety clearance for working at heights	3	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 -GSR, 1986	None	Complete	None
				2	Struck by falling tools	Safety	Improper handling of tools	None	Employees/ Contractors	Supervisor/ Manager	18 Monthly for 8 hrs	Medical	Risk assessment and PPE	3	B	III	F	Strap the tools around the hand/structure	Behavioural safety observations	Supervisor/ Manager	Occupational Health and Safety Act, 1993 (Act No. 85 of 1993; GN R1031 General Safety Regulations 1986	None	Complete	None

		6	Welding	1	Inhalation of welding fumes	Health	Fumes from welding	Local fumes extractor to be used	Employees/ Contractors	Supervisor/ Manager	18 Monthly for 8 hrs	Medical	Risk assessment and PPE	3	B	III	F	Task specific risk assessment	Behavioural safety observations, Medical surveillance	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	Arc eyes	Health	Exposure to UV light	None	Employees/ Contractors	Supervisor/ Manager	18 Monthly for 8 hrs	Medical	Wearing Welding face shield, barricading, risk assessment	3	B	III	F	Task specific risk assessment	Behavioural safety observations, Medical surveillance	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	Burn from welding spates	Safety	Welding flukes falling	None	Employees/ Contractors	Supervisor/ Manager	18 Monthly for 8 hrs	First Aid	Welding PPE, Barricading, risk assessment	2	B	IV	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
		7	Painting fumes	1	Inhalation of painting fumes	Health	Fumes from paint	Local fumes extractor to be used	Employees/ Contractors	Supervisor/ Manager	18 Monthly for 8 hrs	Medical	Risk assessment and PPE	3	B	III	F	Task specific risk assessment	Behavioural safety observations, Medical surveillance	Supervisor/ Manager	Occupational Health and Safety Act, 1993 (Act No. 85 of 1993. National Environmental Act, Air Quality Act 39 of 2004	None	Complete	None
		8	Confined space	1	Suffocate	Health	Lack of oxygen	None	Employees/ Contractors	Supervisor/ Manager	18monthly for 8hrs	Medical	Gas test to be done before entry, and continuously during the task, door must be locked in open position. Rescue team on site	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 - GSR, 1996& GN R85 Construction Regulation 2014	None	Complete	None
		9	Grinding	1	Metal filling going into your eyes	Safety	Flying debris from the grinding	None	Employees/ Contractors	Supervisor/ Manager	18monthly for 8hrs	LTI	PTW, Goggles, Work instruction, PPE & Supervision	4	B	III	F	Task specific risk assessment	Safety behavioural observations, Supervision.	Supervisor/ Manager	Occupational Health and Safety Act, 1993 (Act No. 85 of 1993; Electrical Machinery Regulations 2011; Driven Machinery Regulations 2015	None	Complete	None
				2	Cut your finger	Safety	Improper handling of angle grinder	None	Employees/ Contractors	Supervisor/ Manager	18monthly for 8hrs	LTI	Risk assessment and PPE	4	B	III	F	Task specific risk assessment	Safety behavioural observations, Supervision.	Supervisor/ Manager	Occupational Health and Safety Act, 1993 (Act No. 85 of 1993; GN R1031 General Safety Regulations 1986	None	Complete	None
				3	Noise induced hearing loss	Health	Noise from the grinder	None	Employees/ Contractors	Supervisor/ Manager	18monthly for 8hrs	LTI	Risk assessment and PPE	4	B	III	F	Task specific risk assessment	Safety behavioural observations and periodical medicals	Supervisor/ Manager	Occupational Health and Safety Act, 1993 (Act No. 85 of 1993) - Noise Induced Hearing Loss Regulations	None	Complete	None
				4	Communication breakdown	Safety	Noise from the grinder	None	Employees/ Contractors/ Visitors	Supervisor/ Manager	18 Monthly for 8 hrs	Medical	Two way communication	3	B	III	F	Task specific risk assessment	Behavioural safety observations	Supervisor/ Manager	Occupational Health and Safety Act, 1993 (Act No. 85 of 1993) - Noise Induced Loss Regulations	None	Complete	None
		Spiral casing maintenance	R	1	Use of tools when opening/closing the door	1	Tool slipping and hurting your hand	Safety	Improper handling of tools	None	Employees/ Contractors	Supervisor/ Manager	18 monthly for 8hrs	Medical	Risk assessment and PPE	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 General Safety Regulations 1986	None
2	Noise from Pneumatic tool used for opening manhole			1	Noise induced hearing loss	Health	Noise from the pneumatic tool	None	Employees/ Contractors	Supervisor/ Manager	18 Monthly for 8 hrs	LTI	Risk assessment and PPE	4	B	III	F	Task specific risk assessment	Safety behavioural observations and periodical medicals	Supervisor/ Manager	Occupational Health and Safety Act, 1993 (Act No. 85 of 1993) - Noise Induced Hearing Loss Regulations	None	Complete	None
				2	Communication breakdown	Safety	Noise from the pneumatic tool	None	Employees/ Contractors/ Visitors	Supervisor/ Manager	18 Monthly for 8 hrs	LTI	Two way communication	4	B	III	F	Task specific risk assessment	Behavioural safety observations	Supervisor/ Manager	Occupational Health and Safety Act, 1993 (Act No. 85 of 1993) - Noise Induced Hearing Loss Regulations	None	Complete	None
3	Poor lighting			1	Trip & Fall due to Poor lighting	Safety	No permanent lighting inside	None	Employees/ Contractors	Supervisor/ Manager	18 Monthly for 8 hrs	Medical	Use portable lighting, risk assessment	3	B	III	F	24V portable lighting to be used, Task specific risk assessment	Safety behavioural observations	Supervisor/ Manager	Occupational Health and Safety Act, 1993 (Act No. 85 of 1993 - GN R1031 - GSR	None	Complete	None
4	Slippery working surfaces			1	Slip and fall	Safety	Water from the upstream	None	Employees/ Contractors	Supervisor/ Manager	18 Monthly for 8 hrs	LTI	Risk assessment and PPE	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
5	Working at height			1	Falling from height	Safety	Incorrect use of ladder/ scaffold	Working at heights rescue training	Employees/ Contractors	Supervisor/ Manager	18 Monthly for 8 hrs	LTI	Working at heights training, inspections and safety clearance for working at heights	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 -GSR, 1986	None	Complete	None

				2	Struck by falling tools	Safety	Improper handling of tools	None	Employees/ Contractors	Supervisor/ Manager	18 Monthly for 8 hrs	Medical	Risk assessment and PPE	3	B	III	F	Strap the tools around the hand/structure	Behavioural safety observations	Supervisor/ Manager	Occupational Health and Safety Act, 1993 (Act No. 85 of 1993; GN R1031 General Safety Regulations 1986	None	Complete	None
6	Welding	1	Inhalation of welding fumes	Health	Fumes from welding		Local fumes extractor to be used		Employees/ Contractors	Supervisor/ Manager	18 Monthly for 8 hrs	Medical	Risk assessment and PPE	3	B	III	F	Task specific risk assessment	Behavioural safety observations, Medical surveillance	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	Arc eyes	Health	Exposure to UV light		None		Employees/ Contractors	Supervisor/ Manager	18 Monthly for 8 hrs	Medical	Wearing Welding face shield, barricading, risk assessment	3	B	III	F	Task specific risk assessment	Behavioural safety observations, Medical surveillance	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	Burn from welding spates	Safety	Welding flukes falling		None		Employees/ Contractors	Supervisor/ Manager	18 Monthly for 8 hrs	First Aid	Welding PPE, Barricading, risk assessment	2	B	IV	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
7	Painting fumes	1	Inhalation of painting fumes	Health	Fumes from paint		Local fumes extractor to be used		Employees/ Contractors	Supervisor/ Manager	18 Monthly for 8 hrs	Medical	Risk assessment and PPE	3	B	III	F	Task specific risk assessment	Behavioural safety observations, Medical surveillance	Supervisor/ Manager	Occupational Health and Safety Act, 1993 (Act No. 85 of 1993. National Environmental Act, Air Quality Act 39 of 2004	None	Complete	None
8	Confined space	1	Suffocate	Health	Lack of oxygen		None		Employees/ Contractors	Supervisor/ Manager	18monthly for 8hrs	Medical	Gas test to be done before entry, and continuously during the task, door must be locked in open position. Rescue team on site	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 - GSR, 1996& GN R85 Construction Regulation 2014	None	Complete	None
9	Grinding	1	Metal filling going into your eyes	Safety	Flying debris from the grinding		None		Employees/ Contractors	Supervisor/ Manager	18monthly for 8hrs	LTI	PTW, Goggles, Work instruction, PPE & Supervision	4	B	III	F	Task specific risk assessment	Safety behavioural observations, Supervision.	Supervisor/ Manager	Occupational Health and Safety Act, 1993 (Act No. 85 of 1993; Electrical Machinery Regulations 2011; Driven Machinery Regulations 2015	None	Complete	None
		2	Cut your finger	Safety	Improper handling of angle grinder		None		Employees/ Contractors	Supervisor/ Manager	18monthly for 8hrs	LTI	Risk assessment and PPE	4	B	III	F	Task specific risk assessment	Safety behavioural observations, Supervision.	Supervisor/ Manager	Occupational Health and Safety Act, 1993 (Act No. 85 of 1993; GN R1031 General Safety Regulations 1986	None	Complete	None
		3	Noise induced hearing loss	Health	Noise from the grinder		None		Employees/ Contractors	Supervisor/ Manager	18monthly for 8hrs	LTI	Risk assessment and PPE	4	B	III	F	Task specific risk assessment	Safety behavioural observations and periodical medicals	Supervisor/ Manager	Occupational Health and Safety Act, 1993 (Act No. 85 of 1993) - Noise Induced Hearing Loss Regulations	None	Complete	None
					Communication breakdown	Safety	Noise from the grinder	None	Employees/ Contractors/ Visitors	Supervisor/ Manager	18 Monthly for 8 hrs	Medical	Two way communication	3	B	III	F	Task specific risk assessment	Behavioural safety observations	Supervisor/ Manager	Occupational Health and Safety Act, 1993 (Act No. 85 of 1993) - Noise Induced Hearing Loss Regulations	None	Complete	None
Sewage plant maintenance	N	1	Biological hazardous substance	1	Contracting hepatitis A or B disease	Health	Contact with biological hazardous substance	None	Employees/ Contractors	Supervisor/ Manager	Quarterly for 1 hr	Medical	Risk Assessment, PPE and hepatitis vaccine	3	B	III	F	Task specific risk assessment	Behavioural safety observations	Supervisor/ Manager	Occupational Health and Safety Act, 1993 (Act No. 85 of 1993) - Regulations for hazardous chemical substances, 1995 - Regulations for Hazardous Biological Agents - Notice of Directive in Terms of Section 7(1) of The Occupational Health and Safety Act, 1993 (COIDA Class XXI Health)	None	Complete	None
		2	Live circuits	1	Electrical shock	Safety	Contact with live circuits	None	Employees/ Contractors	Supervisor/ Manager	3 Yearly for 3 hr	LTI	Permit to work, isolation, test before touch	4	B	III	F	Task specific risk assessment	Behavioural safety observations	Supervisor/ Manager	Occupational Health and Safety Act, 1993 (Act No. 85 of 1993) & Plant Safety Regulations	None	Complete	None
		3	Slippery working surfaces	2	Slip and fall	Safety	sewage water on the floor	None	Employees/ Contractors	Supervisor/ Manager	Quarterly for 1 hr	LTI	Inspection and cleaning	4	B	III	F	Task specific risk assessment	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

		4	Use of insecticides	1	Inhaling fumes	Health	Uncontrolled spraying with insecticide	None	Employees/ Contractors	Supervisor/ Manager	Quarterly for 1 hr	Medical	None	3	B	III	I	Use of respirator, risk assessment	Behavioural safety observations	Supervisor/ Manager	Occupational Health and Safety Act, 1993 (Act No. 85 of 1993. Nature Conservations Ordinance 8 of 1969	None	Complete	None
		5	Hot water under pressure	1	Contact with Hot Water under pressure	Safety	Pipe burst	None	Employees/ Contractors	Supervisor/ Manager	Quarterly for 1 hr	LTI	None	4	B	III	I	Task specific risk assessment	Behavioural safety observations, Plant inspections	Supervisor/ Manager	Occupational Health and Safety Act, 1993 (Act No. 85 of 1993 - GN R734 Pressure Equipment Regulation,2009	None	Complete	None
		6	Use of tools	1	Tool slipping and hurting your hand	Safety	Improper handling of tools	None	Employees/ Contractors	Supervisor/ Manager	18monthly for 8hrs	Medical	Risk assessment and PPE	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 General Safety Regulations 1986	None	Complete	None
Excitation transformers maintenance	R	1	Working with High Voltage equipment	1	Electrocution	Safety	Contact with live circuits while testing	None	Employees/ Contractors	Supervisor/ Manager	18 Monthly for 8 hrs	LTI	Work Permit, Arc Flash PPE, isolations, test before touch, follow correct procedure, barricade work area	4	B	III	F	Task specific risk assessment	Access control, Behavioural safety observations	Supervisor/ Manager	Occupational Health and Safety Act, 1993 (Act No. 85 of 1993) & Operating Regulations For High Voltage Systems	None	Complete	None
		2	Working at heights	1	Falling from height	Safety	Missing a step while climbing up or down the ladder	None	Employees/ Contractors	Supervisor/ Manager	18 Monthly for 8 hrs	Medical	Working at heights training, ladder inspections, safety clearance for working at heights	3	B	III	F	Task specific risk assessment	Behavioural safety observations, inspections	Supervisor/ Manager	Occupational Health and Safety Act, 1993 (Act No. 85 of 1993) - GN R1031 -GSR, 1986	None	Complete	None
		3	Rigging	1	Struck by	Safety	Equipment failure	None	Employees/ Contractors	Supervisor/ Manager	18 Monthly for 8 hrs	Medical	Rigging training, Rigging safety clearance, Risk assessment	3	B	III	P	Barricade working area	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	None
		4	Use of tools	1	Tool slipping and hurting your hand	Safety	Improper handling of tools	None	Employees/ Contractors	Supervisor/ Manager	18monthly for 8hrs	Medical	Risk assessment and PPE	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 General Safety Regulations 1986	None	Complete	None
		5	Test equipment and cables on the floor	1	Tripping and falling	Safety	Test equipment and cables on the walkway	None	Employees/ Contractors	Supervisor/ Manager	18 Monthly for 8 hrs	First Aid	Barricading	2	B	IV	F	Task specific risk assessment	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 103 of 1977	None	Complete	None
Governor sump inspection and cleaning.	R	1	Confined space	1	Suffocate	Safety	Lack of oxygen	None	Employees/ Contractors	Supervisor/ Manager	3 Monthly for 3hrs	Fatality	Gas test to be done before entry and continuously during the task	5	B	II	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 - GSR, 1996& GN R85 Construction Regulation 2014	None	Complete	To be registered on IRM
		2	Working in limited space	1	Struck against or body strain	Safety	Poor ergonomics	Ergonomics risk assessment to be done	Employees/ Contractors	Supervisor/ Manager	3 Monthly for 3hrs	LTI	Risk assessment, PPE, take regular breaks	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 - GSR, 1996& GN R85 Construction Regulation 2014	None	Complete	None
		3	Poor lighting	1	Trip & Fall due to Poor lighting	Safety	No permanent lighting inside	None	Employees/ Contractors	Supervisor/ Manager	3 Monthly for 3hrs	First Aid	Use portable lighting, risk assessment	3	B	III	F	24V portable lighting to be used, Task specific risk assessment	Safety behavioural observations	Supervisor/ Manager	Occupational Health and Safety Act, 1993 (Act No. 85 of 1993 - GN R1031 - GSR	None	Complete	None
		4	Slippery surface	1	Slip and fall	Safety	Oil spill	None	Employees/ Contractors	Supervisor/ Manager	18 Monthly for 8 hrs	Medical	Risk assessment and PPE	3	B	III	F	Tasks 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
		5	Working at heights	1	Falling from height	Safety	Missing a step while climbing up onto sump or down under the sump	None	Employees/ Contractors	Supervisor/ Manager	18 Monthly for 8 hrs	Medical	Working at heights training	3	B	III	F	Task specific risk assessment	Behavioural safety observations, inspections	Supervisor/ Manager	Occupational Health and Safety Act, 1993 (Act No. 85 of 1993) - GN R1031 -GSR, 1986	None	Complete	None
220V / 380V electrical boards maintenance	R	1	Live circuits	1	Electrical shock	Safety	Contact with live circuits	None	Employees/ Contractors	Supervisor/ Manager	18 monthly, 8hrs	LTI	Permit to work, test before touch, Follow correct procedure	4	B	III	F	Task specific risk assessment	Safety behavioural observations	Supervisor/ Manager	Occupational Health and Safety Act, 1993 (Act No. 85 of 1993) & Plant Safety Regulations	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 SDS	3	B	III	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 SDS	3	B	III	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	Use of incorrect tools	1	Short-circuit that may lead to electrocution	Safety	Use of uninsulated tools	None	Employees/ Contractors	Supervisor/ Manager	18 monthly, 8hrs	LTI	Risk assessment, insulated tools and PPE	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 General Safety Regulations 1986	None	Complete	None
		4	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/ Contractors	Supervisor/ Manager	18 monthly, 8hrs	LTI	Risk assessment	4	B	III	P	Lowering and lifting chemicals and tools using the crane	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/ Contractors	Supervisor/ Manager	18 monthly, 8hrs	LTI	Risk assessment	4	B	III	P	Lowering and lifting chemicals and tools using the crane	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
PA system maintenace	N	1	Working on portable ladders	1	Falling from height	Safety	Incorrect use of the ladder	Working at heights rescue training	Employees/ Contractors	Supervisor/ Manager	Yearly for 2 hours	LTI	Ladder inspection, Working at heights training, safety clearance for working at height, two man rule	4	B	III	F	Task specific risk assessment	Safety behavioural observations	Supervisor/ Manager	Occupational Health and Safety Act, 1993 (Act No. 85 of 1993) - GN R1031 -GSR, 1986	None	Complete	None
Fire dampers - testing and maintenance	R	1	Dampers located in awkward area	1	Trip and fall	Safety	Trip over plant equipment	None	Employees/ Contractors	Supervisor/ Manager	6 Monthly for 8hrs	LTI	Risk assessment, two man rule	4	B	III	F	Task specific risk assessment	Safety behavioural observations	Supervisor/ Manager	Occupational Health and Safety Act, 1993 (Act No. 85 of 1993	None	Complete	None
		2	Inadvertent closing of the damper while working	1	Caught in between	Safety	System fault	None	Employees/ Contractors	Supervisor/ Manager	Yearly for 4hrs	First Aid	Risk Assessment	2	B	IV	F	Task specific risk assessment	Safety behavioural observations	Supervisor/ Manager	Occupational Health and Safety Act, 1993 (Act No. 85 of 1993) -GN R1031 -GSR, 1986	None	Complete	None
		3	Live circuits	1	Electrical shock	Safety	Contact with live circuits	None	Employees/ Contractors	Supervisor/ Manager	Yearly for 4hrs	LTI	Permit to work, test before touch	4	B	III	F	Task specific risk assessment	Safety behavioural observations	Supervisor/ Manager	Occupational Health and Safety Act, 1993 (Act No. 85 of 1993) & Plant Safety Regulations	None	Complete	None
		4	Working at heights	1	Falling from height	Safety	Incorrect use of the scaffold	Working at heights rescue training	Employees/ Contractors	Supervisor/ Manager	Yearly for 4hrs	LTI	Scaffold inspection, working at heights training, safety clearance for working at height, two man rule	4	B	III	F	Task specific risk assessment	Safety behavioural observations	Supervisor/ Manager	Occupational Health and Safety Act, 1993 (Act No. 85 of 1993) - GN R1031 -GSR, 1986	None	Complete	None
Repairs/removal/installation of Pipes	N	1	Rigging	1	Struck by	Safety	Equipment failure	Installation of rigging point	Employees/ Contractors	Supervisor/ Manager	Yearly for 8 hrs	Fatality	Rigging safety clearance, Rigging Training Risk assessment	5	B	II	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 Regulation 2015	None	Complete	To be registered on IRM
		2	Pipes under pressure	1	Contact with oil/water/air under pressure	Safety	Inadvertently coming into contact with the oil/water/air under pressure	None	Employees/ Contractors	Supervisor/ Manager	Yearly for 8 hrs	LTI	Permit to Work, depressurize system, use of procedure & Supervision	4	B	III	F	Task specific risk assessment	Behavioural safety observations	Supervisor/ Manager	Occupational Health and Safety Act, 1993 (Act No. 85 of 1993	None	Complete	None
		3	Working at heights	1	Falling from height	Safety	Incorrect use of the ladder/scaffold	Working at heights rescue training	Employees/ Contractors	Supervisor/ Manager	Yearly for 8 hrs	LTI	Scaffold/ladder inspection, Working at heights training, safety clearance for working at height, two man rule	4	B	III	F	Task specific risk assessment	Safety behavioural observations	Supervisor/ Manager	Occupational Health and Safety Act, 1993 (Act No. 85 of 1993) - GN R1031 -GSR, 1986	None	Complete	None
		4	Use of tools when removing/replacing pipes	1	Spanner slipping and hurting your hand	Safety	Improper handling of tools	None	Employees/ Contractors	Supervisor/ Manager	Yearly for 8 hrs	Medical	Risk assessment and PPE	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 General Safety Regulations 1986	None	Complete	None
		5	Welding	1	Inhalation of welding fumes	Health	Fumes from welding	Local fumes extractor to be used	Employees/ Contractors	Supervisor/ Manager	Yearly for 8 hrs	Medical	Risk assessment and PPE	3	B	III	F	Task specific risk assessment	Behavioural safety observations, Medical surveillance	Supervisor/ Manager	Occupational Health and Safety Act, 1993 (Act No. 85 of 1993	None	Complete	None
				2	Arc eyes	Health	Exposure to UV light	None	Employees/ Contractors	Supervisor/ Manager	Yearly for 8 hrs	Medical	Wearing Welding face shield, barricading, risk assessment	3	B	III	F	Task specific risk assessment	Behavioural safety observations, Medical surveillance	Supervisor/ Manager	Occupational Health and Safety Act, 1993 (Act No. 85 of 1993	None	Complete	None
				3	Burn from welding spatters/hot surface	Safety	Welding flukes falling	None	Employees/ Contractors	Supervisor/ Manager	Yearly for 8 hrs	First Aid	Welding PPE, Barricading, risk assessment	2	B	IV	F	Task specific risk assessment	Behavioural safety observations	Supervisor/ Manager	Occupational Health and Safety Act, 1993 (Act No. 85 of 1993	None	Complete	None

		6	Grinding	1	Metal fillings going into your eyes	Safety	Flying debris from the grinding	None	Employees/ Contractors	Supervisor/ Manager	Yearly for 8 hrs	LTi	PTW, Goggles, Work instruction, PPE & Supervision	4	B	III	F	Task specific risk assessment	Safety behavioural observations, Supervision.	Supervisor/ Manager	Occupational Health and Safety Act, 1993 (Act No. 85 of 1993; Electrical Machinery Regulations 2011; Driven Machinery Regulations 2015	None	Complete	None
				2	Cut your finger	Safety	Improper handling of angle grinder	None	Employees/ Contractors	Supervisor/ Manager	Yearly for 8 hrs	LTi	Risk assessment and PPE	4	B	III	F	Task specific risk assessment	Safety behavioural observations, Supervision.	Supervisor/ Manager	Occupational Health and Safety Act, 1993 (Act No. 85 of 1993; GN R1031 General Safety Regulations 1986	None	Complete	None
				3	Noise induced hearing loss	Health	Noise from the grinder		Employees/ Contractors	Supervisor/ Manager	Yearly for 8 hrs	LTi	Risk assessment and PPE	4	B	III	F	Task specific risk assessment	Safety behavioural observations and periodical medicals	Supervisor/ Manager	Occupational Health and Safety Act, 1993 (Act No. 85 of 1993) - Noise Induced Hearing Loss Regulations	None	Complete	None
				2	Communication breakdown	Safety	Noise from the grinder	None	Employees/ Contractors/ Visitors	Supervisor/ Manager	18 Monthly for 8 hrs	Medical	Two way communication	3	B	III	F	Task specific risk assessment	Behavioural safety observations	Supervisor/ Manager	Occupational Health and Safety Act, 1993 (Act No. 85 of 1993) - Noise Induced Hearing Loss Regulations	None	Complete	None
				4	Hot surfaces	Safety	Grinding friction	None	Employees/ Contractors	Supervisor/ Manager	Yearly for 8 hrs	First Aid	Risk assessment and PPE	2	B	IV	F	Task specific risk assessment	Behavioural safety observations	Supervisor/ Manager	Occupational Health and Safety Act, 1993 (Act No. 85 of 1993)	None	Complete	None
			Painting fumes	1	Inhalation of painting fumes	Health	Fumes from paint	None	Employees/ Contractors	Supervisor/ Manager	Yearly for 8 hrs	Medical	Risk assessment and PPE	3	B	III	F	Task specific risk assessment	Behavioural safety observations, Medical surveillance	Supervisor/ Manager	Occupational Health and Safety Act, 1993 (Act No. 85 of 1993; National Environmental Act, Air Quality Act 39 of 2004	None	Complete	None
				2	Body strain	Safety	Ergonomics	Ergonomics risk assessment to be done	Employees/ Contractors	Supervisor/ Manager	Yearly for 8 hrs	LTi	Risk assessment, PPE, take regular breaks	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 - GN R1031 - GSR, 1996& GN R85 Construction Regulation 2014	None	Complete	None
			Limited space	1	Struck against or struck by	Safety	Location of pipes	None	Employees/ Contractors	Supervisor/ Manager	Yearly for 8 hrs	Medical	Risk assessment , PPE	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 - GSR, 1996& GN R85 Construction Regulation 2014	None	Complete	None
				2	Body strain	Safety	Ergonomics	Ergonomics risk assessment to be done	Employees/ Contractors	Supervisor/ Manager	Yearly for 8 hrs	LTi	Risk assessment, PPE, take regular breaks	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 - GN R1031 - GSR, 1996& GN R85 Construction Regulation 2014	None	Complete	None
			Slippery working surfaces	1	Slip and fall	Safety	Oil spill on the floor	None	Employees/ Contractors	Supervisor/ Manager	Yearly for 8 hrs	LTi	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
Removal , replacement and opening for inspection of Coolers	R	1	Use of tools when removing/replacing coolers	1	Spanner slipping and hurting your hand	Safety	Improper handling of tools	None	Employees/ Contractors	Supervisor/ Manager	3 Yearly for 8 hrs	Medical	Risk assessment and PPE	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 General Safety Regulations 1986	None	Complete	None
			Working at heights	1	Falling from height	Safety	Incorrect use of the ladder/scaffold	Working at heights rescue training	Employees/ Contractors	Supervisor/ Manager	3 Yearly for 8 hrs	LTi	Scaffold/ladder inspection, Working at heights training, safety clearance for working at height, two man rule	4	B	III	F	Task specific risk assessment	Safety behavioural observations	Supervisor/ Manager	Occupational Health and Safety Act, 1993 (Act No. 85 of 1993) - GN R1031 -GSR, 1986	None	Complete	None
			Rigging	1	Struck by	Safety	Equipment failure	Anchor points to be installed	Employees/ Contractors	Supervisor/ Manager	3 Yearly for 8 hrs	Fatality	Rigging safety clearance, rigging training, Risk assessment	5	B	II	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 Regulation 2015	None	Complete	To be registered on IRM
			Slippery surface	1	Slip and fall	Safety	Oil spill on the floor	None	Employees/ Contractors	Supervisor/ Manager	3 Yearly for 8 hrs	LTi	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
			Limited space	1	Struck against or struck by	Safety	Location of coolers	None	Employees/ Contractors	Supervisor/ Manager	3 Yearly for 8 hrs	Medical	Risk assessment , PPE	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 - GSR, 1996& GN R85 Construction Regulation 2014	None	Complete	None

				2	Body strain	Safety	Ergonomics	Ergonomics risk assessment to be done	Employees/ Contractors	Supervisor/ Manager	3 Yearly for 8 hrs	LTI	Risk assessment, PPE, take regular breaks	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 - GN R1031 - GSR, 1996& GN R85 Construction Regulation 2014	None	Complete	None
		6	Cooler under pressure	1	Contact with oil/water under pressure	Safety	Inadvertently coming into contact with the oil/water under pressure	None	Employees/ Contractors	Supervisor/ Manager	3 Yearly for 8 hrs	LTI	Permit to Work, depressurize system, Procedure & Supervision	4	B	III	F	Task specific risk assessment	Behavioural safety observations	Supervisor/ Manager	Occupational Health and Safety Act, 1993 (Act No. 85 of 1993	None	Complete	None
Filters and strainers maintenance	R	1	Use of tools when removing/replacing filters	1	Spanner slipping and hurting your hand	Safety	Improper handling of tools	None	Employees/ Contractors	Supervisor/ Manager	18 Monthly for 8 hrs	Medical	Risk assessment and PPE	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 General Safety Regulations 1986	None	Complete	None
		2	Rigging	1	Struck by	Safety	Equipment failure	Anchor points to be installed	Employees/ Contractors	Supervisor/ Manager	18 Monthly for 8 hrs	Fatality	Rigging safety clearance, Rigging trainin, Risk assessment	5	B	II	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 Regulation 2015	None	Complete	To be registered on IRM
		3	Working at heights	1	Falling from height	Safety	Incorrect use of the ladder/scaffold	Working at heights rescue training	Employees/ Contractors	Supervisor/ Manager	36 Monthly for 8 hrs	LTI	Ladder inspection, working at heights training, safety clearance for working at height, two man rule	4	B	III	F	Task specific risk assessment	Safety behavioural observations	Supervisor/ Manager	Occupational Health and Safety Act, 1993 (Act No. 85 of 1993) - GN R1031 -GSR, 1986	None	Complete	None
		4	Slippery surface	1	Slip and fall	Safety	Oil spill on the floor	None	Employees/ Contractors	Supervisor/ Manager	18 Monthly for 8 hrs	LTI	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 Buiding Regulations and Building Standards Act 103 of 1977	None	Complete	None
PT enclosure maintenance	R	1	Rigging	1	Struck by	Safety	Equipment failure	Anchor points to be installed	Employees/ Contractors	Supervisor/ Manager	36 Monthly for 8 hrs	Fatality	Rigging safety clearance, Rigging training, Risk assessment	5	B	II	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 Regulation 2015	None	Complete	To be registered on IRM
		2	Working at heights	1	Falling from height	Safety	Incorrect use of the ladder/scaffold	Working at heights rescue training	Employees/ Contractors	Supervisor/ Manager	36 Monthly for 8 hrs	LTI	Ladder inspection, working at training, safety clearance for working at height, two man rule	4	B	III	F	Task specific risk assessment	Safety behavioural observations	Supervisor/ Manager	Occupational Health and Safety Act, 1993 (Act No. 85 of 1993) - GN R1031 -GSR, 1986	None	Complete	None
		3	Slippery surface	1	Trip and fall	Safety	Oil spill on the floor	None	Employees/ Contractors	Supervisor/ Manager	Daily for 2hrs	LTI	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 Buiding Regulations and Building Standards Act 103 of 1977	None	Complete	None
		4	Uneven surface	1	Trip and fall	Safety	Plant design layout	None	Employees/ Contractors	Supervisor/ Manager	Daily for 2hrs	LTI	Risk assessment, PPE	4	B	III	F	Task specific risk assessment	Behavioural safety observations	Supervisor/ Manager	Occupational Health and Safety Act, 1993 (Act No. 85 of 1993 - National Buiding Regulations and Building Standards Act 103 of 1977	None	Complete	None
		5	Painting fumes	1	Inhalation of painting fumes	Health	Fumes from paint	Local fumes extractor to be used	Employees/ Contractors	Supervisor/ Manager	36 Monthly for 8 hrs	Medical	Risk assessment and PPE	3	B	III	F	Task specific risk assessment	Behavioural safety observations, Medical surveillance	Supervisor/ Manager	Occupational Health and Safety Act, 1993 (Act No. 85 of 1993. National Environmental Act, Air Quality Act 39 of 2004	None	Complete	None
		6	Working with dry ice	1	Cold burns to the skin	Safety	Contact with dry ice	None	Employees/ Contractors	Supervisor/ Manager	10 Yearly for 8 hrs	Medical	Risk assessment and PPE	3	B	III	F	Task specific risk assessment	Behavioural safety observations, Medical surveillance	Supervisor/ Manager	Occupational Health and Safety Act, 1993 (Act No. 85 of 1993	None	Complete	None
Blowdown compressor gravity tank oil topup	N	1	Working at heights	1	Falling from height	Safety	Incorrect use of the ladder	Working at heights rescue training	Employees	Supervisor/ Manager	Weekly for 0.5 hr	LTI	Working at heights training, safety clearance for working at height, inspections	4	B	III	F	Task specific risk assessment	Safety behavioural observations	Supervisor/ Manager	Occupational Health and Safety Act, 1993 (Act No. 85 of 1993) - GN R1031 -GSR, 1986	None	Complete	None
Removal and replacement of floor plates	N	1	Rigging, to confirm which floor plates	1	Struck by	Safety	Equipment failure		Employees/ Contractors	Supervisor/ Manager	36 Monthly for 8 hrs	Fatality	Rigging safety clearance, Rigging training, Risk assessment	5	B	II	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 Regulation 2015	None	Complete	To be registered on IRM
		2	Working at heights	1	Falling from height	Safety	Incorrect use of the ladder/scaffold		Employees/ Contractors	Supervisor/ Manager	36 Monthly for 8 hrs	LTI	Ladder inspection, training, safety clearance for working at height, two man rule	4	B	III	F	Task specific risk assessment	Safety behavioural observations	Supervisor/ Manager	Occupational Health and Safety Act, 1993 (Act No. 85 of 1993) - GN R1031 -GSR, 1986	None	Complete	None
		3	Slippery surface	1	Trip and fall	Safety	Oil spill on the floor		Employees/ Contractors	Supervisor/ Manager	Daily for 2hrs	LTI	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 Buiding Regulations and	None	Complete	None

		4	Uneven surface	1	Trip and fall	Safety	Plant design layout		Employees/ Contractors	Supervisor/ Manager	Daily for 2hrs	LTI	Inspection and cleaning	4	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
Isolations or de-isolations	N	1	Opening and closing valves under gratings or floor plates	1	Struck by or against	Safety	Plant design layout	None	Employees	Supervisor/ Manager	Quarterly, 1hr	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 General Safety Regulations 1986	None	Complete	None
				2	Caught in between	Safety	Limited space	None	Employees	Supervisor/ Manager	Quarterly, 1hr	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 - GSR, 1996& GN R85 Construction Regulation, 2014	None	Complete	None
		2	Access	1	Tripping and Falling	Safety	Slippery surface, not applying three point contact	None	Employees	Supervisor/ Manager	Quarterly, 1hr	LTI	Apply three point contact	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 - Environmental regulation of Workplaces, 1987&Facilities Regulations, 2004& National Building Regulations and Building Standards Act 103 of 1977	None	Complete	None
		3	Poor lighting	1	Tripping and Falling, struck against	Safety	Poor visibility	None	Employees	Supervisor/ Manager	Quarterly, 1hr	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 - Environmental regulation of Workplaces, 1987&Facilities Regulations, 2004& National Building Regulations and Building Standards Act 103 of 1977	None	Complete	None
		4	Draining of the vessels	1	Noise induced hearing loss	Health	Draining of high pressure air		Employees/ Contractors/ Visitors	Supervisor/ Manager	36monthly, 8hrs	Near Miss	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	Communication breakdown	Safety	Noise from the pressurised air	None	Employees/ Contractors/ Visitors	Supervisor/ Manager	18 Monthly for 8 hrs	Medical	Two way communication	3	B	III	F	Task specific risk assessment	Behavioural safety observations	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	Employees/ Contractors	Supervisor/ Manager	36monthly, 8hrs	LTI	Following the correct Procedure, risk assessment, PPE	4	B	III	F	Task specific risk assessment	Behavioural safety observations and continuous supervision	Supervisor/ Manager	Occupational Health and Safety Act, 1993 (Act No.	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, 1hr	LTI	Working at heights 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 -GSR, 1986	None	Complete	None
		7	Isolating/de-isolating electrical supplies	1	Electric shock	Safety	Contact	None	Employees	Supervisor/ Manager	Quarterly, 1hr	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.	None	Complete	None
		8	Opening and closing valves	1	Body muscle sprain/strain	Health	operating mechanically tight valves/location of the valve	Ergonomics risk assessment to be done	Employees	Supervisor/ Manager	Quarterly, 1hr	Medical	Two man rule	3	B	III	F	Task specific risk assessment	Behavioural safety observations	Supervisor/ Manager	Occupational Health and Safety Act, 1993 (Act No. 85 of 1993	None	Complete	None
Geyser maintenance	N	1	Hot water	1	Burn injuries	Safety	Lack of concentration, accidental splash, horseplay, crowded space	None	Employees/ Contractors	Supervisor/ Manager	Daily, 1hrs	Medical	Awareness	3	B	III	F	Task specific risk assessment	Behavioural safety observations	Supervisor/ Manager	Occupational Health and Safety Act, Act No. 85 of 1993	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, working at heights training, inspections, safety clearance for working at heights	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) - GN R1031 -GSR, 1986	None	Complete	None