


Occupational Health and Safety Baseline risk assessment template

Business/Operating unit:	Asset Management Project Execution: Installation and cabling for the ERTU Refurbishment at Drakensburg, Hillside, Rabbit and Lethabo substations	Next Review Date: 07 April 2022 (every 2 years):	Template identifier:
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Refer to Occupational Health and Safety Risk assessment procedure 32-520

List activity	Hazard Identification	Associated risk	Risk type	What are the possible consequences?	Existing Controls		Risk Priority Rating	RCE Risk Control Effectiveness	Control Owner	Legal and Other Requirements	
					Consequence	Likelihood					
List specific activities to be performed taking into consideration the equipment to be used, the personnel involved in the task.	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	Consider the worse case scenario without controls?	Include: - <u>Preventative Controls</u> (controls implemented to eliminate hazards or reduce the likelihood of the risk occurring), and - <u>Reactive Controls</u> (controls implemented to reduce the immediate impact of the risk occurring) Elimination Substitution Engineering controls Administrative controls Personal protective equipment (PPE)				Person allocated the responsibility for implementing the agreed controls	Where relevant, list the relevant legislative and or Eskom requirements that prescribe the control.	
Driving on Public Roads Transporting Employees	Vehicle Collision	Injuries Damage to property due to speeding, not adhere to road conditions including gravel roads and farm roads, not adhering to Traffic rules and safe driving techniques.	Safety	Vehicles and equipment damaged	Staff driving vehicles to have valid National driver's license, PDP Permits and Defensive driving techniques, Vehicles in roadworthy condition, Only transport authorised equipment in vehicle, Pre-trip checks, and Obeying of all traffic laws, Adherence to life saving rules.	4	C	II	Mostly effective	Construction workers Contractors Eskom Employees	ROAD TRAFFIC ACT, Internal contractor measures
	High jacking	Fatalities, injuries due to criminal act of vehicle hijacking and resistance as the substation is near "taxi rank" and residential area.	Safety	Fatalities	Staff driving vehicles to have valid National driver's license, PDP Permits and Defensive driving techniques, Vehicles in roadworthy condition, Only transport authorised staff in vehicle, Pre-trip checks, and Obeying of all traffic laws, Adherence to life saving rules.	4	D	I	Mostly effective	Construction workers Contractors Eskom Employees	ROAD TRAFFIC ACT, Internal contractor measures
	Members of Public Injuries		Safety	Injuries	Staff driving vehicles to have valid National driver's license, PDP Permits and Defensive driving techniques, Vehicles in roadworthy condition, Only transport authorised staff in vehicle, Pre-trip checks, and Obeying of all traffic laws, Adherence to life saving rules.	4	D	I	Mostly effective	Construction workers Contractors Eskom Employees	ROAD TRAFFIC ACT, Internal contractor measures,
	Members of Public Fatalities		Safety	Fatalities	Staff driving vehicles to have valid National driver's license, PDP Permits and Defensive driving techniques, Vehicles in roadworthy condition, Pre-trip checks, and Obeying of all traffic laws, Adherence to life saving rules.	4	D	I	Mostly effective	Construction workers Contractors Eskom Employees	ROAD TRAFFIC ACT, Internal contractor measures,
	Long distance driving	Injuries, fatalities, damage to property	Safety	Fatalities, injuries, damaged property	Pre-trip risk assessment, take breaks long the road and/or book accommodation if unable to continue to driven maximum allowable distance	4	D	I	Mostly effective	Construction workers Contractors Eskom Employees	ROAD TRAFFIC ACT, Internal contractor measures,
	Driving on Public Roads, gravel	Vehicle incidents, High Jacking of vehicles	Safety	Injuries, Property damage	Staff driving vehicles to have national driver's license, vehicles in roadworthy condition, required PDP permits transporting employees, only transport authorised staff in vehicle, pre-trip checks, and obeying of all traffic laws, Adherence to life saving rules. Correct vehicles for task at hand	3	3	II	Mostly effective	Construction workers Contractors Eskom Employees	ROAD TRAFFIC ACT, Internal contractor measures,

Installation and cabling for the ERTU Refurbishment at Drakensburg, Hillside, Rabbit and Lethabo substations	Confined work area, restricted work space. Electrical alive environment. Electrical interruption. Manhandling of equipment. Repetative work movement	Electrical contact. Falling from elevated position. Falling from Tower members, trips falls on site work. Falling of equipment from elevated level Fatalities, Injuries, damage to equipment due to uncontrolled work methods, unsafe work techniques. No direct supervision on employees and tasks.	Safety	Fatalities, Injuries and Damage of property	Competent personnel to execute scope of work. Method statements, safe work procedure, risk assessment to train employees on work to be executed. Risk identification done and respond measures put in place shared with employees on risks present. Direct supervision on employees for work. Water environment safe work procedures and emergencies identified and mitigated. Appointment of personnel in writing as per OHS Act. Regular audits, safety & project meetings	4	C	III	Mostly effective	Construction workers Contractors Eskom Employees	OHS Act 85 and the Regulations as amended to the act, COID Act, Eskom Safety specifications and requirements to scope of work as contracted, Contractor internal safety measures for scope of work, Internal Eskom Commercial selection process
	Equipment and material handling, physical work execution, lifting equipment by means of lifting devices. Machinery Excavation work, Dismantling of structures, building.	Fatalities, Injuries, damage to equipment due to uncontrolled work methods, unsafe work techniques. No direct supervision on employees and tasks.	Safety	Injuries of employees, members of public	Competent personnel to execute scope of work. Method statements, safe work procedure, risk assessment to train employees on work to be executed. Risk identification done and respond measures put in place shared with employees on risks present. Direct supervision on employees for work. Water environment safe work procedures and emergencies identified and mitigated.	4	C	III	Mostly effective	Construction workers Contractors Eskom Employees	OHS Act 85 and the Regulations as amended to the act, COID Act, Eskom Safety specifications and requirements to scope of work as contracted, Contractor internal safety measures for scope of work, Internal Eskom Commercial selection process
	Address soil erosion along the access roads	Injuries, damage to equipment due to uncontrolled work methods on erosion areas, unsafe work techniques. No direct supervision on employees and tasks.	Safety	Injuries of employees	Appointment of personnel in writing as per OHS Act.	2	B	IV	Mostly effective	Construction workers Contractors Eskom Employees	OHS Act 85 and the Regulations as amended to the act, COID Act, Eskom Safety specifications and requirements to scope of work as contracted, Contractor internal safety measures for scope of work, Internal Eskom Commercial selection process
	Crossing Electrical Eskom lines. Support (stone and concrete structures) constructed to either support the structure on steep slopes or protect the structure against erosion where applicable for line crossings.	Fatalities, Injuries, damage to equipment due to uncontrolled work methods, unsafe work techniques. No direct supervision on employees and tasks. Loss of line to network, material, delay in project, increase in project costs	Safety	Injuries of employees	Regular audits, safety & project meetings	4	C	III	Mostly effective	Construction workers Contractors Eskom Employees	OHS Act 85 and the Regulations as amended to the act, COID Act, Eskom Safety specifications and requirements to scope of work as contracted, Contractor internal safety measures for scope of work, Internal Eskom Commercial selection process

Laying and pulling cables between equipment and inside trenches	Fatalities, Injuries , damage to equipment due to uncontrolled work methods, unsafe work techniques. No direct supervision on employees and tasks.	Safety	Injuries and Falling from heights of employees	Competent personnel to execute scope of work. Method statements, safe work procedure, risk assessment to train employees on work to be executed. Risk identification done and respond measures put in place shared with employees on risks present. Direct supervision on employees for work. Water environment safe work procedures and emergencies identified and mitigated.	4	D	I	Mostly effective	Construction workers Contractors Eskom Employees	OHS Act 85 and the Regulations as amended to the act, COID Act, Eskom Safety specifications and requirements to scope of work as contracted, Contractor internal safety measures for scope of work, Internal ESKOM Commercial selection process
Opening of trenches, excavating underground trenches	Possibility of being bitten by snakes, bees or any animals. Back aches, falling into the trenches, being electructuted by live cables	Safety	Injuries of employees	Competent personnel to execute scope of work. Method statements, safe work procedure, risk assessment to train employees on work to be executed. Risk identification done and respond measures put in place shared with employees on risks present. Direct supervision on employees for work. Water environment safe work procedures and emergencies identified and mitigated.	4	C	III	Mostly effective	Construction workers Contractors Eskom Employees	OHS Act 85 and the Regulations as amended to the act, COID Act, Eskom Safety specifications and requirements to scope of work as contracted, Contractor internal safety measures for scope of work, Internal ESKOM Commercial selection process
Carry cables to the control room	Injuries, damage to equipment due to uncontrolled work methods, unsafe work techniques. No direct supervision on employees and tasks.	Safety	Injuries of employees	Competent personnel to execute scope of work. Method statements, safe work procedure, risk assessment to train employees on work to be executed. Risk identification done and respond measures put in place shared with employees on risks present. Direct supervision on employees for work. Water environment safe work procedures and emergencies identified and mitigated.	4	D	I	Mostly effective	Construction workers Contractors Eskom Employees	OHS Act 85 and the Regulations as amended to the act, COID Act, Eskom Safety specifications and requirements to scope of work as contracted, Contractor internal safety measures for scope of work, Internal ESKOM Commercial selection process
Install labels	Fatalities, Injuries , damage to equipment due to uncontrolled work methods at elevated positions, unsafe work techniques. No direct supervision on employees and tasks.	Safety	Injuries and Drowning of employees working with water envirenment	Competent personnel to execute scope of work. Method statements, safe work procedure, risk assessment to train employees on work to be executed. Risk identification done and respond measures put in place shared with employees on risks present. Direct supervision on employees for work. Water environment safe work procedures and emergencies identified and mitigated.	4	C	III	Mostly effective	Contractor Employer. Contractors Employers	OHS Act 85 and the Regulations as amended to the act, COID Act, Eskom Safety specifications and requirements to scope of work as contracted, Contractor internal safety measures for scope of work.
Site Rehabilitation.	Injuries , damage to equipment due to uncontrolled work methods, unsafe work techniques. No direct supervision on employees and tasks.	Safety	Injuries of employees	Competent personnel to execute scope of work. Method statements, safe work procedure, risk assessment to train employees on work to be executed. Risk identification done and respond measures put in place shared with employees on risks present. Direct supervision on employees for work. Water environment safe work procedures and emergencies identified and mitigated.	4	C	III	Mostly effective	Construction workers Contractors Eskom Employees	OHS Act 85 and the Regulations as amended to the act, COID Act, Eskom Safety specifications and requirements to scope of work as contracted, Contractor internal safety measures for scope of work.
Removal of damaged cables	Injuries , damage to equipment due to uncontrolled work methods, unsafe work techniques. No direct supervision on employees and tasks.	Safety	Injuries of employees	Competent personnel to execute scope of work. Method statements, safe work procedure, risk assessment to train employees on work to be executed. Risk identification done and respond measures put in place shared with employees on risks present. Direct supervision on employees for work. Water environment safe work procedures and emergencies identified and mitigated.	4	D	I	Mostly effective	Construction workers Contractors Eskom Employees	OHS Act 85 and the Regulations as amended to the act, COID Act, Eskom Safety specifications and requirements to scope of work as contracted, Contractor internal safety measures for scope of work, Internal ESKOM Commercial selection process
Entering and walking on trench covers (uneven surfaces)	Injuries due to falls and trips on same level	Safety	Injuries	No working on trenches as this might break the trench covers possibly resulting in injusries	2	C	II	Mostly effective	Construction workers Contractors Eskom Employees	Occupational Health and Safety Act, 1993 (Act No. 85 of 1993) section 8 (1): Employer shall provide and maintain as far as is reasonably practicable a working environment that is safe and without risk to the health of his employees.

Using appropriate PPE as per Hazard Identification Risk Assessment	Improper PPE usage Using incorrect PPE for task Using damaged, expired	Exposure to Covid-19, hazardous substances (cement, chemicals), snakes, spiders, scorpions, bees, etc.	Safety	Infections, unjuries, allergic reaction, fatalities	PPE inspection before undertaking task, SHE talks, safety induction, Risk Assessments (daily), Supervision, SMAT Behavioural Safety Observations, Job or Task Observations, etc.	2	B	IV	Mostly effective	Construction workers Contractors Eskom Employees	Occupational Health and Safety Act, 1993 (Act No. 85 of 1993) Regulation 3 of the Environmental Regulations for Workplaces.
Daily site activities and ergonomics at worksites	Unsafe posture positioning of employees during working activities, digging of excavations for structures	Injuries due to unsafe working positions within restricted work area	Health	Injuries and back problems, strains, muscular disorders	Correct work site layout, ergonomically designed tools for tasks, avoid long working sessions (allowing muscles to relax).	2	B	IV	Mostly effective	Construction workers Contractors Eskom Employees	Occupational Health and Safety Act, 1993 (Act No. 85 of 1993) Regulation 3 of the Environmental Regulations for Workplaces.
	Noise	Temporary hearing impairment. Total hearing impairment. Discomfort temporary	Health	Hearing Impairment	Risk of noise present identification to be done by Sawren Construction (i.e. check for close confined noise working areas).	2	B	IV	Mostly effective	Construction workers Contractors Eskom Employees	Occupational Health and Safety Act, 1993 (Act No. 85 of 1993) Regulation 3 of the Environmental Regulations for Workplaces.
Mobile plant, equipment and tools	Equipment usage on uneven ground surfaces, confined, restricted work areas, stringing of conductor, lifting of structures to assemble.	Damage to property due to uncontrolled activity , damage to property and equipment	Safety	Damage to equipment, Loss of tools, Damage to property	Ensure employees, operators are fully trained in operating plant and equipment and maintained under all operating circumstances	2	B	IV	Mostly effective	Construction workers Contractors Eskom Employees	Occupational Health and Safety Act, 1993 (Act No. 85 of 1993) Regulation 3 of the Environmental Regulations for Workplaces.
Working close to electrical alive conductors within enclosed work area environment	Equipment usage within confined space, lifting and moving of equipment near and under electrical live conductors, equipment , electrocution	Electrocution to employees,	Safety	Injury, fatality, Electrical Burns	Ensure employees, operators are fully trained in operating plant and equipment and maintained under all operating circumstances	4	C	II	Mostly effective	Construction workers Contractors Eskom Employees	Occupational Health and Safety Act, 1993 (Act No. 85 of 1993) ORHVS authorisation and working techniques.
	Electrical Operating and Switching (Operating Regulations for High Voltage Systems - ORHVS) NOT FOR CONTRACTOR APPOINTED	Fatalities, Injuries due to electrical contact.	Safety	Fatality. Electrical burns. Electrical system failure	SHE talks, safety induction, Risk Assessments (daily), Supervision, SMAT Behavioural Safety Observations, Job or Task Observations, etc.	3	C	II	Mostly effective	TX Eskom GMR 2.1	Occupational Health and Safety Act, 1993 (Act No. 85 of 1993) ORHVS authorisation and working techniques. Environment Legislative, COID Act
	Risk of Security Break In, Theft, Vandalism, shooting, violence as substation is close to residential/industrial area	Loss of equipment, material, delay in project, increase in project costs	Safety	Fatalities. injuries and loss of equipment. Project delays	Securing of equipment at a safe environment. Physical security to safeguard equipment on site.	3	C	II	Mostly effective	Principal Contractor Employer to ensure direct supervision is done on all activities during work execution.	Occupational Health and Safety Act, 1993 (Act No. 85 of 1993)
	Falling objects from elevated position	Loss of equipment, material, delay in project, increase in project costs, Injuries to employees	Safety	Fatalities, injuries and loss of equipment	Securing of equipment while working at elevated positions. Securing of equipment during climbing of structures. Securing of equipment during descending of structures.	2	B	IV	Mostly effective	Construction workers Eskom Employees	Occupational Health and Safety Act, 1993 (Act No. 85 of 1993)
Using of or hazardous chemical substances (cement, etc.)	Occupational diseases, illness contaminated intake / contact with substances	Illness, skin burns due to uncontrolled contact with substances. Inhalation from fumes exposure.	Health	Injury, illness, Occupational Diseases	SHE talks, safety induction, Risk Assessments (daily), Supervision, SMAT Behavioural Safety Observations, Job or Task Observations, etc.	3	C	II	Mostly effective	Construction workers Eskom Employees	Occupational Health and Safety Act, 1993 (Act No. 85 of 1993) ORHVS authorisation and working techniques. Environment Legislative, COID Act
Exposure to adverse weather patterns, direct sun, wind, rain and cold patterns	Illness to exposure to direct weather elements.	Illness, Sun Burn, Heat Stroke due to no protection and or controlling exposure risks.	Health	Injury, illness, Occupational Diseases, Heat Stroke from direct sun exposure long period of times	SHE talks, safety induction, Risk Assessments (daily), Supervision, SMAT Behavioural Safety Observations, Job or Task Observations, etc.	2	B	IV	Mostly effective	Construction workers Eskom Employees	Occupational Health and Safety Act, 1993 (Act No. 85 of 1993) ORHVS authorisation and working techniques. Environment Legislative, COID Act
General ventilation and extraction (only applicable if working inside building and/or confined space)	Occupational diseases, breathing challenges, not sufficient fresh air for breathing. COVID 19 CORONA VIRUS distance between employees.	Breathing challenges, choking, suffocating from breathing, toxicating gasses inhalation	Safety	Injury, illness, Occupational Diseases,	Direct Supervision over activities. Ensure natural ventilation are present, Working in confined area, dust controlling by additional ventilation ,Daily Toolbox Talks and safety awareness activities to be done with employees. Risk Identification done daily on work activities.	4	d	I	Mostly ineffective	Construction workers Eskom Employees	Occupational Health and Safety Act, 1993 (Act No. 85 of 1993) ORHVS authorisation and working techniques. Environment Legislative, COID Act
General lifting and physical Manhandling of components	Lifting machine unstable on soil. Collapsing of equipment. Uneven ground levels for lifting cable drums.	Injuries to employees, damage to equipment due to unsafe securing of lifting components	Safety	Injury, fatalities, Damage to properties	Direct Supervision over activities. Ensure Safe working methods are applied by employees, Daily Toolbox Talks and safety awareness activities to be done with employees. Risk Identification done daily on work activities.	4	C	II	Mostly effective	Construction workers Eskom Employees	Occupational Health and Safety Act, 1993 (Act No. 85 of 1993) ORHVS authorisation and working techniques.

Stacking and storage	Collapsing of stacking material	Injuries to employees, damage to equipment due to unsafe stacking methods of equipment. Uncontrolled stacking areas.	Safety	Injury, fatalities, Damage to properties	Good stacking and storage method and managing, control of area	3	B	III	Mostly effective	Construction workers Eskom Employees	Occupational Health and Safety Act, 1993 (Act No. 85 of 1993) .
Responding to a fire (still unannounced)- Emergency evacuation drills	Uncontrolled fire occur due to man-made and or hot work activities	Injuries to employees, member of public, damage to equipment due to uncontrolled hot work activities and igniting fire within environment.	Safety	Injury, Damage to properties, Wild life endangered	To adhere to EP plan for the construction site, work area	2	B	IV	Mostly effective	Construction workers Eskom Employees	Occupational Health and Safety Act, 1993 (Act No. 85 of 1993) . Environment Legislative. Eskom EMP
Using of Mobile Chemical ablution and toilet facilities	Unhygienic situation present	Illness, Diseases. Not regular cleaning of Mobile Chemical facilities. Over usage of Mobile facilities, more employees than available facilities.	Health	Illness, Occupational diseases	During Project good housekeeping and hygienic practises, Inspections done on facilities, regular maintenance on facilities agreement with supplier in place	1	B	IV	Mostly effective	Construction workers Eskom Employees	Occupational Health and Safety Act, 1993 (Act No. 85 of 1993) . Environment Legislative. Eskom EMP
Bush clearing	Insects species present	Injuries when attacked by species	Safety	Experience burning, pain, itching, redness, headache, rash, nausea, vomiting	Individuals to be aware of their status regarding allergies. Seek immediate emergency care for treatment. Treatment may include: Wash the area well with soap and water. Apply a cold or ice pack wrapped in a cloth, or a cold, wet washcloth to the site. Protect against infection. Elevate the site if the bite occurred on an arm or leg (to help prevent swelling). SHE talks, medical surveillance and situational awareness.	2	C	III	Mostly effective	Construction workers Eskom Employees	Occupational Health and Safety Act, 1993 (Act No. 85 of 1993) . Environment Legislative. Eskom EMP
	Bees Sting	Injuries to employees, information not available of allergic employees to bee stings. First aid treatment equipment not available. Fatalities	Safety	Allergic reaction i.e.. pain, redness. swelling, itching, sweating, anxiety, dizziness or fainting. Possible fatality.	Individuals to be aware of their status regarding allergies. Seek immediate emergency care for treatment. Treatment may include: Wash the area well with soap and water. Apply a cold or ice pack wrapped in a cloth, or a cold, wet washcloth to the site. Protect against infection. Elevate the site if the bite occurred on an arm or leg (to help prevent swelling). SHE talks, medical surveillance and situational awareness.	2	C	III	Mostly effective	Construction workers Eskom Employees	Occupational Health and Safety Act, 1993 (Act No. 85 of 1993) . Environment Legislative. Eskom EMP
	Snakes bites	Injuries to employees, fatalities once attacked by poisonous snakes	Safety	Shock, fever, fainting, rapid pulse and breathing difficulties and worse case fatality.	Leave snakes alone. Always be aware of your surroundings. Stay out of tall grass unless you wear thick leather boots. Keep hands and feet out of areas you cannot see. It is very important to try and note what the snake looked like (colour, size etc.).... to assist Medical Services or treating physician to establish what anti-venom to administer	2	c	III	Mostly effective	Construction workers Eskom Employees	Occupational Health and Safety Act, 1993 (Act No. 85 of 1993) . Environment Legislative. Eskom EMP
	Elevated Work, cable stringing and laying of cables. Connection cable work.	Injuries to Employees, Fatality	Safety	Fatality, Injury, Amputation, Bone fractures, Drowning in water	Trained competent employees, Health and safety compliance inspections, Appropriate PPE on site for using by employees, Daily Risk Assessments, Method Statements to task, Toolbox Talks.	4	D	I	Mostly effective	Construction workers Eskom Employees	Occupational Health and Safety Act, 1993 (Act No. 85 of 1993) . Environment Legislative. Eskom EMP
	During tea breaks and lunch breaks on site. Hygiene principals not followed, Lay down area not secured and approved for purpose of breaks, HV Environment, not barricaded, safe areas for breaks and resting	Illness to employees due to unhygienic site conditions.	Health	Medicals, Lost time injuries	Risk to be identified for breaks. Situational awareness to employees. Health and safety compliance inspections. Toolbox Talks to discuss Hygiene aspects.	1	B	IV	Mostly effective	Construction workers Eskom Employees	Occupational Health and Safety Act, 1993 (Act No. 85 of 1993) . Environment Legislative. Eskom EMP
	During digging / drilling of holes manual or machine excavation.	Injuries to employees due to incorrect manhandling of digging tools and equipment.	Safety	Medicals, Lost time injuries	Risks to be identified for trench digging and stockpiling excavated soil away from trench edges. Situational awareness to employees. Health and safety compliance inspections. Toolbox Talks to discuss drilling - digging tasks.	1	B	IV	Mostly effective	Construction workers Eskom Employees	Occupational Health and Safety Act, 1993 (Act No. 85 of 1993) . Environment Legislative. Eskom EMP

	Damage to underground services	Damage to cables due to unidentified underground services , damage to and equipment	Safety	Medicals, Lost time injuries. Damage to equipment.	Risks to be identified before digging trenches and stockpiling soil away from trench edges. Situational awareness to employees. Health and safety compliance inspections. Toolbox Talks to discuss drilling - excavation, digging tasks.	1	B	IV	Mostly effective	Construction workers Eskom Employees	Occupational Health and Safety Act, 1993 (Act No. 85 of 1993) . Environment Legislative. Eskom EMP
	Laying of cables	Injuries to employees due to incorrect manhandling of cables and pulling of cables to be connected to equipment.	Safety	Medicals, Lost time injuries	Risks to be identified for laying and pulling cables. Situational awareness to employees. Health and safety compliance inspections. Toolbox Talks to discuss safe cabling work tasks.	1	B	IV	Mostly effective	Construction workers Eskom Employees	Occupational Health and Safety Act, 1993 (Act No. 85 of 1993) . Environment Legislative. Eskom EMP
	Damage to adjacent infrastructure. Rail electrical lines, Eskom lines	Loss of supply, Injuries to employees due to incorrect/unsafe working procedures	Safety	Loss of supply. Damage to equipment.	Risks to be identified for restricted work space. Situational awareness to employees. Toolbox Talks to discuss safe methods and risks present for tasks at hand. Safe work clearances should always be managed	1	B	IV	Mostly effective	Construction workers Eskom Employees	Occupational Health and Safety Act, 1993 (Act No. 85 of 1993) . Environment Legislative. Eskom EMP

	Removal of old equipment, cables	Loss of supply, Injuries to employees due to incorrect/unsafe working procedures	Safety	Damage to equipment. Injuries to employees	Risks to be identified for restricted work space. Situational awareness to employees. Toolbox Talks to discuss safe methods and risks present for tasks at hand. Safe work clearances should always be managed	1	B	IV	Mostly effective	Construction workers Eskom Employees	Occupational Health and Safety Act, 1993 (Act No. 85 of 1993) . Environment Legislative. Eskom EMP
	Electrocution from Induction from existing networks	Loss of supply, Injuries to employees due to incorrect/unsafe working procedures	Safety	Fatality, Damage to equipment. Injuries to employees	Risks to be identified for presence of induction (electricity) within restricted work space. Earthing for safe working practice to be applied. Situational awareness to employees. Toolbox Talks to discuss safe methods and risks present for tasks at hand. Safe work clearances should always be managed	4	D	I	Mostly effective	Construction workers Eskom Employees	Occupational Health and Safety Act, 1993 (Act No. 85 of 1993) . ORHVS Systems Regulations
	Risk of being electrocuted by not creating Equipotential zones around the earth-peaks, winches and tensioners, etc.	Loss of supply, Injuries to employees due to incorrect/unsafe working procedures	Safety	Fatality, Damage to equipment. Injuries to employees	Risks to be identified for presence of induction (electricity) within restricted work space. Earthing for safe working practice to be applied. Situational awareness to employees. Toolbox Talks to discuss safe methods and risks present for tasks at hand. Safe work clearances should always be managed	4	D	I	Mostly effective	Construction workers Eskom Employees	Occupational Health and Safety Act, 1993 (Act No. 85 of 1993) . ORHVS Systems Regulations
	Outage delays due to network constraints. Project delays due to accesses not being granted by Tx control / road closures not granted / work taking place over weekends	Project Delay for completion. Recording and monitoring system faulty. Incorrect readings on faults	Safety	Unplanned demand of electricity. No outage available as planned. Communication breakdown.	Risks for outages to be identified on a continuous basis and communication with outage scheduler on system constrains. Situational awareness to employees. System Ops requested to conduct network analysis to determine the viability of outages.	4	D	I	Mostly effective	Contractor Employer. Site manager appointed for works. TX Grid GMR.2.1	Outage schedule process
	Risk of D400, D20 cabinet, panels in the control and carrier rooms damaged, stolen.	Injuries to employees ascending and descending wooden structures/ steel structures carrying equipment, tools in restricted space. Slip and falls	Safety	Injuries to employees re-assembling structures. Loss of equipment. Delay of project.	Risks to be identified for damaged, aged, theft of new equipment. Situational risks identifying and awareness to employees. Toolbox Talks to discuss safe methods and risks present for tasks at hand. Safe work practises should be adhered too always.	2	B	IV	Mostly effective	Principal Contractor project manager appointed to ensure task specific risks are included in identifying structures risks.	Occupational Health and Safety Act, 1993 (Act No. 85 of 1993) . ORHVS Systems Regulations
Storing equipment and material during construction	Not securing safe storage of equipment and material	Loss of equipment, material, delay in project, increase in project costs	Safety	Injuries, Loss of equipment	Risk to be identified, secure equipment in identified security areas, Physical security to be present, Health and safety compliance inspections, Method Statements to task, Toolbox Talks.	2	B	IV	Mostly effective	Principal Contractor project manager appointed to ensure task specific risks are included in identifying structures risks.	Occupational Health and Safety Act, 1993 (Act No. 85 of 1993) . Environment Legislative.
Step Ladders	Ladders usage to elevated platform work areas	Injuries to employees ascending and descending ladders carrying equipment, tools in restricted space. Slip and falls	Safety	Injuries of employees	Risk to be identified, holding onto ladders, supporting ladders safely. Health and safety compliance inspections, Toolbox Talks and situational safety awareness for walking on site.	2	B	IV	Mostly effective	Principal Contractor project manager appointed to ensure task specific risks are included in identifying structures risks.	Occupational Health and Safety Act, 1993 (Act No. 85 of 1993) . Environment Legislative.
Members of Public Labour Unrest	Unrest and violence work stoppages	Scenery Park unemployed community members seeking job interrupt construction	Safety	Medicals, Lost time injuries, work activities delays. Project delays	Risk to be identified, secure equipment in identified security areas, Physical security to be present, Emergency plan to cater for such situations, Toolbox Talks. Situational awareness to employees	3	C	II	Mostly effective	Principal Contractor project manager appointed to ensure EP plan and risks identified are upated and communicated, SAPS and emerency services	Occupational Health and Safety Act, 1993 (Act No. 85 of 1993)
Using of toilet facilities	Poor hygiene	Unhygienic environment, toilets not cleaned regularly, cleaning after use not done	Health	Infections, diseases, bacterial/viral infection	Housekeeping, good hygiene practices, Biochemical toilets emptied regularly	2	B	IV	Mostly effective	Pricipal Contractor, Eskom	Facilities Regulation 2: (Sanitation). Facilities Regulation 5: (Dining Rooms).

Risk of being infected by COVID- 19 CORONA VIRUS	Access control	Infected employees and visitors may enter the site operations or offices	Health	Local transmission of the virus to exposed employees	Screen using infrared temperature thermometers . Appropriate PPE for employees conducting screening tests. Deactivation of biometrics testing at entrances.	5	E	I	Effective	Pricipal Contractor, Eskom	<ol style="list-style-type: none"> 1. On entry to all workplaces, strict hygiene protocols are implemented such as that of washing hands with soap and water or using a sanitizer. 2. In addition, social distancing is enforced. 3. Prohibit Employees or Visitors from entering Offices or Premises, if they had travelled to areas that have wide-spread or ongoing transmission of COVID-19. 4. Prohibit Employees or Visitors from entering Offices or Premises, if they had been in contact with people who have tested positive for Covid_19 or showing syptoms of exposure to COVID 19. 5. A confirmation that Employees and Visitors have completed the Covid_19 self-assessment questionnaire by Security at the entrance. 6. A Record with confirmation of daily Employees' and Visitors' Temperature to be kept by Security at the entrance. 7. On entry employees or visitors entering the premises to put on appropriate PPE. 8. Display signages indicating Social Distancing requirement at common areas. 9. Provide training on the use, maintenance and disposal of PPE.
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	Alcohol Breathalyser Testing	Contact with infected droplets during breathalysing.	Health	Covid_19 Local transmission.	Use of masks and wearing of gloves by Security Personnel.	5	E	I	Effective	Pricipal Contractor, Eskom	<ol style="list-style-type: none"> 1. Visual Screening for alcohol abuse. 2. If appearing positive to alcohol abuse, a breathalysing machine that has a disposable straw to be used to confirm.
	Workers exposed to infected person/s or objects (workplace surfaces, door handles, etc)	Lack of worker education and Health or Hygiene Awareness in respect of control measures for all employees, contractors, suppliers and visitors.	Health	Infected Employee/s with COVID-19. Closure of business premises for decontamination of building. All employees at affected areas in the building are to be isolated.	Employee awareness and health/hygiene protocols adopted for all employees, contractors, suppliers and visitors.	5	E	I	Effective	Pricipal Contractor, Eskom	<ol style="list-style-type: none"> 1 Hygiene Control Practices, regular hand washing using soap & water for 20 seconds or hand sanitizers. 2. Instructions for anyone with COVID-19 symptoms to inform their line manager and follow the protocol for self isolation. 3. Workplace cleanliness and hygiene with disinfectants. 4. Social distancing, all employees to ensure that they keep a distance of 2 meters apart when interacting with their fellow colleagues or other persons. This applies to all meetings as well. 5. Wearing of cloth face masks at all times. 6. Regular sanitizing of workplace surfaces. 7. Display signages indicating Social Distancing requirement at common areas.
	Social Interactions	Employees / Visitors not following social distancing protocols. [This also applies to social interactions outside of the workplace as well.]	Health	Employee(s) may come into close contact with affected employees or visitors that are Symptomatic or Asymptomatic to COVID-19. Local transmission of the virus is highly probable.	Stringent Hygiene and Social Distancing Protocols in place Wearing face masks at all times	5	E	I	Effective	Pricipal Contractor, Eskom	<ol style="list-style-type: none"> 1. Instructions for anyone with COVID-19 symptoms to inform their line manager and follow the protocol for self isolation. 2. Social distancing, all employees to ensure that they keep a distance of 2 meters apart when interacting with their fellow colleagues or other persons. This applies to all meetings as well. 3. All large gatherings (meetings and other events) should be held using Microsoft Team ,VC or other similar means 4. Employees are encouraged to report all social interactions that are not compliant to their BU COVID 19 Compliance Officer. (e.g. tea areas, pause areas, canteens, etc) 5. Display signages indicating Social Distancing requirement at common areas. 6. Limit the number of employees at common areas such as tea-rooms, reception areas and canteens. 7. Social interactions which are not work related should be limited as far as possible. 8. Warning signs for social distance and wearing of masks to be displayed
	Ways of Working (working on close proximity to each other)	Current ways of working may have the potential, for local transmission of the virus.	Health	Employees are not aware of the potential risks from Covid-19 and become infected due to a lack of awareness of control measures.	Employee awareness and health/hygiene protocols adopted for all employees, contractors, suppliers and visitors.	5	E	I	Effective	Pricipal Contractor, Eskom	<ol style="list-style-type: none"> 1. Determine alternative work-plans for essential and operational staff members. 2. Discourage non essential meetings and visitors. 3. Keep all large meetings virtual (Microsoft team, VC). 4. Offer employees the flexibility to work from home where possible. 5. Provision of PPE(face masks)and enforcement of compliance. 6. Use of sanitizers on touched surfaces, shared equipment and tools. 7. Conduct COVID-19 personal self-assessment questionnaire and temperature screening before starting work. 8. Display signages indicating Social Distancing requirement at common areas. 9. Develop Safe Working Instructions.

	Personal Hygiene	<p>1. Poor workplace and employee hygiene may lead to people in the workplace becoming sick, with weaker immunity, thus having lower resistance in dealing with COVID-19.</p> <p>2. If one is too close to any person who coughs or sneezes, they spray small liquid droplets from their nose or mouth which may contain the virus.</p> <p>3. If one is too close, you can breathe in the droplets, including the COVID-19 virus if the person coughing or sneezing is infected or has the disease.</p>	Health	<p>1. Employees not ensuring workplace cleanliness and personal hygiene with disinfectants (washing of hands with soap and water or utilising hand sanitizers).</p> <p>2. Employees having no courtesy for other employees with they cough or sneeze.</p> <p>3. Employees not utilising masks.</p> <p>4. Poor or lack of adequate cross ventilation.</p>	<p>1. Ensuring employees are provided with and have access to consumables, i.e. cleaning materials such as soap and disinfectants, sanitizers & relevant PPE.</p> <p>2. Employees to embrace good hygiene etiquette when coughing or sneezing.</p> <p>3. Employees always having on their masks at all times.</p>	5	E	I	Effective	Principal Contractor, Eskom	<p>1. Continuous communication of policies around safety / precaution in a simple readable format.</p> <p>2. Regularly and continuous washing of hands with soap and water for 20 seconds or the use of 70% or above alcohol-based sanitizer.</p> <p>3. Sanitising workplaces on a more frequent basis.</p> <p>4. Deep clean for affected areas / workspaces.</p> <p>5. Employees to always have their masks on and ensure to cover their mouth & nose with a flexed elbow or tissue when coughing or sneezing - they must then flush the used tissue in the toilet and thoroughly wash their hands with soap and water or use a hand-sanitizer.</p> <p>6. Provision of adequate ventilation.</p>
	Employee Wellness	<p>Employees having flu-like symptoms or other medical conditions due to having been in contact with Symptomatic, Asymptomatic or with people that have travelled to high risk areas.</p>	Health	<p>1. Employees not being aware of the need to self-isolate when they have symptoms of the COVID-19 virus.</p> <p>2. Employees not being aware that they were in contact with an infected person.</p> <p>3. Employees having symptoms but not self-isolating.</p>	<p>1. Continual awareness on employee well-being awareness.</p> <p>2. Employees to follow the GUIDELINES ON MANAGEMENT OF VULNERABLE EMPLOYEES DURING COVID-19 PANDEMIC</p>	5	E	I	Effective	Principal Contractor, Eskom	<p>1. Employees to self isolate-quarantine.</p> <p>2. Employees seek medical advice when they experience symptoms.</p> <p>3. Those employees who are unwell to contact their direct line managers / supervisors and report their illness or symptoms sustained and only return to work when they are well.</p> <p>4. Employees should exercise common courtesy and not travel with other employees when they are feeling unwell or having symptoms.</p> <p>5. Employees should avoid touching their faces, mouths and noses.</p>
	Employees diagnosed with COVID-19.	<p>Employees have tested positive after being in contact with infected people, or having travelled to high risk areas.</p>	Health	<p>1. Employees are immediately subjected to self-quarantine / isolation.</p> <p>2. Employees not self isolating after testing positive and infecting others</p>	<p>1. On testing positive, the employee will be notified by the National Institute of Communicable Diseases (NICD) or other relevant SA Health Departments and put the employee into quarantine at home or at a facility designated to manage the outbreak.</p>	5	E	I	Effective	Principal Contractor, Eskom	<p>1. The employee will remain in quarantine / isolation until repeat testing shows that he/she no longer has the virus.</p> <p>2. Employees who tested positive must be monitored for case management and to ensure that they don't report for work</p> <p>3. All employees who tested positive must notify health and wellness / eskom doctor</p>
	Transportation of workers in Pool Vehicles	<p>1. Normal vehicle occupancy is not in line with safe protocols relating to COVID-19.</p> <p>2. Inadequate hygiene controls due to employees not following hygiene measures whilst traveling in vehicles.</p>	Health	<p>1. Close contact between employees whilst travelling poses a risk of COVID-19 transfer as the virus spreads through Asymptomatic Persons as well.</p> <p>2. Vehicle contaminated with Covid_19 virus.</p>	<p>1. Management to implement measures pertaining occupancy of light driven vehicles. (Bakkies and Mini-buses).</p> <p>2. Sanitizers to be provided for employees to use on embarking and disembarking of Pool vehicles.</p>	5	E	I	Effective	Principal Contractor, Eskom	<p>1. A maximum of not more than 50% loading capacity for a sedan or a single cab bakkie.</p> <p>2. A maximum of not more than 70% loading capacity for a minibus.</p> <p>3. Employees are compelled to use the hand sanitizers provided prior to embarking and disembarking of Eskom Pool vehicles.</p> <p>4. Assigned drivers to ensure vehicles are cleaned and disinfected before and after disembarking.</p> <p>5. Pool vehicle occupants must wear masks while in the vehicle</p>
	Employees using Public Transportation (Taxi's & Buses)	<p>1. Normal vehicle occupancy is not in line with safe protocols relating to COVID-19.</p> <p>2. Inadequate hygiene controls.</p>	Health	<p>1. Close contact between employees whilst travelling poses a risk of COVID-19 transfer as the virus spreads through Asymptomatic Persons as well.</p> <p>2. Employees exposed to poor hygiene conditions that are present in taxi's and buses.</p>	<p>1. The Transport Minister prescribed that taxi association and bus operators commit to rigid hygiene measures as well as the provision of hand sanitizers for all passengers.</p> <p>2. Wearing of masks by all passengers.</p> <p>3. Limiting the load capacity of passengers.</p>	5	E	I	Effective	Principal Contractor, Eskom	<p>1. Compliance to internal taxi associations may not be met as stated, and therefore management will minimise exposure by allowing certain staff members using taxi's or other public transportation means to remain home as the pandemic intensifies.</p> <p>2. Employees should refuse to board public transport where hygiene measures are not adhered to.</p>

	Operating of Mobile and Fixed Plant	1. Inadequate hygiene control / poor housekeeping. 2. Operators not following stringent hygiene controls when operating mobile and fixed plant.	Health	1.Operators not following stringent hygiene controls when operating mobile and fixed plant contracting Covid_19 and infecting other employees.	Hand sanitizers & masks provided for Operators to use whilst operating plant.	5	E	I	Effective	Pricipal Contractor, Eskom	1. Operators are compelled to use the hand sanitizers provided for regular use. 2. Assigned operators to ensure the mobile plant or fixed plant stations are cleaned and disinfected before and after use. 3. Management to implement stringent hygiene control measures for the operation of mobile and fixed plant. 4. Develop Safe Working Instructions.
	Portable Equipment and Tools &/ Shared Computer Operations such as Control Units	Inadequate hygiene measures taken when using portable equipment and tools &/ Shared Computer Operations such as Control Units	Health	Employees using portable equipment and tools &/ Shared Computer Operations such as Control Units not disinfecting equipment and tools prior & after use contracting Covid_19 and infecting other employees.	Hand sanitizers provided for Employees to use regularly during operations.	5	E	I	Effective	Pricipal Contractor, Eskom	1. Employees are compelled to use the hand sanitizers provided for regular use. 2. Assigned operators to ensure the shared equipment and tools are cleaned and disinfected before and after use. 3. Management to implement stringent hygiene control measures for the operation of portable equipment and tools &/ Shared Computer Operations such as Control Units. 4. Develop Safe Working Instructions.
	Sleeping over using guest accomodation during emergencies	Coming into contact with infected person(s) or contaminated surfaces / clothing / bedding	Health	Contact with Covid_19 virus resulting in people getting sick	1. Use of sanitisers. 2. Wearing of masks.	5	E	I	Effective	Pricipal Contractor, Eskom	1. Request for a cleaning and disinfection register. 2. Clean the surfaces are within reach with water and soap or with a sanitiser.