Occupational Health and Safety Baseline risk assessment template

Business/Operating unit:	**TRANSMISSION PROJECTS DELIVERY BASELINE RSK ASSESSMENT REV 3**	**Deparment:**	TPD		**Next Review Date (every 2 years):**	**01-Apr-26**	**Template identifier:**	**240-70044602**

Occupational Health and Safety Baseline risk assessment

Business/Operating unit:	**Projects Delivery : Leseding Substation transformation**	**Departments:**	**SHEQS**		**Next Review Date (every 2 years):**	**Apr-27**	**Template identifier:**	**240-70044602**
Date:	**06/05/2025**	**Prepared by:**	Andani Munyai Johannes Sibanyoni	**Authorised by:**	Name: Vusi Mthimunye Designation: CHSA Date: 06 May 2025		**Document identifier**	**TPDMAN-FM-99**
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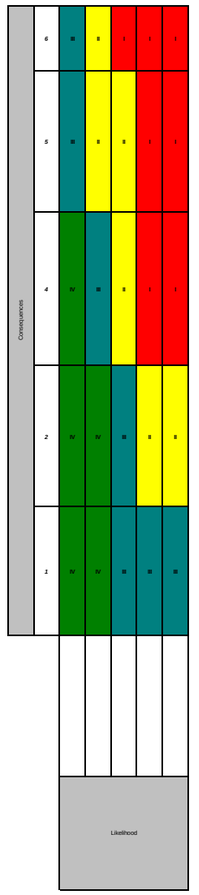
Refer to Occupational Health and Safety Risk assessment procedure 32-520

List activity	*Activity type (Routine/Non-routine)*	*Hazard nr*	*Hazard identification*	*Risk Nr*	*Associated risk*	*Risk type*	*Cause(s) of the risk*	*Exposed group/employees*	*Risk Owner*	*Exposure patterns*	*What are the possible consequences?*	*Existing Controls*	*Consequence*	*Likelihood*	*Risk Priority Rating*	*RCE* Risk Control Effectiveness	*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?	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)					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)	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.
Commuting / travelling between sites	R	**1**	Driving unroadworthy motor vehicles	**1.1**	Motor vehicle accident Damage to vehicle	Safety	Unroadworthiness of the vehicles Non adherence to the motor vehicle maintenance plan Wear and tear of the vehicle Disregard of motor vehicle defects, warning alarms, strange sound etc. Non-adherence to the vehicle inspection requirements.	Employees/ members of the public/Contractors/ Visitors	Project Manager	Daily	Multiple Fatalities Injuries, Damage to property (Vehicle) Post traumatic Disorder.	**Elimination** - Not possible **Substitution** - Not not possible **Engineering controls** - Not possible **Administrative controls** - Driver and Vehicle safety awareness campaign. - Regular vehicle maintenance. - Ensure visual pre-trip inspection before traveling, **Personal protective equipment** - Not applicable	6	A	I	**Fully effective**	Contractor shall develop and implement additional controls and rating post implementation of these additional controls.	NTCSA Inspections and Audits on Contractor	Contractor appointed responsible person	32-727 SHEQ Policy OHS Act, act 85 of 1993 Section 8(a-j) 240-62946386 Driver and Vehicle Safety Management Procedure Sec 3.2 & 3.5 National Road Traffic Act, act 93 of 1996, sec 12 & 42	Contractor to determine the date	Contractor to determine the date	N/A
	R	**2**	Driving in adverse weather conditions (Heavy rain, hail storm, heavy winds, snow, mist, fog)	**2.2**	Motor vehicle accident, Damage to the vehicle.	Safety	Adverse weather conditions - Poor visibility -Strong water flow-sweeping-off vehicles Strong winds affecting the vehicle balance Loss of control Slippery snow covered roads Not keeping updated with the changes in weather patterns .	Employees/ members of the public/Contractors/ Visitors	Project Manager	Infrequently/ Seasonal (exposure is determined by the prevailing weather conditions	Multiple Fatalities Injuries, Damage to property (Vehicle) Post traumatic Disorder.	**Elimination** - Not possible **Substitution** - Not possible **Engineering controls** - Not Possible **Administrative controls** - Awareness on travelling in Adverse weather conditions. - Conduct Travel route risk assessment, - Campaigns on Driver and Vehicle safety, - Checking of weather forecasts for that area. - Keeping up with the news on television the night before traveling and on the radio while driving for weather updates - Sharing of incidents/lessons learnt - Incident reporting - Conduct continous driver risk assessment **Personal protective equipment** - Not applicable	6	A	I	**Mostly effective**	Contractor shall develop and implement additional controls and rating post implementation of these additional controls.	NTCSA Inspections and Audits on Contractor	Contractor appointed responsible person	32-727 SHEQ Policy OHS Act, act 85 of 1993 Section 8(a-j) 240-62946386 Driver and Vehicle Safety Management Procedure Sec 3.2 & 3.5 National Road Traffic Act, act 93 of 1996, sec 12 & 43	Contractor to determine the date	Contractor to determine the date	N/A
	R	**3**	Driving on poor road conditions(potholes, wet , slippery, uneven surfaces, rough terrain, gravel road, narrow roads, invisible road markings,sand dunes)	**3.1**	Motor vehicle accident, being stuck for longer period on sand dunes and muddy conditions.	Safety	Not adjusing speed as per prevailing road conditions. Driving at a speed not suitable for the condition of the road. Driving an unsuitable vehicle Lack of training, knowledge and skill to handle the conditions.	Employees/ members of the public/Contractors/ Visitors	Project Manager	Daily	Multiple Fatalities Injuries, Damage to property (Vehicle) Post traumatic Disorder.	**Elimination** - Not possible **Substitution** - Not possible **Engineering controls** - Not Possible **Administrative controls** - Conduct route Planning and Travel route risk assessment, - Awareness on the Vehicle and driver safety Management procedure, - Campaigns on Driver and Vehicle safety, - Sharing of incidents/lessons learnt - Incident reporting - Conduct continous driver risk assessment **Personal protective equipment** - Not applicable	6	A	I	**Mostly effective**	Contractor shall develop and implement additional controls and rating post implementation of these additional controls.	NTCSA Inspections and Audits on Contractor	Contractor appointed responsible person	32-727 SHEQ Policy OHS Act, act 85 of 1993 Section 8(a-j) 240-62946386 Driver and Vehicle Safety Management Procedure Sec 3.2 & 3.5 National Road Traffic Act, act 93 of 1996, sec 12 & 43	Contractor to determine the date	Contractor to determine the date	N/A
	R	**4**	Driving areas where wild/stray animals are prevalent.	**4.1**	Motor vehicle accident Damage to vehicle	Safety	No warning road signs on the presence of animals on the road, breaking / ignoring the rules of the road, prevalence of stray animals in the vicinity Inadequate route planning.	Employees/ members of the public/Contractors/ Visitors	Project Manager	Infrequently	Multiple Fatalities Injuries, Damage to property (Vehicle) Post traumatic Disorder.	**Elimination** - Not possible **Substitution** - Not possible **Engineering controls** - Not possible **Administrative controls** - Conduct route Planning and Travel route risk assessment, - Campaigns on Driver and Vehicle safety, - Sharing of incidents/lessons learn. - Incident reporting. - Conduct continous driver risk assessment. **Personal protective equipment** - Not applicable	6	A	I	**Mostly effective**	Contractor shall develop and implement additional controls and rating post implementation of these additional controls.	NTCSA Inspections and Audits on Contractor	Contractor appointed responsible person	32-727 SHEQ Policy OHS Act, act 85 of 1993 Section 8(a-j) 240-62946386 Driver and Vehicle Safety Management Procedure Sec 3.2 & 3.5 National Road Traffic Act, act 93 of 1996, sec 12 & 43	Contractor to determine the date	Contractor to determine the date	N/A
	R	**5**	Bad driver behaviour	**5.1**	Motor vehicle accident, assault Damage to vehicle	Safety	Disregard of road rules (exceeding, speed limit, safe following distance not mainatined, desregard of pedestrian crossings etc.), negative driver attitude, driving under the influence, road rage, stress, time pressure, tailgating.	Employees/ members of the public/Contractors/ Visitors	Project Manager	Daily	Multiple Fatalities (adverse impact / based on the worsecase scenario)	**Elimination** - Not possible **Substitution** - Not possible **Engineering controls** - Not Possible **Administrative Controls** - Driver and Vehicle Safety campaigns (situational awareness, alertness, - Awareness on driver behaviour - Awareness on stress management) - Life saving rules acknowledgement - keeping up with legal and other requirements changes - Implementation of change management requirements. **Personal protective equipment** - Not applicable	6	A	I	**Mostly effective**	Contractor shall develop and implement additional controls and rating post implementation of these additional controls.	NTCSA Inspections and Audits on Contractor	Contractor appointed responsible person	32-727 SHEQ Policy OHS Act, act 85 of 1993 Section 8(a-j) 240-62946386 Driver and Vehicle Safety Management Procedure Sec 3.2 & 3.5 National Road Traffic Act, act 93 of 1996, sec 12 & 43	Contractor to determine the date	Contractor to determine the date	N/A
	R	**6**	Destructed driving	**6.1**	Motor vehicle accident Damage to vehicle	Safety	Usage of cellphones,applying make-up in the car eating while driving, distractive passangers, multi- tasking and personal problems (stress), driver attitude and behaviour, after effects of taking medication use of alcohol, animals on the road, by-standers.	Employees/ members of the public/Contractors/ Visitors	Project Manager	Daily	Multiple Fatalities Injuries, Damage to property (Vehicle) Post traumatic Disorder.	**Elimination** - Not possible **Substitution** - Not possible **Engineering controls** - Not Possible **Admistrative control** - Driver and Vehicle Safety campaigns driver destructions(use of cell phone while driving , situational awareness,etc.) - Trip planning - Continous driver risk assessment **Personal protective equipment** - Not applicable	6	A	I	**Fully effective**	Contractor shall develop and implement additional controls and rating post implementation of these additional controls.	NTCSA Inspections and Audits on Contractor	Contractor appointed responsible person	32-727 SHEQ Policy OHS Act, act 85 of 1993 Section 8(a-j) 240-62946386 Driver and Vehicle Safety Management Procedure Sec 3.2 & 3.5 National Road Traffic Act, act 93 of 1996, sec 12 & 43	Contractor to determine the date	Contractor to determine the date	N/A
	R	**7**	Driving behind vehicles with unsecured load.	**7.1**	Motor vehicle accident, Damage to the vehicle.	Safety	Unsecured or inadequately secured load falling off vehicles Safe following distance not maintained.	Employees/ members of the public/Contractors/ Visitors	Project Manager	Daily	Multiple Fatalities Injuries, Damage to property (Vehicle) Post traumatic Disorder.	**Elimination** - Not possible **Substitution** - Not possible **Engineering controls** - Not Possible **Administrative controls** - Driver and vehicle Safety Awareness Campaigns - Continuous route risk assessment and observations - Keep safe following distance - Defensive driver training (for frequent drivers) - Fitness for duty - Maintain safe following distance **Personal protective equipment** - Not applicable	6	A	I	**Fully effective**	Contractor shall develop and implement additional controls and rating post implementation of these additional controls.	NTCSA Inspections and Audits on Contractor	Contractor appointed responsible person	32-727 SHEQ Policy OHS Act, act 85 of 1993 Section 8(a-j) 240-62946386 Driver and Vehicle Safety Management Procedure Sec 3.2 & 3.5 National Road Traffic Act, act 93 of 1996, sec 12 & 43	Contractor to determine the date	Contractor to determine the date	N/A
	R	**8**	Giving hitch-hickers lifts and night driving	**8.1**	Motor vehicle accident, assault, hi-jacking, Damage to vehicle.	Safety	Socio economic factors (high criminal activities, increase in the cost of living etc.), poor trip planning on travel time,Unforseen circumstances and travel booking challenges.	Employees/ members of the public/Contractors/ Visitors	Project Manager	Daily	Multiple Fatalities Injuries, Damage to property (Vehicle) Post traumatic Disorder.	**Elimination** - Not possible **Substitution** - Not possible **Engineering controls** - Not applicable to this risk **Administrive Controls** - Driver and Vehicle Safety Awareness Campaigns - Route planning - Security alerts on hi-jacking hot spo areas - Travel route risk assessment, - Sharing of lessons learnt from similar incidents, - Discussing incident case studies from other areas - Sharing of incidents/lessons learn - Incident reporting **Personal protective equipment** - Not applicable	6	A	I	**Fully effective**	Contractor shall develop and implement additional controls and rating post implementation of these additional controls.	NTCSA Inspections and Audits on Contractor	Contractor appointed responsible person	32-727 SHEQ Policy OHS Act, act 85 of 1993 Section 8(a-j) 240-62946386 Driver and Vehicle Safety Management Procedure Sec 3.2 & 3.5 National Road Traffic Act, act 93 of 1996, sec 12 & 43	Contractor to determine the date	Contractor to determine the date	N/A

R	Safety	1	A	Fully effective
N	Health	2	B	Mostly effective
		4	D	None
		5	E	
		6		



	R	9	Driving where there is road works/road construction	9.1	Motor vehicle accident (Damage to vehicle)	Safety	Obstruction on the road, unclear road signs, driver disregard of road signs, night driving. Useof cellphone while driving	Employees/ members of the public/Contractors/ Visitors	Project Manager	Daily	Multiple Fatalities Injuries. Damage to property (Vehicle).	**Elimination** - Not possible. **Substitution** - Use and alternate route where possible **Engineering controls** - Not applicable **Administrative controls** - Driver and Vehicle Safety awareness campaigns - Travel route risk assessment (use alternative routes) - Sharing of lessons learnt from similar incidents. - Adjusting your speed and following distance accordingly. - Incident reporting **Personal Protective Equipment** - Not applicable	6	A	I	**Fully effective**	Contractor shall develop and implement additional controls and rating post implementation of these additional controls.	NTCSA Inspections and Audits on Contractor	Contractor appointed responsible person	32-727 SHEQ Policy OHS Act, act 85 of 1993 Section 8(a-j) 240-62946386 Driver and Vehicle Safety Management Procedure Sec 3.2 & 3.5 National Road Traffic Act, act 93 of 1996, sec 12 & 43	Contractor to determine the date	Contractor to determine the date	N/A
	R	10	Poor observation during reverse parking	10,1	Motor vehicle accident	Safety	Inadequate use of side, rearview mirrow and blind spot. Attention destracted Use of cellphone while reversing	Employees/ members of the public/Contractors/ Visitors	Project Manager	Daily	Injury (Lost Time Injury)	**Elimination** - Not possible **Substitution** - Not possible **Engineering controls** - Not possible **Administrative controls** - Driver and Vehicle Safety awareness campaigns - Sharing of incidents/lessons learnt - Incident reporting **Personal protective equipment** - Not applicable	4	A	II	**Fully effective**	Contractor shall develop and implement additional controls and rating post implementation of these additional controls.	NTCSA Inspections and Audits on Contractor	Contractor appointed responsible person	32-727 SHEQ Policy OHS Act, act 85 of 1993 Section 8(a-j) 240-62946386 Driver and Vehicle Safety Management Procedure Sec 3.2 & 3.5 National Road Traffic Act, act 93 of 1996, sec 12 & 43	Contractor to determine the date	Contractor to determine the date	N/A
Site walk-out or Working at site	R	11	Exposure to hazards of nature (snakes, ticks, mosquitoes, bees, spiders, wasps, scorpions bites etc.)	11,1	Body/skin reaction	Health	Individual susceptibility (allergies) venomous poison, distrupting the natural habitat of the insects	Employees/ members of the public/Contractors/ Visitors	Project Manager	Daily	Fatality , Microbial infection (medical treatment case) Lost time injury	**Elimination** - Not possible **Substitution** - Not possible **Engineering controls** - Not possible **Administrative controls** - Awareness on insect bites - Induction training encourage employees to declare any form of medical condition - Trained snake handlers - Epinephrine injections/pills **Personal protective equipment** - None	5	C	II	**Mostly effective**	Contractor shall develop and implement additional controls and rating post implementation of these additional controls.	NTCSA Inspections and Audits on Contractor	Contractor appointed responsible person	32-727 SHEQ Policy OHS Act, act 85 of 1993 Section 8(a-j) Communications Standard sec 3.1 240-44175132 Personal Protective Equipment Standard sec 3.1.4 32-520 OHS Risk Assessment Procedure Sec 3.1	Contractor to determine the date	Contractor to determine the date	N/A
	R	12	Uneven Surfaces/ Open trenches	12,1	Slips, Trips and Falls	Safety	Non-adherence to the site rules Walking on non-dermacted walkways Poor housekeeping practices Non-barricaded open trechences Unsecured power cables	Employees/ members of the public/Contractors/ Visitors	Project Manager	Daily	Lost time injury Medical injury First aid injury	**Elimination** - Install secure barricading **Substitution** - Not possible **Engineering controls** - Not possible **Administrative controls** - Site OHS Induction training - Barricading rules - Housekeeping standard - Safety Signage - Visible Felt Leadership - Job observation - Behavioural observations - Daily safety task instructions/ Daily risk assessments - Work stoppages and safety awareness training **Personal protective equipment** Not applicable	4	C	II	**Fully effective**	Contractor shall develop and implement additional controls and rating post implementation of these additional controls.	NTCSA Inspections and Audits on Contractor	Contractor appointed responsible person	32-727 SHEQ Policy OHS Act, act 85 of 1993 Section 8(a-j) Communications Standard sec 3.1	Contractor to determine the date	Contractor to determine the date	N/A
	R	13	Exposure to extreme heat or cold (rain) weather	13,1	Nausea, heat stress/stroke, cold stress, frostbites. (wet and cold from rain)	Health	Heat waves, cold front and storms due to climate change.	Employees/ members of the public/Contractors/ Visitors	Project Manager	Daily/Weekly	Medical injury First aid injury	**Elimination** - Rotation of workers - Work rest regime **Substitution** - Not possible **Engineering controls** - Not possible **Administrative controls** - Daily safety task instructions/ Daily risk assessments - Heat stress & hypothermia awareness - Stopping of activities during rain **Personal protective equipment** - Sun hats - Winter jackets Balaclava Masks - Sun screen - Sun brims	3	C	II	**Fully effective**	Contractor shall develop and implement additional controls and rating post implementation of these additional controls.	NTCSA Inspections and Audits on Contractor	Contractor appointed responsible person	32-727 SHEQ Policy OHS Act, act 85 of 1993 Section 8(a-j) Communications Standard sec 3.1 240-44175132 Personal Protective Equipment Standard sec 3.1.4 32-520 OHS Risk Assessment Procedure Sec 3.1	Contractor to determine the date	Contractor to determine the date	N/A
	R	14	Exposure to Wild animals	14,1	Attacks by wild animals	Safety	Lack of knowledge & awareness; Failure to inform how to react when faced with wild animals.	Employees/ members of the public/Contractors/ Visitors	Project Manager	Daily	Medical Injury LTI Fatality	**Elimination** - Not Possible **Substitution** - Not possible **Engineering controls** - Not possible **Administrative controls** - Daily safety task instructions/ Daily risk assessments Awareness training on how to react when faced with wild animals; Do not feed animals; Fence off animals and prevent contact with workers; **Personal protective equipment** Not applicable	5	C	II	**Fully effective**	Contractor shall develop and implement additional controls and rating post implementation of these additional controls.	NTCSA Inspections and Audits on Contractor	Contractor appointed responsible person		Contractor to determine the date	Contractor to determine the date	N/A
	R	15	Horseplay while working (rough play, pranks, foolishness, social pressure to partake in unsafe acts, harassment & unauthorise protest actions)	15,1	Violence at work, assault, harm		Disrespect,anger, substance abuse, stress,ego, social relationships at work	Employees/ members of the public/Contractors/ Visitors	Project Manager	Daily	Fatality Lost Time injury Medical injury First aid injury	**Elimination** - Not possible **Substitution** - Not possible **Engineering controls** - Not possible **Administrative controls** - Mental health awareness training - Employee assistance program - Stress management awareness - Substance abuse awareness - Sexual harrassment awareness **Personal protective equipment** - Not possible	4	B	III	**Mostly effective**	Contractor shall develop and implement additional controls and rating post implementation of these additional controls.	NTCSA Inspections and Audits on Contractor	Contractor appointed responsible person	32-727 SHEQ Policy OHS Act, act 85 of 1993 Section 8(a-j) Communications Standard sec 3.1 32-1115 Management of Sexual Harassment Procedure 3.3 32-37 Management of Substance Abuse in the Workplace sec 3	Contractor to determine the date	Contractor to determine the date	N/A
Site Camp - Office administration/occupancy/space utilization	R	16	Loose electrical cables	16,1	Trips, slips & falls	Safety	Poor cables installation & management Use of wall mounted plugs for portable electrical appliances (laptops) Layout of the boardroom/office Office design refurbishment without consulting the OHS professionals, employees and/or employee representatives	Employees/ members of the public/Contractors/ Visitors	Project Manager	Daily	Lost Time injury Medical injury First aid injury	**Elimination** - None **Substitution** - Not possible **Engineering controls** - None **Administrative controls** - Awareness on slip, trips and falls - H&S inspections - OHS induction **Personal protective equipment** - Not applicable	4	B	III	**Fully effective**	Contractor shall develop and implement additional controls and rating post implementation of these additional controls.	NTCSA Inspections and Audits on Contractor	Contractor appointed responsible person	32-727 SHEQ Policy OHS Act, act 85 of 1993 Section 8(a-j) Communications Standard sec 3.1 National Building Regulations and Building Standards Act (act no. 103 of 1977), sec 14 (1a &2) Electrical Installations Regulation 6 March 2009, Reg 7 &8	Contractor to determine the date	Contractor to determine the date	N/A
		17	Exposure to live electrical wires	17,1	Electric shock/burn	Safety	Damaged electrical equipment & cables	Employees/ members of the public/Contractors/ Visitors	Project Manager	Daily	Lost time injury Medical injury First aid injury	**Elimination** - Report and replace damanged cables **Substitution** - Replace with a new electrical equipment or wire **Engineering controls** - Not possible **Administrative controls** - H&S inspections - OHS theme on Electrical Safety **Personal protective equipment** - Not applicable	3	B	III	**Fully effective**	Contractor shall develop and implement additional controls and rating post implementation of these additional controls.	NTCSA Inspections and Audits on Contractor	Contractor appointed responsible person	32-727 SHEQ Policy OHS Act, act 85 of 1993 Section 8(a-j) Communications Standard sec 3.1 National Building Regulations and Building Standards (No. 103 of 1977); sec 14 (1a &2) Elecrical Installations Regulation 6 March 2009, Reg 7 &8	Contractor to determine the date	Contractor to determine the date	N/A
	R	18	Uneven surface (damaged/loose carpets/tiles)	18,1	Trips, slips & falls	Safety	Poor installation, maintenance, wear and tear of building material Wearing stilettos	Employees/ members of the public/Contractors/ Visitors	Project Manager	Daily	Lost time injury Medical injury First aid injury Near-miss	**Elimination** - Remove and replace uneven surfaces, damaged tiles and loose carpets etc. **Substitution** - Replace damaged tiles and loose carpets **Engineering controls** - Not possible **Administrative controls** - SHE inspections -OHS theme on Office Safety **Personal protective equipment** - Not applicable	4	A	II	**Fully effective**	Contractor shall develop and implement additional controls and rating post implementation of these additional controls.	NTCSA Inspections and Audits on Contractor	Contractor appointed responsible person	32-727 SHEQ Policy OHS Act, act 85 of 1993 Section 8(a-j) Communications Standard sec 3.1 National Building Regulations and Building Standards (No.	Contractor to determine the date	Contractor to determine the date	N/A
	R	19	Incorrect handling of Paper	19,1	Papercut	Safety	Hastiness Loss of concentrations Distractions	Employees/ members of the public/Contractors/ Visitors	Project Manager	Daily	first-aid injury	**Elimination** - Not possible **Substitution** - Not possible **Engineering controls** - Not possible **Administrative controls** - None **Personal protective equipment** - Not applicable	2	A	iv	**Mostly effective**	Contractor shall develop and implement additional controls and rating post implementation of these additional controls.	NTCSA Inspections and Audits on Contractor	Contractor appointed responsible person	32-727 SHEQ Policy OHS Act, act 85 of 1993 Section 8(a-j) Communications Standard sec 3.	Contractor to determine the date	Contractor to determine the date	N/A
	R	20	Use of unhygienic ablution facilities	20,1	Microbial infection	Health	Ineffective cleaning Blockage Unhygienic behaviours Microbial contamination Planned & unplanned Water disruptions Non-compliance to the agreement on the removal and emptying of the chemical hired toilets	Employees/ members of the public/Contractors/ Visitors	Project Manager	Daily	Medical injury Occupational disease with reversible effects)	**Elimination** - Daily cleaning of the ablution facility as per roaster **Substitution** - Not Possible **Engineering controls** - Not Possible **Administrative controls** - Notices to maintain good hygiene practices installed - Daily Cleaning / disinfection - OHS induction **Personal protective equipment** - Not applicable	3	C	II	**Fully effective**	Contractor shall develop and implement additional controls and rating post implementation of these additional controls.	NTCSA Inspections and Audits on Contractor	Contractor appointed responsible person	32-727 SHEQ Policy OHS Act, act 85 of 1993 Section 8(a-j) Communications Standard sec 3.1 National Building Regulations and Building Standards (No. 103 of 1977 sec 10.1(a)(i) Facilities Regulations 3 August 2004, reg 2.b (ii)	Contractor to determine the date	Contractor to determine the date	N/A
The use of hydroboil for boiling water	R	21	Contact with hot water & beveverages	21,1	Skin burns	Safety	Loss of concentrations and distractions Use of cellphone/ talking and not looking at the hydroboil	Employees/ members of the public/Contractors/ Visitors	Project Manager	Daily	Lost time injury Medical injury First aid injury Near-miss	**Elimination** - Not possible **Substitution** - Not possible **Engineering controls** - Be cautious when handling hot stuff **Administrative controls** - None **Personal protective equipment** - Not applicable	3	B	III	**Mostly effective**	Contractor shall develop and implement additional controls and rating post implementation of these additional controls.	NTCSA Inspections and Audits on Contractor	Contractor appointed responsible person	32-727 SHEQ Policy OHS Act, act 85 of 1993 Section 8(a-j)	Contractor to determine the date	Contractor to determine the date	N/A
	R	22	The height and positioning of the hydroboil.	22,1	Contact with hot water	Safety	Awkward Body Posture (stretching up) Hydroboil positioned too high up on the wall	Employees/ members of the public/Contractors/ Visitors	Project Manager	Daily	Lost time injury Medical injury First aid injury Near-miss	**Elimination** - Not possible **Substitution** - Not possible **Engineering controls** - Lower the position of the hydroboil **Administrative controls** - Reporting of hydroboil deficiencies **Personal protective equipment** - Not applicable	4	C	II	**Fully effective**	Contractor shall develop and implement additional controls and rating post implementation of these additional controls.	NTCSA Inspections and Audits on Contractor	Contractor appointed responsible person	32-727 SHEQ Policy OHS Act, act 85 of 1993 Section 8(a-j)	Contractor to determine the date	Contractor to determine the date	N/A

The use of microwave oven for heating	R	**23**	Overheating of containers/cups	**23,1**	Skin burns	Safety	Contact with a overheated container/cups	Employees/ members of the public/Contractors/ Visitors	Project Manager	Daily	Lost time injury Medical injury First aid injury Near-miss	**Elimination** - Not possible **Substitution** - Use microwave friendly containers **Engineering controls** Not possible **Administrative controls** OHS induction **Personal protective equipment** Not applicable	4	C	II	**Fully effective**	Contractor shall develop and implement additional controls and rating post implementation of these additional controls.	NTCSA Inspections and Audits on Contractor	Contractor appointed responsible person	32-727 SHEQ Policy OHS Act, act 85 of 1993 Section 8(a-j)	Contractor to determine the date	Contractor to determine the date	N/A
Bush & shrub clearing and tree felling	R	**24**	Cutting of trees	**24,1**	Injuries	Safety	Lack of training; Lack of concentration; Poor maintenance; Poor supervision; Failure to follow procedures	Contractor employees	Project Manager	6-8hours	LTI	**Elimination** - Not possible **Substitution** None **Engineering controls** Not possible **Administrative controls** OHS induction Operators shall be trained; Awareness training; Develop a maintenance schedule for all machinery; Provide general supervision; Develop safe work procedures, and communicate to all employees. **Personal protective equipment** Full PPE	4	C	II	**Mostly effective**	Contractor shall develop and implement additional controls and rating post implementation of these additional controls.	NTCSA Inspections and Audits on Contractor	Contractor appointed responsible person	32-727 SHEQ Policy OHS Act, act 85 of 1993 Section 8(a-j)	Contractor to determine the date	Contractor to determine the date	N/A
	R	**25**	Moving machinery (eg TLB);	**25,1**	Struck by	Safety	Lack of concentration; Failure to demarcate walk areas; failure to provide flagman	Environmental and Health and Safety personnel; Workers; Visitors	Project Manager	6-8hours	Fatality	**Elimination** - Not possible **Substitution** None **Engineering controls** Not possible **Administrative controls** OHS induction Operators shall be trained; Develop a site specific traffic plan; Provide trained flagmen and give them high visibility vests. **Personal protective equipment** Full PPE	5	B	II	**Mostly effective**	Contractor shall develop and implement additional controls and rating post implementation of these additional controls.	NTCSA Inspections and Audits on Contractor	Contractor appointed responsible person	32-727 SHEQ Policy OHS Act, act 85 of 1993 Section 8(a-j)	Contractor to determine the date	Contractor to determine the date	N/A
	R	26		26,1	Noise exposure	Health	Failure to provide, train and use hearing protection; Failure to monitor / supervise use of ear protection	Contractor employees	Project Manager	6-8hours	LTI	**Elimination** - Not possible **Substitution** None **Engineering controls** Not possible **Administrative controls** OHS induction Conduct health risk assessment and communicate to employees; Provide and train employees on use of PPE (ear protection); Provide supervision. **Personal protective equipment** Ear protection	4	B	III	**Mostly effective**	Contractor shall develop and implement additional controls and rating post implementation of these additional controls.	NTCSA Inspections and Audits on Contractor	Contractor appointed responsible person	32-727 SHEQ Policy OHS Act, act 85 of 1993 Section 8(a-j)	Contractor to determine the date	Contractor to determine the date	N/A
Excavation / trenching	R	27	Collapse of sides of excavation;	27,1	Entrapment of persons / material inside excavation;	Safety	Weak and soft type of soil; Incorrect shoring/bracing; Overloading the sides of the excavation by construction vehicles. Spoiled material stored too close to the exvacation.	Contractor employees	Project Manager	6-8hours	LTI	**Elimination** - Not possible **Substitution** None **Engineering controls** Contractor to ensure excavation is adequately stabilised as per Safe Work Procedure (Method Statement); Construction Regulations 13; **Administrative controls** OHS induction Provide supervision. **Personal protective equipment** Full PPE.	4	B	III	**Mostly effective**	Contractor shall develop and implement additional controls and rating post implementation of these additional controls.	NTCSA Inspections and Audits on Contractor	Contractor appointed responsible person	32-727 SHEQ Policy OHS Act, act 85 of 1993 Section 8(a-j)	Contractor to determine the date	Contractor to determine the date	N/A
	R	28	Open excavation	28,1	Falling into	Safety	Inadequate barricading Inadequate warning;	Contractor employees	Project Manager	6-8hours	LTI	**Elimination** - Not possible **Substitution** None **Engineering controls** None **Administrative controls** OHS induction Adequate barricading Adequate warning; **Personal protective equipment** Full PPE	4	B	III	**Mostly effective**	Contractor shall develop and implement additional controls and rating post implementation of these additional controls.	NTCSA Inspections and Audits on Contractor	Contractor appointed responsible person	32-727 SHEQ Policy OHS Act, act 85 of 1993 Section 8(a-j)	Contractor to determine the date	Contractor to determine the date	N/A
	R	29	Underground services (services pipes, eletrical & telecoms cables etc);	29,1	Damage to underground services;	Safety	Failure to identify underground services; Failure to communicate results of tests for underground services to operator; Unavailability of plans for underground services; Failure to follow procedure by the operator;	Contractor employees	Project Manager	6-8hours	LTI	**Elimination** -Use underground services detector (eg cable detector) to identify / trace underground services. Obtain and use underground service plan **Substitution** - Not Possible **Engineering controls** Adequate barricading **Administrative controls** OHS induction Communicate the results of the tests to all employees **Personal protective equipment** Full PPE	2	B	IV	**Mostly effective**	Contractor shall develop and implement additional controls and rating post implementation of these additional controls.	NTCSA Inspections and Audits on Contractor	Contractor appointed responsible person	32-727 SHEQ Policy OHS Act, act 85 of 1993 Section 8(a-j)	Contractor to determine the date	Contractor to determine the date	N/A
	R	30	Material / people falling into excavation	30,1	Injuries to employees / animals;	Safety	Failure to barricade the excavation area.	Contractor employees	Project Manager	6-8hours	Medical ,LTI	**Elimination** -Install secure barricading prevent people and animals from falling onto excavation. **Substitution** - Not Possible **Engineering controls** Not possible **Administrative controls** OHS induction Awareness on barricading standards **Personal protective equipment** Full PPE	4	C	II	**Mostly effective**	Contractor shall develop and implement additional controls and rating post implementation of these additional controls.	NTCSA Inspections and Audits on Contractor	Contractor appointed responsible person	32-727 SHEQ Policy OHS Act, act 85 of 1993 Section 8(a-j)	Contractor to determine the date	Contractor to determine the date	N/A
	R	31	Moving machinery (eg TLB);	31,1	Damage to excavation, injury to employees	Safety	Moving machinery is too close to the excavation.	Contractor employees	Project Manager	6-8hours	Medical ,LTI,Fatality	**Elimination** - Erect barricading aroung excavation. **Substitution** - Not Possible **Engineering controls** Not possible **Administrative controls** OHS induction Supervision (ensure the moving machinery is at a distance of at least 1.5m from the excavation); **Personal protective equipment** Full PPE	5	C	II	**Mostly effective**	Contractor shall develop and implement additional controls and rating post implementation of these additional controls.	NTCSA Inspections and Audits on Contractor	Contractor appointed responsible person	32-727 SHEQ Policy OHS Act, act 85 of 1993 Section 8(a-j)	Contractor to determine the date	Contractor to determine the date	N/A
	R	32	Restricted view of operator;	32,1	Struck against	Safety	Boom of the excavator / TLB restricts view of operator; Operator not being directed by a trained flagman; Lack of supervision.	Contractor employees	Project Manager	6-8hours	LTI, Fatality	**Elimination** - Not possible. **Substitution** - Not Possible **Engineering controls** Not possible **Administrative controls** OHS induction Operators must be competent to operate the machinery Ensure there are trained flagmen during these operations Provide adequate supervision **Personal protective equipment** Provide high visibility PPE.	5	C	II	**Mostly effective**	Contractor shall develop and implement additional controls and rating post implementation of these additional controls.	NTCSA Inspections and Audits on Contractor	Contractor appointed responsible person	32-727 SHEQ Policy OHS Act, act 85 of 1993 Section 8(a-j)	Contractor to determine the date	Contractor to determine the date	N/A
	R	33	Noise, Dust	33,1	Noise induced hearing loss and Dust inhalation	Health	Failure to provide, train and use hearing and respiratory protection; Failure to supervise use of hearing and respiratory protection.	Contractor employees	Project Manager	6-8hours	LTI	**Elimination** - Not possible. **Substitution** - Not Possible **Engineering controls** Not possible **Administrative controls** OHS induction Conduct health risk assessment and communicate hazards to employees **Personal protective equipment** Provide hearing and respiratory protection, and supervise their use.	4	B	III	**Mostly effective**	Contractor shall develop and implement additional controls and rating post implementation of these additional controls.	NTCSA Inspections and Audits on Contractor	Contractor appointed responsible person	32-727 SHEQ Policy OHS Act, act 85 of 1993 Section 8(a-j)	Contractor to determine the date	Contractor to determine the date	N/A
	R	34	Incorrect setting of foundation;	34,1	Misalignment of the structure leading to structure collapse and injuries to employees;	Safety	Lack of supervision; Lack of knowledge.	Contractor employees	Project Manager	6-8hours	LTI, Fatality	**Elimination** - Not possible **Substitution** - Not Possible **Engineering controls** Not possible **Administrative controls** OHS induction **Personal protective equipment** Full PPE	4	B	III	**Mostly effective**	Contractor shall develop and implement additional controls and rating post implementation of these additional controls.	NTCSA Inspections and Audits on Contractor	Contractor appointed responsible person	32-727 SHEQ Policy OHS Act, act 85 of 1993 Section 8(a-j)	Contractor to determine the date	Contractor to determine the date	N/A
	R	35	Awkward posture Bending (Ergonomics)	35,1	Musculoskeletal injuries	Safety	Inadequate training on ergonomics; Lack of supervision	Contractor employees	Project Manager	6-8hours	LTI	**Elimination** - Not possible **Substitution** - Not Possible **Engineering controls** None **Administrative controls** OHS induction Employees to receive basic ergonomics awareness training, including: • recognizing ergonomic risk factors • recognizing signs and symptoms of musculoskeletal disorders (MSD's) that may be related to the work environment. General principles for controlling ergonomic risk factors. • An awareness of other ergonomics factor/s which may affect their postures **Personal protective equipment** Full PPE	4	B	III	**Mostly effective**	Contractor shall develop and implement additional controls and rating post implementation of these additional controls.	NTCSA Inspections and Audits on Contractor	Contractor appointed responsible person	32-727 SHEQ Policy OHS Act, act 85 of 1993 Section 8(a-j)	Contractor to determine the date	Contractor to determine the date	N/A
	R	36	Use of Hazardous Chemical Agents	36,1	Exposure Hazardous Chemical Agents	Safety	Accidental contact with the chemicals Spillage if the container is dropped	Contractor employees	Project Manager	6-8hours	Acute toxicity, Inhalation Skin corrosion/irritation Serious eye damage/eye irritation	**Elimination** Not Possible **Substitution**: Not Possible **Engineering**: None **Administrative**: - Ensure that SDS for all chemicals are available and employees are trained on SDS and control measures in case of contact incident - Ensure that risk assessment is done before work commences. - Handle the containers with care. - Always read the manufacturer's instructions prior to use. - Inventory list of all chemicals - All chemicals to have 16 point SDS's **PPE:** - Appropriate PPE as per the risk assessment	4	B	III	**Mostly effective**	Contractor shall develop and implement additional controls and rating post implementation of these additional controls.	NTCSA Inspections and Audits on Contractor	Contractor appointed responsible person	32-727 SHEQ Policy OHS Act, act 85 of 1993 Section 8(a-j)	Contractor to determine the date	Contractor to determine the date	N/A

General Construction	R	37	Ergonomics (awkward posture, bending, lifting objects)	37,1	Musculoskeletal disorder	Health	Inadequate training on ergonomics; Inadequate supervision; Incorrect lifting techniques; Ergonomics (incorrectawkward posture).	Contractor employees	Project Manager	6-8hours	LTI	**Elimination** - Not possible **Substitution** - Not Possible **Engineering controls** None **Administrative controls** OHS induction; Awareness training on correct lifting techniques Job rotation and work rest periods; **Personal protective equipment** Full PPE	4	D	III	**Mostly effective**	Contractor shall develop and implement additional controls and rating post implementation of these additional controls.	NTCSA Inspections and Audits on Contractor	Contractor appointed responsible person	32-727 SHEQ Policy OHS Act, act 85 of 1993 Section 8(a-j)	Contractor to determine the date	Contractor to determine the date	N/A
	R	38	Heavy equipment & material (Loading / off loading)	38,1	Lifting equipment failure while loading / off loading; Injuries to workers.	Safety	Failure to chose the correctly rated lifting equipment; Poor maintenance and failure to subject lifting equipment to statutory tests; Workers standing underneath load being lifted; Failure to follow correct procedure.	Contractor employees	Project Manager	6-8hours	Medical ,LTI	**Elimination** - Not possible **Substitution** - Not Possible **Engineering controls** Supervisor to ensure that the correctly rated lifting equipment is used Lifting equipment to be subjected to statutory tests at prescribed intervals, and a maintenance schedule be developed. Inspection of Lifting equipment. **Administrative controls** OHS induction; Supervisor to ensure that workers do not stand underneath suspended load. **Personal protective equipment** Full PPE	3	D	III	**Mostly effective**	Contractor shall develop and implement additional controls and rating post implementation of these additional controls.	NTCSA Inspections and Audits on Contractor	Contractor appointed responsible person	32-727 SHEQ Policy OHS Act, act 85 of 1993 Section 8(a-j)	Contractor to determine the date	Contractor to determine the date	N/A
	R	39	Manual handling	39,1	Heavy load falls onto employee, trapping hands, fingers, feet etc under; Back strains / musculoskeletal injuries	Safety	Failure to provide lifting equipment for heavy loads; Failure to give training / awareness on correct manual lifting techniques.	Contractor employees	Project Manager	6-8hours	Medical	**Elimination** - Not possible **Substitution** - Not Possible **Engineering controls** Provide suitable lifting equipment for heavy loads. **Administrative controls** OHS induction; Give training / awareness on correct manual lifting tecniques. **Personal protective equipment** Full PPE	4	D	III	**Mostly effective**	Contractor shall develop and implement additional controls and rating post implementation of these additional controls.	NTCSA Inspections and Audits on Contractor	Contractor appointed responsible person	32-727 SHEQ Policy OHS Act, act 85 of 1993 Section 8(a-j)	Contractor to determine the date	Contractor to determine the date	N/A
	R	40	Psychological Hazards eg, Repetitive work, Stress related / work pressures / personal problems	40,1	May lead to incidents / injuries	Safety	Failure to concentrate / inattentiveness / complacency; Failure to give councelling to employees eg EAP); Lack of job rotation; Extended periods away from home.	Contractor employees	Project Manager	6-8hours	LTI	**Elimination** - Not possible **Substitution** - Not Possible **Engineering controls** Provide job rotation. **Administrative controls** OHS induction; Ensure that employees receive counselling when needed; Ensure employees are able to go to their homes on pay weekends Give training / awareness on correct manual lifting tecniques. **Personal protective equipment** None	4	B	III	**Mostly effective**	Contractor shall develop and implement additional controls and rating post implementation of these additional controls.	NTCSA Inspections and Audits on Contractor	Contractor appointed responsible person	32-727 SHEQ Policy OHS Act, act 85 of 1993 Section 8(a-j)	Contractor to determine the date	Contractor to determine the date	N/A
	R	41	Suspended load	41,1	Fall onto persons, causing injuries	Safety	Use of incorrect / damaged lifting equipment; Incorrect and unapproved rigging and lifting methods; Failure to maintain, and inspect by approved service providers (LME/I); Inadequate training and supervision	Contractor employees	Project Manager	6-8hours	LTI, Fatality	**Elimination** - Not possible **Substitution** - Not Possible **Engineering controls** Provide job rotation. **Administrative controls** OHS induction; Routine and pre use inspections by appointed competent person; Safe work procedures; Supervision. . **Personal protective equipment** Full PPE	5	B	II	**Mostly effective**	Contractor shall develop and implement additional controls and rating post implementation of these additional controls.	NTCSA Inspections and Audits on Contractor	Contractor appointed responsible person	32-727 SHEQ Policy OHS Act, act 85 of 1993 Section 8(a-j)	Contractor to determine the date	Contractor to determine the date	N/A
	R	42	Defective Lifting equipment (Crane, slings, shackles)	42,1	Lifting Equipment failure leading to injuries	Safety	Use of defective lifting equipment; Incorrect and unapproved rigging and lifting methods; Failure to maintain, and inspect by approved service providers; Failure to inspect by the user (rigger); deviating from the standards.	Contractor employees	Project Manager	6-8hours	LTI	**Elimination** - Not possible **Substitution** - Not Possible **Engineering controls** Statutory load tests by LME **Administrative controls** OHS induction; Routine and pre use inspections by appointed competent person; **Personal protective equipment** Full PPE	3	B	III	**Mostly effective**	Contractor shall develop and implement additional controls and rating post implementation of these additional controls.	NTCSA Inspections and Audits on Contractor	Contractor appointed responsible person	32-727 SHEQ Policy OHS Act, act 85 of 1993 Section 8(a-j)	Contractor to determine the date	Contractor to determine the date	N/A
	R	43	Elevated position	43,1	Fall from height (Objects and persons) leading to injuries / fatilities	Safety	Failure to identify correct anchor points; Not following procedure (e.g Abseiling); Underlying medical condition; Failure to secure propreiy / hook up at heights(persons and objects); Inadequate WAH training / supervision.	Contractor employees	Project Manager	6-8hours	LTI	**Elimination** - No work is allowed during inclement weather conditions **Substitution** - Not Possible **Engineering controls** Identification of anchor point by supervisor ; Erect safety nets to catch falling material; Demarcate drop zone are **Administrative controls** OHS induction, Training on work at height from an accreditated organisation; Client approved contractor fall protection plan Direct supervision **Personal protective equipment** Full PPE	4	B	III	**Mostly effective**	Contractor shall develop and implement additional controls and rating post implementation of these additional controls.	NTCSA Inspections and Audits on Contractor	Contractor appointed responsible person	32-727 SHEQ Policy OHS Act, act 85 of 1993 Section 8(a-j)	Contractor to determine the date	Contractor to determine the date	N/A
	R	44	Uneven surfaces	44,1	Slipping / falling leading to injuries	Safety	Steep incline area with loose rock material; Failure to provide awarenss training to employees on work on uneven surfaces / mountainous area; Failure to provide employees with relevant equipment for mountain work (e.g ankle boots).	Contractor employees	Project Manager	6-8hours	Medical , LTI	**Elimination** - Not possible **Substitution** - Not Possible **Engineering controls** Provide employees with the relevant equipment for working in uneven terrain. **Administrative controls** OHS induction Awareness training of affected employees on rock / mountain climbing techniques. **Personal protective equipment** ; Full PPE	3	B	III	**Mostly effective**	Contractor shall develop and implement additional controls and rating post implementation of these additional controls.	NTCSA Inspections and Audits on Contractor	Contractor appointed responsible person	32-727 SHEQ Policy OHS Act, act 85 of 1993 Section 8(a-j)	Contractor to determine the date	Contractor to determine the date	N/A
Stringing	R	45	Falling of equipment from heights to ground.	45,1	Equipment falling on employees working below	Safety	Failure to secure equipment propreiy; Lack of training.	Contractor employees	Project Manager	6-8hours	LTI	**Elimination** - No work is allowed during inclement weather conditions **Substitution** - Not Possible **Engineering controls** Identification of anchor point by supervisor, No person is allowed to work/stand beneath persons working at height, Erect safety nets to catch falling material **Administrative controls** OHS induction; Training on work at height from an accreditated organisation Communication of Work at Height Procedure 32-418 section 3 Client approved contractor fall protection plan; Direct supervision Demarcate drop zone area. **Personal protective equipment** Full PPE	3	B	III	**Mostly effective**	Contractor shall develop and implement additional controls and rating post implementation of these additional controls.	NTCSA Inspections and Audits on Contractor	Contractor appointed responsible person	32-727 SHEQ Policy OHS Act, act 85 of 1993 Section 8(a-j)	Contractor to determine the date	Contractor to determine the date	N/A
	R	46	Live overhead lines in close proximity to work area / induced electricity	46,1	Electrocution, Serious burns	Safety	Failure to observe clearances; Inadequate supervision.	Contractor employees	Project Manager	6-8hours	LTI	**Elimination** - Not possible **Substitution** - Not Possible **Engineering controls** None **Administrative controls** OHS induction Supervisor shall ensure that the safety clearances are observed as per Electrical Machinery Regulations 19 & 21, Eskom Procedure "Operating Regulations for High Voltage Systems (ORHVS)-32-646" Section 5.03.6.3 (Work in close proximity to live conductors / apparatus). Supervisors shall be trained in the Eskom ORHVS **Personal protective equipmen**t Full PPE	3	B	III	**Mostly effective**	Contractor shall develop and implement additional controls and rating post implementation of these additional controls.	NTCSA Inspections and Audits on Contractor	Contractor appointed responsible person	32-727 SHEQ Policy OHS Act, act 85 of 1993 Section 8(a-j)	Contractor to determine the date	Contractor to determine the date	N/A
Working inside the HV yard	R	47	Live Electrical Equipments	47,1	Contact with electrical equipment	Safety	Inadvertent exposure to live parts of the plant , equipment or machinery - Violation of Operating Regulations for High Voltage Systems - Inadequate or inappropriate training - Inadequate risk assesment - Taking shortcuts - Lack of concentration - Inadequate communication - Failure to adhere to standards, procedure and instruction	Contractor employees	Project Manager	6-8hours	Electric shock; Psychological damage; Physical burns; Neurological damage or Ventricular fibrillation resulting in fatality or lost time injury	**Elimination**: None **Substitution**: None **Engineering:** - Make the plant safe (i.e. Isolate, Testing, earthing, barricaring the plant to be worked on.) **Administrative Controls** - Implementation of the requirements of the ORHVS Regulation i.e. Operating Regulations for High Voltage Systems training and authorisation, - Conduct pre-task risk assessment, complete workers register - Ensure that the permit is issued before commencement of the testing activities. - Emergency preparedness plan is reviewed and discussed before any work commences - Communicate and adhere to the procedures. - Enforcement of Life Saving rules. - Train employees on the Safe Working Procedures - Supervision - Medical surveillance - Tools and equipments checked and maintained in good working condition **PPE:** - Wear appropriate PPE as per the risk assessment.	4	D	I	**Mostly effective**	Contractor shall develop and implement additional controls and rating post implementation of these additional controls.	NTCSA Inspections and Audits on Contractor	Contractor appointed responsible person	32-727 SHEQ Policy OHS Act, act 85 of 1993 Section 8(a-j)	Contractor to determine the date	Contractor to determine the date	N/A
	R	48	SF6 Gas	48,1	Exposure to SF6 gas which may cause eye, lung and skin irritation	Health	- Accidental release of SF6 gas	Contractor employees	Project Manager	Occasually	Death Severe irritation Shortness of breath	**Elimination**: None **Substitution**: None **Engineering**: None **Administrative:** - SF6 gas cylinders to be checked for damage before use. - Pre-task risk assessment and toolbox talk - Provide first aid box - Medical surveillance PPE: - Appropriate PPE as per the risk assessment and SDS - PPE to be checked for damage before use.	4	D	I	**Mostly effective**	Contractor shall develop and implement additional controls and rating post implementation of these additional controls.	NTCSA Inspections and Audits on Contractor	Contractor appointed responsible person	32-727 SHEQ Policy OHS Act, act 85 of 1993 Section 8(a-j)	Contractor to determine the date	Contractor to determine the date	N/A
	R	49	Walking on trench covers	49,1	Breaking of the trench covers and falling into trench	Safety	- Failure to identify the risk - Lack of concentration - trench covers defecive	Contractor employees	Project Manager	6-8hours	Medical incident First aid incident Near miss	**Elimination:** None **Substitution:** None **Engineering**: Where possible do not walk on trench covers **Administrative:** - Situational awareness - Obey warning signs - Pre task risk assessments before work commences. **PPE:** - Wear appropriate PPE as per risk assessment	4	B	III	**Mostly effective**	Contractor shall develop and implement additional controls and rating post implementation of these additional controls.	NTCSA Inspections and Audits on Contractor	Contractor appointed responsible person	32-727 SHEQ Policy OHS Act, act 85 of 1993 Section 8(a-j)	Contractor to determine the date	Contractor to determine the date	N/A
	R	50	Earth Moving Machinery (graders, tractors)	50,1	Struck by /Contact with machinery	Safety	Lack of concentration, fatigue; Failure to demarcate walk areas and appoint signalmen, Inadequate observation by the driver; Inadequate inspection and maintenance; Incompetent operator; Inadequate lock out systems; Failure to put in chock blocks	Contractor employees	Project Manager	6-8hours	LTI	**Elimination** - Not possible **Substitution** - Not Possible **Engineering controls** Only Competent operator to operate machinery Ensure there is an adequate lock out system; Ensure that chock blocks are inserted when vehicles are stationery **Administrative controls** OHS induction Site traffic plan to demarcate safe walk areas for employees; Awarness training on work hazards; Appoint signal / flag man Ensure adequate observation by the driver; Ensure adequate inspection and maintenance **Personal protective equipment** Full PPE	4	D	I	**Mostly effective**	Contractor shall develop and implement additional controls and rating post implementation of these additional controls.	NTCSA Inspections and Audits on Contractor	Contractor appointed responsible person	32-727 SHEQ Policy OHS Act, act 85 of 1993 Section 8(a-j)	Contractor to determine the date	Contractor to determine the date	N/A

Rehabilitation	R	51	Dust and noise	51,1	Lung infection; hearing loss	Health	Moving machinery; Failure to use or provide ear protection and respiratory protection.	Contractor employees	Project Manager	6-8hours	LTI	**Elimination** - Not possible **Substitution** - Not Possible **Engineering controls** None **Administrative controls** OHS induction Demarcate noise zones and noise equipments with pictograms; Subject employees to audiometric and lung testing and medical surveillance **Personal protective equipment** Provide adequate PPE(dust masks, hearing protection e.g ear muffs, ear plugs;	4	B	III	**Mostly effective**	Contractor shall develop and implement additional controls and rating post implementation of these additional controls.	NTCSA Inspections and Audits on Contractor	Contractor appointed responsible person	32-727 SHEQ Policy OHS Act, act 85 of 1993 Section 8(a-j)	Contractor to determine the date	Contractor to determine the date	N/A
	R	52	Hazardous Chemical Agent – cement	52,1	Mesothelioma / Silicosis	Health	Lack of training; Failure to provide and train in the use of respiratory protection	Contractor employees	Project Manager	6-8hours	LTI	**Elimination** - Not possible **Substitution** - Not Possible **Engineering controls** None **Administrative controls** OHS induction Demarcate noise zones and noise equipments with pictograms; Subject employees to audiometric and lung testing and medical surveillance **Personal protective equipment** Provide adequate PPE(dust masks, hearing protection e.g ear muffs, ear plugs	4	B	III	**Mostly effective**	Contractor shall develop and implement additional controls and rating post implementation of these additional controls.	NTCSA Inspections and Audits on Contractor	Contractor appointed responsible person	32-727 SHEQ Policy OHS Act, act 85 of 1993 Section 8(a-j)	Contractor to determine the date	Contractor to determine the date	N/A
	R	53	Hand tools (eg pliers)	53,1	Caught between Struck by(Punctured skin)	Safety	Lack of concentration,fatigue;	Contractor employees	Project Manager	6-8hours	LTI	**Elimination** - Not possible **Substitution** - Not Possible **Engineering controls** None **Administrative controls** OHS induction Work rest periods for employees; Awarness training on work hazards for certain tasks, eg use of hand tools. **Personal protective equipment** Full PPE	4	B	III	**Mostly effective**	Contractor shall develop and implement additional controls and rating post implementation of these additional controls.	NTCSA Inspections and Audits on Contractor	Contractor appointed responsible person	32-727 SHEQ Policy OHS Act, act 85 of 1993 Section 8(a-j)	Contractor to determine the date	Contractor to determine the date	N/A
Hazardous Biological Agents	R	54	HBA exposure in clinic environment e.g- HIV / AIDS, TB, Hepatitis A&B,	54,1	Contact with infectious fluids, blood,faeces, airborne pathogens,	Health	Failure to conduct awareness training on prevention and control of infectious diseases; Failure to conduct medical surveillance.	Eskom / contractor employees eg first aiders	Project Manager	6-8hours	LTI	**Elimination** Not Possible **Substitution** - Not Possible **Engineering controls** None **Administrative controls** OHS induction Awareness training, medical surveillance programme, vaccination of first aiders and health care workers for Hepatitis A & B and flu vaccine. **Personal protective equipment** Medical PPE for exposured personnel	4	B	III	**Mostly effective**	Contractor shall develop and implement additional controls and rating post implementation of these additional controls.	NTCSA Inspections and Audits on Contractor	Contractor appointed responsible person	32-727 SHEQ Policy OHS Act, act 85 of 1993 Section 8(a-j)	Contractor to determine the date	Contractor to determine the date	N/A
	R	55	Reportable diseases, i.e. Malaria, Diphtheria, Rabies, Tetanus, Viral hepatitis, Yellow fever, Rheumatic / Congo fever	55,1	Contact with infectious fluids, blood,faeces, airborne pathogens,	Health	Failure to conduct awareness training on prevention and control of infectious diseases; Failure to conduct medical surveillance.	Eskom / contractor employees eg first aiders	Project Manager	6-8hours	LTI	**Elimination** Not Possible **Substitution** - Not Possible **Engineering controls** None **Administrative controls** OHS induction Awareness training, medical surveillance programme **Personal protective equipment** for exposured personnel Medical PPE	4	B	III	**Mostly effective**	Contractor shall develop and implement additional controls and rating post implementation of these additional controls.	NTCSA Inspections and Audits on Contractor	Contractor appointed responsible person	32-727 SHEQ Policy OHS Act, act 85 of 1993 Section 8(a-j)	Contractor to determine the date	Contractor to determine the date	N/A
	R	56	Infectious disease exposure i.e. Bacterial diarrhoea, Typhoid fever, Hepatitis A, Tinea.	56,1	Contact with infectious fluids, blood,faeces, airborne pathogens,	Health	Failure to conduct awareness training on prevention and control of infectious diseases; Failure to conduct medical surveillance.	Eskom / contractor employees	Project Manager	6-8hours	LTI	**Elimination** Not Possible **Substitution** - Not Possible **Engineering controls** None **Administrative controls** OHS induction Awareness training, medical surveillance programme **Personal protective equipment** for exposured personnel Medical PPE	4	B	III	**Mostly effective**	Contractor shall develop and implement additional controls and rating post implementation of these additional controls.	NTCSA Inspections and Audits on Contractor	Contractor appointed responsible person	32-727 SHEQ Policy OHS Act, act 85 of 1993 Section 8(a-j)	Contractor to determine the date	Contractor to determine the date	N/A
	R	57	HBA exposure in general work environment e.g Viruses - Tuberculosis, Bacteria – Anthrax in soil and Parasites – Tapeihook worms.;	57,1	Contact with infectious fluids, blood,faeces, airborne pathogens,	Health	Failure to conduct awareness training on prevention and control of infectious diseases; Failure to conduct medical surveillance.	Eskom / contractor employees	Project Manager	6-8hours	LTI	**Elimination** Not Possible **Substitution** - Not Possible **Engineering controls** None **Administrative controls** OHS induction Awareness training, medical surveillance programme **Personal protective equipment** for exposured personnel Medical PPE	4	D	I	**Mostly effective**	Contractor shall develop and implement additional controls and rating post implementation of these additional controls.	NTCSA Inspections and Audits on Contractor	Contractor appointed responsible person	32-727 SHEQ Policy OHS Act, act 85 of 1993 Section 8(a-j)	Contractor to determine the date	Contractor to determine the date	N/A
	R	58	Vulnerable persons i.e. Lactating women and pregnant employees;	58,1	Contact with infectious body fluids, eg saliva, blood,faeces,airborne pathogens,	Health	Failure to conduct awareness training on prevention and control of infectious diseases specifically for pregnant / lactating and vulnerable employees	Pregnant women, immune compromised employees	Project Manager	6-8hours	LTI	**Elimination** Not Possible **Substitution** - Not Possible **Engineering controls** None **Administrative controls** OHS induction Awareness training, medical surveillance programme **Personal protective equipment** for exposured personnel Medical PPE	4	B	III	**Mostly effective**	Contractor shall develop and implement additional controls and rating post implementation of these additional controls.	NTCSA Inspections and Audits on Contractor	Contractor appointed responsible person	32-727 SHEQ Policy OHS Act, act 85 of 1993 Section 8(a-j)	Contractor to determine the date	Contractor to determine the date	N/A
	R	59	Emergency personnel exposed to HBA	59,1	Contact with infectious body fluids, eg saliva, blood,faeces,airborne pathogens,	Health	Failure to adhere to processes and procedures for handling emergency situations.	Emergency personnel and first aiders	Project Manager	6-8hours	LTI	**Elimination** Not Possible **Substitution** - Not Possible **Engineering controls** None **Administrative controls** OHS induction Awareness training, medical surveillance programme, vaccination of first aiders and health care workers for Hepatitis A & B and flu vaccine. **Personal protective equipment** Medical PPE for exposured personnel	4	B	III	**Mostly effective**	Contractor shall develop and implement additional controls and rating post implementation of these additional controls.	NTCSA Inspections and Audits on Contractor	Contractor appointed responsible person	32-727 SHEQ Policy OHS Act, act 85 of 1993 Section 8(a-j)	Contractor to determine the date	Contractor to determine the date	N/A
Geotechnical Surveys & Pegging	R	60	Hand tools eg. Hammer, Machete	60,1	Body injuries	Safety	Incorrect work position; Impact between tools and surface; Defective equipment;	Contractor employee	Project Manager	6-8hours	LTI, MED	**Elimination** Not Possible **Substitution** - Not Possible **Engineering controls** None **Administrative controls** OHS induction Awareness training of employees in the use of hand tools like hammers, spanners, chisels etc; Provide protective cap for chisels Inspect before use; Provide non defective equipment; Quarantine defective equipment **Personal protective equipment** Full PPE	4	D	I	**Mostly effective**	Contractor shall develop and implement additional controls and rating post implementation of these additional controls.	NTCSA Inspections and Audits on Contractor	Contractor appointed responsible person	32-727 SHEQ Policy OHS Act, act 85 of 1993 Section 8(a-j)	Contractor to determine the date	Contractor to determine the date	N/A