

Business/Operating unit:		Tutuka Refurbishment and Construction Project										Department:		GCD Tutuka Refurbishment and Construction Project - Continuous Ash Disposal Facility Project										Next Review Date (every 2 years):		01-Apr-22		Template identifier:		240-70044602															
Date: 01-Oct-21												Prepared by:		Tutuka Refurbishment Risk Assessment Team										Authorised by:		Name: Tumelo Mosikili		Designation: Site Project Manager (Acting)		Signed:		Revision number: 1		Revision date: 01-Oct-24											
																										Date: 01-Oct-21																			
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	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.	6	Anything with potential to cause of harm. Note: A hazard can pose more than one risk.	6	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: i. in place, ii. implemented, iii. 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?	Inadequate - Preventative Controls (controls implemented to eliminate hazards or reduce the likelihood of the risk occurring), and - Detection Controls (controls implemented to reduce the immediate impact of the risk occurring) Elimination Substitution Engineering controls Administrative controls Personal protective equipment (PPE)				Inadequate - Preventative Controls (controls implemented to eliminate hazards or reduce the likelihood of the risk occurring), and - Detection Controls (controls implemented to reduce the immediate impact of the risk occurring) Elimination Substitution Engineering controls Administrative controls Personal protective equipment (PPE)	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 cannot be changed	Pending, In Progress, Complete	Where applicable, add IRM system reference number for tracking of treatment actions.																							
Site Establishment	R	1	Unsafe methods utilized for the loading (Supplier/hauser) and unloading of office buildings and containers	1.1	Mobile office buildings shelling or being dropped	Safety	Untrained employees, Using untrained lifting equipment, No safe working statement, No supervision	Employees, Visitors	Site Project Manager	On occurrence	Fatality, Lost time incident, Medical incident	Risk assessments are conducted and method statements are developed for each task	5	B	II	Mostly effective	All risk assessments and method statements are evaluated for completeness prior to activities being authorized. Riggers conduct rigging studies prior to the lifting taking place. Manhole gaskets are used at all times when loads are lifted or lowered. A competent person is used to guide the load to the desired place.	The Master Documents Register indicates that all risk assessments & method statements have been adequately compiled and accepted by the client	Safety Department, Rigger	CHNS Act section 8, CR 2014 regulation Client Safety Specification, Contractor Safety Plan																									
	R	2	Insufficient laydown areas or space designated for project purposes	2.1	Congestion of buildings & vehicles at the site office	Safety	Poor planning & design	Employees, Visitors	Site Project Manager	On occurrence	Fatality, Lost time incident, Medical incident	Planning & design of laydown areas are conducted, Scope of works include site laydown areas and camps	5	A	II	Mostly effective	An evaluation is conducted of the Laydown areas and site camps prior to awarding contracts and/or commencing activities	Inspections & Audits indicate sufficient spacing allocations within working areas, laydown areas and site camps	Project Manager, Designer	CHNS Act section 8, Client Safety Specification, Client Contract Data, Contractor Safety Plan																									
	R	3	Location of underground services unknown	3.1	Damage to existing services (water, sewerage & electricity)	Safety	No services mapping/drawings, Not conducting underground services surveys to determine the location of underground services	Employees, Visitors	Site Project Manager	On occurrence	Fatality, Lost time incident, Medical incident	Underground services maps are included in contractual documents, Underground surveys are conducted prior construction to determine if there are any underground services	5	B	II	Mostly effective	Underground services drawing to be provided to the contractor in order to avoid damage to services. Area to be scanned prior work	No incident are reported involving the damaging of hidden underground services	Supervisors	Environmental Management Plans (EMPs), Water Use License (WUL), Integrated Environmental Authorization (IEA), Client Safety specifications																									
	R	4	Uneven ground surfaces for the setting out of mobile site offices	4.1	Mobile site offices losing footing/stability and falling over the side.	Safety	Loosing footing/stability	Employees	Site Project Manager	On occurrence	Fatality, Lost time incident, Medical incident	Inspections by a competent person before site establishment commences, Designs to be approved prior to site establishment/commence	5	B	II	Fully effective	Site laydown areas are grubbed and prepared prior to site establishment. A Civil Engineer monitors and approves the foundations prior to the erection of buildings/Pathrooms	Site laydown areas are grubbed and prepared prior to site establishment. A Civil Engineer monitors and approves the foundations prior to the erection of buildings/Pathrooms	Construction Manager, Supervisor	National Building Regulations, CR 2014 regulation 16 A 1																									
Connecting Power to the Pathroom Offices	R	5	No electrician available to authorize electrical connections	5.1	Electrical supply utilized without C.O.C's	Safety	Non-compliance to legal & Eskom requirements	Employees	Site Project Manager	On occurrence	Fatality, Lost time incident, Medical incident	Legislation, Supervision, Training, Procedures, Safety specification, Appointed & authorized electricians	5	B	II	Fully effective	Method statements to ensure that no electrical connections are lowered up and offset prior to then receiving a C.O.C from an electrician by the contractor	Audits indicate that all electrical installations have been issued with a valid C.O.C by a competent and authorized person	Electrician & Supervisors	Electrical Installations Regulations, CR 2014 regulation 24, Client Safety Specification, Contractor Safety Plan																									
De-establishing Site Laydown Areas	R	6	Electrical points not de-energized before disconnecting supply points	6.1	Employees & Contractors can come into contact with live electrical points	Safety	No procedure, Poor supervision, No inspection	Employees, Visitors	Site Project Manager	On occurrence	Fatality, Lost time incident, Medical incident	Legislation, Training, Supervision, Procedures, Safety specification, Lock-out procedure, Life-saving Rules	5	B	II	Mostly effective	Method statements to ensure that all electrical connections are de-energized and locked-out prior to work commencing. Contractor to submit a site de-establishment plan that the client shall approve prior doing site de-establishment	No incidents are reported during site de-establishment	Electrician & Supervisors	CR 2014 regulation 24, Electrical Installations Regulations, Client Safety Specification, Contractor Safety Plan																									
	R	7	Unsafe methods utilized for the loading (Site laydown area) of office buildings and containers for removal from site	7.1	Mobile office buildings can slip out of control or strike observers standing close-by	Safety	Untrained employees for the lifting of buildings and containers, No method statement developed and accepted, No supervision	Employees, Visitors	Site Project Manager	On occurrence	Fatality, Lost time incident, Medical incident	Legislation, Rigging study, Training, Supervision, Procedures, Method statements, Safety specification	5	B	II	Mostly effective	Rigging study to be conducted for each lifting & rigging operation when de-establishing site	Audits & inspections identify that rigging studies are adequate and on site	Rigger and Safety Officer	Crane Machinery Regulations, LK, Escalator & Passenger Conveyor Regulations, Client Site use of lifting machines and lifting ladders Procedure - 39-98, Client Safety Specification, Contractor Safety Plan																									
Construction and installation of Refueling bays	R	8	Installations not done as per the local authorities requirements.	8.1	Non approval from the municipal Fire Chief for the safe storage of fuels on the construction site	Safety	Requirements for the storage of fuels unknown, Non-compliance to the requirements for fuel storage	Employees, Visitors	Site Project Manager	Daily	Fatality, Environmental incidents	Municipal By-law define what requirements are needed for the safe storage of fuels on the construction site	5	A	II	Fully effective	A municipal permit has been granted for the safe storage of fuel at the Contractor Site Camp Yard	No incidents are reported regarding the storage of fuels within the fuel storage facility	Supervisor, Tutuka PS Fire Chief/Master Safety Officer	CHNS Act section 8, HCS Regulations, CR 2014 regulation 5 & 7, Municipal By-laws, Client Safety Specification, Contractor Safety Plan																									
	R	9	No bundwall and spillage containment capacity	9.1	Uncontained leakage of fuels	Safety	Requirements for the storage of fuels unknown, Non-compliance to the requirements for fuel storage	Employees, Visitors	Site Project Manager	Daily	Environmental incidents i.e. Spillages	Municipal By-law define what requirements are needed for the safe storage of fuels on the construction site	4	A	II	Fully effective	A method statement & risk assessment is to be developed for the storage of fuels on site and bundwall and spillage containment volumes & measures must be included	No incidents are reported regarding the ignition of fuels within the fuel storage facility	Supervisor, Tutuka PS Fire Chief/Master Safety Officer	CHNS Act section 8 & 7, Municipal By-laws, Client Safety Specification, Contractor Safety Plan																									
	R	10	Insufficient fire fighting equipment on site	10.1	Ability to fight possible fires	Safety	Insufficient fire fighting equipment on site, No complaints fire fighters	Employees, Visitors	Site Project Manager	Daily	Environmental incidents i.e. Spillages	Municipal By-law define what requirements are needed for the safe storage of fuels on the construction site. The Contractor to conduct monthly inspections on all fire-fighting equipment. Tutuka Fire Officer(s) are welcome to conduct verification audits	4	A	II	Mostly effective	A municipal permit has been granted for the safe storage of fuels at the Contractor Site Camp Yard. The Client SHE Specification requires fire fighting equipment to be checked in line with legislation and Eskom requirements	No incidents are reported regarding the ignition of fuels within the fuel storage facility	Supervisor, Tutuka PS Fire Chief/Master Safety Officer	CHNS Act section 8, HCS Regulations, CR 2014 regulation 5 & 7, Municipal By-laws, Client Safety Specification, Contractor Safety Plan																									
Controlling Access to the Construction Site	R	11	No project specific induction developed and/or implemented	11.1	Employees/visitors/vendors access site without undergoing a project specific induction	Safety	Power station induction does not include the project specific risks, Non-compliance to legal & Eskom requirements	Employees, Visitors, Public	Site Project Manager	Per project	Fatality, Lost time incident, Medical incident	All employees undergo a Power Station induction. Project specific induction prior to be issued with access rights to the construction site. Visitors undergo a Power Station visitors induction prior to being allowed access to the construction site	5	C	II	Mostly effective	A site specific induction programme to be developed by the Contractor, based on the risks identified in the Baseline Risk Assessment & the scope of work for the particular project	Audits indicate that all employees have undergone site specific inductions	Safety Officer	CR 2014 regulation 7, Client Safety Specification, Contractor Safety Plan																									
	R	12	Limited or no access control on site	12.1	Persons gain unauthorized access to site	Safety	Poor access control measures, Poor supervision, Limited staffing requirements, Non-compliance to legal & Eskom requirements	Employees, Visitors, Public	Site Project Manager	Daily	Fatality, Property damage	Legislation, Training, Procedures, Safety specification, Security is present on the construction site 24/7	5	C	II	Mostly effective	Access control to be fully implemented and operational during construction activities	No persons are found having entered the construction illegally	Project Manager, Security Department	CR 2014 regulation 27, Client Safety Specification, Contractor Safety Plan																									
	R	13	Baricading around site areas is not erected according to legislation & Eskom requirements	13.1	Persons gain unauthorized access to working areas	Safety	Correct type of baricading unavailable, Baricading standard insufficient, Non-compliance to legal & Eskom requirements, Lack of supervision	Employees, Visitors	Site Project Manager	Daily	Fatality, Lost time incident, Medical incident	Legislation, Training, Supervision, Procedures, Client SHE Specification	5	C	II	Mostly effective	Effective man-proof baricading to be erected around the working areas. Baricading standard to be developed & included in the Contractor Safety Plan with effective fencing	Audit & inspection indicate the the construction site is adequately baricaded with effective fencing	Supervisors and Safety Department	CR 2014 regulation 27, Client Safety Specification, Contractor Safety Plan																									
	R	14	Insufficient or no safety signs are posted as required by legislation & Eskom requirements	14.1	Person accessing site not informed about site rules	Safety	No signage available, Standard for signage not implemented, Non-compliance to legal & Eskom requirements, Poor supervision	Employees, Visitors	Site Project Manager	Daily	Lost time incident, Medical incident	Legislation, Training, Supervision, Procedures, Client SHE Specification	4	C	II	Mostly effective	Adequate safety signage to be conspicuously displayed in all languages, Signage to be covered in the induction programme	No issues raised during inspections & audits	Safety Department	General Safety Regulation 26, SABS Standards, Client Safety Specification, Contractor Safety Plan, Transport Management Plan																									
	R	15	The alcohol tester is faulty	15.1	Employees under the influence of an intoxicating substance gain access to the construction works	Safety	No maintenance or calibration of the instrument, Incompetent persons utilized for the testing of an intoxicating substance	Employees, Visitors, Public	Site Project Manager	Daily	Lost time incident, Medical incident	Calibration tests are conducted as per the OEM requirements	4	C	II	Mostly effective	Alcohol testers are sent for maintenance by the OEM	Calibration tests are conducted and results are to be in a state of good repair	Construction Manager	Construction Regulations (2014), SABS Standards, Client Safety Specification, Contractor Safety Plan																									
Managing Occupational Health & Hygiene	R	16	Medical screening done without a risk based person job specification	16.1	Employees medical status is not fully assessed per employee risk exposures	Health	Medical screening process not updated, Non-compliance to Eskom medical screening requirements	Employees, Visitors	Site Project Manager	Annually (site based employees) & every 3 years (office based employees)	Lost time injury, Irreversible health effects/occupational disease with permanent consequence	The Safety Department manages the issuing of Person job Specifications prior to employees attending the medical examinations and in addition a G4-14 is issued for the medical. Annexure 3 to be submitted for Contractors	4	C	II	Mostly effective	Medical verification to be conducted by an Eskom Occupational Health Nurse & Practitioner. No findings are found during audits	The project maintains a medical response database and flag system with all Person job Specifications, GA 14 Form & Annexure 3	Safety Department (Eskom and Contractor)	Occupational Health & Safety Act, 30-2002, Eskom Procedures for Medical Examinations, Client Safety Specification, Contractor Safety Plan																									
	R	17	Employee medical restrictions not declared	17.1	Employees unable to manage medical restrictions on site	Health	Non-declaration of medical restriction by the employee/OHP, Generic person job specification doesn't identify restrictions	Employees, Visitors	Site Project Manager	Annually (site based employees) & every 3 years (office based employees)	Lost time injury	The medical clinic declares a medical restriction when discovered during medical examinations	4	C	II	Mostly effective	Medical verification to be conducted by an Eskom Occupational Health Nurse or Medical Practitioner	The project maintains an updated medical restrictions database	Occupational Health Nurse and Safety representative	Occupational Health & Safety Act, Regulations for Hazardous Biological Agents reg 3, 32-2002 - Eskom Medical Surveillance Procedures																									
	R	18	Excessive noise on site	18.1	Employees exposed to a level of noise exceeding the legal threshold limit	Health	Noise levels not determined or assessed, Effective & appropriate PPE not worn, Non-compliance to legal & Eskom requirements	Employees, Visitors	Site Project Manager	Daily	Irreversible health effects/occupational disease with permanent consequence	Annual & Bi-annual Hygiene Assessments are conducted to determine noise exposure levels and the required PPE is determined according to the worst case scenario	4	C	II	Mostly effective	An Occupational Hygienist is appointed to Go Coal Project to assist with Hygiene monitoring	Audits & inspections indicate Hygiene Assessments have been been conducted and the appropriate PPE is being utilized by all employees accordingly	Occupational Hygienist, Employees	NHL Regulations, Eskom PPE Standard, Client Safety Specification, Contractor Safety Plan																									
	R	19	Poor illumination	19.1	Employees working in poor lighting conditions	Health	Lighting unavailable, Lighting damaged	Employees, Visitors	Site Project Manager	Daily	Lost time injury	Ratification assessments or surveys are conducted to determine the correct lighting lux required for each working area. A lighting standard to be set and maintenance personnel to be implemented. Damaged or fused lights are replaced making use of the defect management system	4	C	II	Mostly effective	Ratification surveys to be conducted to determine the correct lighting lux required for each working area. A lighting standard to be set and maintenance personnel to be implemented. Damaged or fused lights are replaced making use of the defect management system	Audits & inspections indicate Hygiene Assessments have been been conducted and all working areas are adequately illuminated. Defects raised are closed out	Occupational Hygienist, Supervisors	CHNS Act section 8, Environmental Regulations for Workplace regulation 3, Client Safety Specification, Contractor Safety Plan																									
	R	20	Appropriate PPE not being utilized when performing tasks	20.1	Employees are exposed to higher levels of injuries & Occupational Diseases	Health	PPE unavailable, PPE not defined, Poor supervision, PPE uncomfortable	Employees, Visitors	Site Project Manager	Daily	Irreversible health effects/occupational disease with permanent consequence	PPE is issued to all employees in compliance with legislation and Eskom procedures	4	B	II	Mostly effective	PPE inspections to be included in the toolbox talk session. A sufficient supply of PPE is to be available. Employees to be trained on how to use PPE	Inspections & Audits indicate an effective system is in place for the issuing of PPE and all employees have the appropriate PPE, while performing their tasks	Safety Officer, Supervisor, Employee	General Safety Regulations regulation 2, Eskom PPE Standard																									
	R	21	Excessive levels of vibration present on site	21.1	Employees exposed to excessive (high) levels of vibration	Health	Vibration levels unknown, Poor supervision	Employees, Visitors	Site Project Manager	Daily	Occupational disease with rehabilitation permanent effect, Ergonomic stress	Vibration assessments are conducted to determine the source & level of vibrations that employees are exposed to	3	B	II	Mostly effective	OEM requirements are analysed to determine appropriate remedial actions required for mitigation of vibration	Audits & inspections indicate Vibration Assessments have been been conducted and the appropriate mitigating measures have been implemented	Occupational Hygienist	CHNS Act section 8, Client SHE Specification																									
	R	22	No health & hygiene assessments conducted to highlight risks employees will be exposed to	22.1	Health risks are unknown or poorly managed	Health	No stated hygienist available, Assumption that the project is covered by the Tutuka Power Station Health Assessment, Non-compliance to legal & Eskom requirements	Employees, Visitors	Site Project Manager	Every 2 years	Irreversible health effects/occupational disease with permanent consequence	An Occupational Hygienist to be appointed for Go Coal Projects to facilitate the execution of Hygiene Assessments on projects	4	B	II	Mostly effective	Contractors conduct Hygiene Assessments on their projects to ensure risks are adequately identified and mitigated	Audit indicate the Hygiene Assessments conducted by subcontractors have been adequately mitigated	Occupational Hygienist	CHNS Act section 8, HCS Regulations, Client Safety Specification, Contractor Safety Plan																									
	R	23	Airborne pollutants are above the legal threshold limit	23.1	Employees are exposed to airborne pollutants above the legal threshold	Health	Airborne pollutant levels not determined or assessed, No or insufficient airborne particles control, Not wearing the appropriate PPE, Non-compliance to legal & Eskom requirements	Employees, Visitors	Site Project Manager	Daily	Lost time injury, Irreversible health effects/occupational disease with permanent consequence	An Occupational Hygienist to be appointed for Go Coal Projects to facilitate the execution of Hygiene Assessments on projects in order to determine the extent if any, of airborne pollutants	4	B	II	Mostly effective	Appropriate PPE is provided when necessary in order to ensure employees are protected where exposure levels are unable to be control sufficiently enough	Hygiene Assessments, Audits and inspections indicate that airborne pollutants have been adequately mitigated	Occupational Hygienist	CHNS Act section 8, HCS Regulations, Client Safety Specification, Contractor Safety Plan																									
	R	24	Excessive levels of dust prevail during construction	24.1	Dust inhalation and poor visibility	Safety	Dust suppression not conducted or is ineffective	Employees, Visitors, neighboring farms	Site Project Manager	Daily	Dust inhalation, eye irritation, Medical incidents	An Occupational Hygienist to be appointed for Go Coal Projects to facilitate the execution of Hygiene Assessments on projects in order to determine the extent if any, of airborne pollutants of exposure to airborne silica dust	3	C	II	Mostly effective	Dust suppression to be applied and evaluated its effectiveness.	Dust samples taken indicate an exposure and below OEM levels. No public complaint are received due to excessive dust/dust	Occupational Hygienist, Environmental Management Officer	CHNS Act section 8, HCS Regulations, Dust Control Management (DMS/ST), Client Safety Specification, Contractor Safety Plan																									
Managing Skills & Resources	R	25	Little or no skilled resources available	25.1	Incompetent & / or Unskilled employees employed by the contractor	Safety	Non-compliance to Legal & Contractual obligations, Local municipal requirements, other construction activities in surrounding area	Employees, Visitors	Site Project Manager	Daily	Fatality, Lost time incident, Medical incident	Relevant training interventions are conducted to ensure employees are competent to perform their duties in a safe manner	5	C	II	Mostly effective	Training Matrix is developed to ensure that employees undergo the minimum Safety requirements for their jobs to be performed. Minimum Safety Competencies are defined for each task	Audits conclude that all employees have undergone all relevant Safety training	Safety Department	CR 2014 regulations 5 & 7, SQAQ requirements, Client Safety Specification, Contractor Safety Plan																									
Enforcing Legal																																													

		R	41	Incompetent, Unauthorized and unauthorized employees allowed to operate mobile plant & machinery	41.1	There is an increased risk of incidents occurring as a result of incompetence and experience	Safety	Compliant & appointed operators unavailable. Poor supervision. Unauthorized access to mobile machinery & equipment is possible. Non-compliance to legal & Easom requirements	Employees, Visitors	Site Project Manager	Daily	Last time injuries, medicals, first aid incidents; near miss incidents, property damage	Operators of mobile plant & machinery are trained, found competent & appointed for the specific type of plant being operated	4	B	II	Fully effective	Mobile plant & machinery must incorporate a locking device to ensure that all employees operating mobile machinery & plant are trained & competent to do so	DMR 2, Supervisors, Safety Officers	CHS Act, CR 2014 regulation 23, Client Safety Specification, Contractor Safety Plan, Traffic Management Plan		
		R	42	Mobile plant & machinery not safely parked after hours (ignoring, access, lockout & certification)	42.1	Unauthorized access to or theft of mobile plant & machinery	Safety	Mobile machinery & equipment is unrobustable, Operator forgets to lock the machine out	Employees, Visitors	Site Project Manager	Daily	Last time injuries, medicals, first aid incidents; near miss incidents, property damage	All mobile plant & machinery are locked after use. Pre-use inspections are conducted and documented to ensure that damages are repaired. Security patrols are conducted during off hours	4	C	II	Mostly effective	Mobile plant & machinery must incorporate a locking device to ensure that no unauthorized access to plant when such is not under the direct supervision of the operator	Supervisor, Safety Officer, Mechanical Foreman	CHS Act 35 of 1993, DMR, CR 2014 regulation 23, Client Safety Specification, Contractor Safety Plan, Traffic Management Plan		
		R	43	No spotter, flagman or traffic controllers are on site during the use of mobile machinery & equipment	43.1	Operators are unaware of impending dangers whilst operating mobile plant & machinery	Safety	Insufficient flagmen/riders appointed for the volume of mobile plant & machinery	Employees, Visitors	Site Project Manager	Daily	Last time injuries, medicals, first aid incidents; near miss incidents, property damage	An instruction was issued that no mobile plant or machine may be reversed without the assistance of a flagman/riders	4	C	II	Mostly effective	Inspections & Audits indicate that flagmen/riders are assisting all mobile plant & machinery operators with visibility during reversing activities	Supervisor, Safety Officer	Client Safety Specification, Contractor Safety Plan, Traffic Management Plan		
		R	44	Machinery utilized for the wrong task	44.1	Damaging the machinery or task not done properly	Safety	Correct machinery not available	Employees, Visitors	Site Project Manager	On occurrence	Last time injuries, medicals, first aid incidents; near miss incidents, property damage	Method Statements indicate what machinery is required for the particular task	4	C	II	Mostly effective	Machinery to be inspected by competent persons. Faulty machinery to be replaced and not used. Supervisors & Riggers to ensure that no task is executed if the required Machinery is not present and being used for the task	DMR 2, Supervisor, Rigger, Safety Officer	DMR Regulation 4, EMR Regulations, DMR Regulations, CR 2014 regulation 23, Client Safety Specification, Contractor Safety Plan, Traffic Management Plan		
		R	45	Operators not following the set speed limit	45.1	Collisions between mobile machinery take place	Safety	Operators are pressured to increase hauls per shift due to haggling production	Employees, Visitors	Site Project Manager	On occurrence	Last time injuries, medicals, first aid incidents; near miss incidents, property damage	Speed limits have been set to 40km/h for all vehicles	4	C	II	Mostly effective	Road signs displayed along traffic routes to indicate the desired speeds of haul trucks	Supervisor, Safety Officer	Road Traffic Act, CR 2014 regulation 23, Client Safety Specification, Contractor Safety Plan, Traffic Management Plan		
		R	46	Safe following distance not maintained	46.1	Collisions between mobile machinery take place	Safety	Operators not adhering to the site speed limits	Employees, Visitors	Site Project Manager	On occurrence	Last time injuries, medicals, first aid incidents; near miss incidents, property damage	Speed limits have been set to 40km/h for all vehicles	4	C	II	Mostly effective	Road signs displayed along traffic routes to indicate the desired speeds of haul trucks	Supervisor, Safety Officer	Road Traffic Act, CR 2014 regulation 23, Client Safety Specification, Contractor Safety Plan, Traffic Management Plan		
		R	47	Haul roads are slippery due to heavy rain	47.1	Mobile machinery can veer out of control, braking system becomes ineffective	Safety	Poor traction of the wheels on the gravel roads and momentum from heavy loads of the machinery	Employees, Visitors	Site Project Manager	On occurrence	Last time injuries, medicals, first aid incidents; near miss incidents, property damage	Haul roads to be maintained by the Contractor after heavy rains	4	C	II	Mostly effective	Awareness has been made in the induction training of the dangers when excessive rain falls on the construction site	Supervisor, Safety Officer	CR 2014 regulation 23, Client Safety Specification, Contractor Safety Plan, Traffic Management Plan, NEC Contractual Agreement		
		R	48	Spotters not visible to the operators at the tipping zones	48.1	Spotters being driven over	Safety	Poor visibility of the operator due to the design of the vehicle	Employees, Visitors	Site Project Manager	On occurrence	Last time injuries, medicals, first aid incidents; near miss incidents, property damage	Operators of mobile plant & machinery are required to halt any reversing activity if the spotter cannot be seen through the mirror/view mirror	4	C	II	Mostly effective	Supervisors are to ensure that Spotters are actively engaged in the reversing of mobile machinery & plant	Supervisor, Safety Officer	CR 2014 regulation 23, Client Safety Specification, Contractor Safety Plan, Traffic Management Plan, Contractor Method Statements & Risk Assessments		
Refuelling of Diesel by Mobile Machinery & Plant, and or Construction Vehicles		R	49	Insufficient space/area access is provided for the safe refuelling of mobile machinery & plant	49.1	Operators of mobile machinery & plant dip, trip & fall whilst refuelling & climbing into their vehicles and whilst refuelling	Safety	Design did not cater for the safe movement of operators within the refuelling bay	Employees, Visitors	Site Project Manager	Daily	Last time injuries, medicals, first aid incidents; near miss incidents, property damage	Designs are evaluated prior to the execution of the construction of the fuel storage facility	4	B	II	Mostly effective	The contractor is to develop a method statement & risk assessment for the refuelling activities	Supervisor, Safety Officer, Operator	CR 2014 regulations 5 & 7, Municipal By-laws, Client Safety Specification, Contractor Safety Plan, Traffic Management Plan		
		R	50	Fuel hose is too short for the safe refuelling of diesel (section of fuel cap size of mobile machinery & plant)	50.1	Spillage of fuels takes place	Safety	Design did not cater for the location of fuel caps & size of mobile machinery & plant	Employees	Site Project Manager	Daily	Last time injuries, medicals, first aid incidents; near miss incidents, property damage	Designs are evaluated prior to the execution of the construction of the fuel storage facility	4	B	II	Mostly effective	The contractor is to develop a method statement & risk assessment for the refuelling activities	Supervisor, Safety Officer, Operator	CR 2014 regulations 5 & 7, Municipal By-laws, Client Safety Specification, Contractor Safety Plan, Traffic Management Plan		
		R	51	Little or no maintenance is done on the refuelling bay & refuelling mechanisms	51.1	Refuelling of fuels storage tanks & Spillage of fuels takes place	Safety	No maintenance requirements determined for the fuel storage facilities. No control for replacement of the refuelling bay allowed. Negligence in maintaining the fuel storage facilities	Employees, Visitors	Site Project Manager	Daily	Last time injuries, medicals, first aid incidents; near miss incidents, property damage	Evaluation of project costs involves the analysis of funding for safety related matters	4	B	II	Mostly effective	Contractors are to ensure that adequate funding is provided for, for the maintenance & upkeep of fuel storage facilities	Supervisor, Safety Officer, Operator	CR 2014 regulations 5 & 7, Municipal By-laws, Client Safety Specification, Contractor Safety Plan, Traffic Management Plan		
Recovery of Mobile Plant and Machinery and Construction Vehicles		R	52	Making use of Ropes and Chains to recover mobile plant and machinery and or construction vehicles that are stuck in mud	52.1	Ropes and chains may snap when placed under extreme tension	Safety	No method statement developed for the recovery of mobile plant and machinery, and or construction vehicles	Employees	Site Project Manager	On occurrence	Last time injuries, medicals, first aid incidents; near miss incidents, property damage	Legislation and the Client SHE Specification require method statements to be developed for all types of activities	4	C	II	Mostly effective	The method statement developed for the recovery of mobile machinery and plant, and or construction vehicles, must identify either a suitable sling or tow bar, as identified by a competent rigger	Construction Manager, Supervisor, Safety Officer, Operator	CR 2014 regulations 5, Client SHE Specification, Contractor SHE Plan		
Diving of Construction and Private Vehicles on Site		R	53	Employees drive unsafely & recklessly whilst on Site and Easom business	53.1	Possible collision and damage to mobile vehicles Possible injuries/fatalities, Work stoppages	Safety	Non-compliance to legal & Easom requirements, Distraction (using mobile phone or operating music in the car)	Employees, Visitors	Site Project Manager	Daily	Last time injuries, medicals, first aid incidents; near miss incidents, property damage	All drivers are licensed in terms of the Road Traffic Act and found to be competent to the competency	4	C	II	Mostly effective	Drivers are to be included into the traffic requirements & observations are to be conducted to ensure compliance thereto. A Traffic Management Plan has been developed by the contractor to define and manage all traffic on the construction site	Safety Officer, Supervisor, Employee	CHS Act section 8 - General duties of employers to their employees & section 14 - General duties of employees at work, Risk Assessment, CR 2014 regulation 23, Vehicle and Driver Safety Management Procedure 32-10, Client Safety Specification, Contractor Safety Plan, Contractor Traffic Management Plan		
		R	54	Driver fails asleep behind the wheel	54.1	Loss of vehicle control	Safety	Medical problems, Fatigue, Driving under influence of intoxicating substances, Lack of concentration	Employees, Visitors, Public	Site Project Manager	Daily	Last time injuries, medicals, first aid incidents; near miss incidents, property damage	All road trips are approved, Induction covers traffic management & road trips. Awareness training is provided on the matter	4	C	II	Mostly effective	Employees not to drive when intoxicated, Support the National Awake Campaigns, Take breaks every 2 hours, Sleep over to avoid night driving, Seasonal Awareness Training is provided, A Road Trip Risk Assessment must be conducted and a Pre-use inspection on the vehicle	Driver	CHS Act, Section 14, Road Traffic Act, CR 2014 regulation 23, Vehicle and Driver Safety Management Procedure 32-10, Client Safety Specification, Contractor Safety Plan, Traffic Management Plan		
		R	55	Driving on poor road conditions and disturbed by objects on the road	55.1	Loss of vehicle control	Safety	Road conditions	Employees, Visitors, Public	Site Project Manager	Daily	Last time injuries, medicals, first aid incidents; near miss incidents, property damage	Easom drivers permit, Advanced driving training, Easom Vehicle Specification - 32-24S, Safety specification, Speed limits zone signage, Site Traffic management, Road traffic signs	4	C	II	Mostly effective	Drivers to do road assessment before taking a trip, Follow road signage and where there is potholes, reduce speed	Driver	CHS Act section 14, Road Traffic Act, Vehicle and Driver Safety Management Procedure 32-10, Client Safety Specification, Contractor Safety Plan, Traffic Management Plan		
Excavating Trenches for Construction Work		R	56	Excavations incorrectly sloped	56.1	Subsidence and cave in of excavations	Safety	Dipping gradient not defined during designs	Employees, Visitors	Site Project Manager	On occurrence	Fatality, Last time injuries, medicals, first aid incidents; near miss incidents, property damage	Excavations to be sloped as per the design requirements, Civil Engineers & Supervisors to actively present their inspections as to the correct slope creation	5	C	II	Mostly effective	Supervisors & Safety Officers are to ensure all requirements are adhered to or corrected if they are not	Excavation Supervisors, Safety Officers	CR 2014 regulation 5 & 7, Client Safety Specification, Contractor Safety Plan, Excavation permit		
		R	57	Unbaricaded or shored & braced excavations	57.1	Employees or visitors can fall into excavations, excavations can collapse, Mobile machinery & vehicles can drive into excavations	Safety	Requirements of excavation work unknown or not enforced	Employees, Visitors	Site Project Manager	On occurrence	Fatality, Last time injuries, medicals, first aid incidents; near miss incidents, property damage	Legislation & Client requirements require that all excavations be adequately baricaded so as to prevent persons from falling therein and or to prevent collapse onto persons	5	C	II	Mostly effective	A competent Excavation Supervisor is appointed to manage all excavations and work in the vicinity of excavations	Supervisors, Safety Officers	CR 2014 regulation 5 & 7, Client Safety Specification, Contractor Safety Plan, Excavation permit		
		R	58	Proper access and exit not provided for the excavations	58.1	Employees are unable to safely exit or enter excavations	Safety	No holdover or pathway allowed for during the excavating of the trench	Employees	Site Project Manager	Daily	Last time injuries, medicals, first aid incidents; near miss incidents, property damage	Method Statement & Risk Assessments are to identify the type and place for excavation egress and entry points and employees are to be informed thereof	4	C	II	Mostly effective	Supervisors & Safety Officers are to ensure all requirements are adhered to or stop activities until rectified	Excavation Supervisors, Safety Officers	CR 2014 regulation 5 & 7, Client Safety Specification, Contractor Safety Plan		
		R	59	Trenches excavated in unstable ground conditions	59.1	Excavations can subside due to weak compaction	Safety	Geography of the region	Employees, Visitors	Site Project Manager	Daily	Last time injuries, medicals, first aid incidents; near miss incidents, property damage	Trench designs are evaluated prior to excavation thereof by Civil Engineers	4	C	II	Mostly effective	The Construction Manager, Excavation Supervisor & Civil Engineers are to test the compaction of the trenches to ensure stability for construction work	Quality Officer, Civil Engineer, Supervisors, Contractor Supervisor	CR 2014 regulation 5 & 7, Client Safety Specification, Contractor Safety Plan		
Constructing the Ash Dam, Pollution Control Dams		R	60	Deep excavations are left unbaricaded due to the construction methodology	60.1	Mobile plant, machinery and construction vehicles can access the deep excavations in an uncontrolled manner	Safety	The construction methodology does not allow for the placing of baricading or barriers to protect the edges of the deep excavations	Employees, Visitors	Site Project Manager	Daily	Last time injuries, medicals, first aid incidents; near miss incidents, property damage	Designs are evaluated and the construction methodology approved before construction starts. The contractor is to submit a method statement and risk assessment for evaluation to the Client for evaluation	4	C	II	Mostly effective	Access must be restricted to construction personnel, the Designer, The Project Manager, the CHS Agent and Safety personnel only. The contractor must submit method statements and risk assessments for all work to be conducted on high walls	Construction Manager, Supervisor, Safety Officer	CR 2014 regulations 6 & 13 & 23, Client SHE Specification, Contractor SHE Plan		
		R	61	Deep excavations fill up with rain water during rains	61.1	Employees can drown in the dam of water	Safety	No drainage point for the excessive water to flow out from	Employees, Visitors	Site Project Manager	Daily	Last time injuries, medicals, first aid incidents; near miss incidents, property damage	The EBMF enforces the management of storm water and the Client Safety Specification requires the effective management of water bodies	4	C	II	Mostly effective	A drainage point that allows for gravity flow must be installed until such as the dam is under construction in that area, after which the water must be effectively disposed of in a manner that is safe to people and the environment	Construction Manager, Supervisor, Safety Officer, Environmental Officer	CR 2014 regulations 6 & 13 & 23 & 26, Client SHE Specification, Contractor SHE Plan		
Constructing high Walls at the Pollution Control Dams and ash dump		R	62	High walls are left unbaricaded due to the construction methodology	62.1	Mobile plant and machinery can drive off the edge of the high wall in an uncontrolled manner	Safety	The entire area of the dam walls is under construction and any form of baricading or restrict to construction thereof	Employees, Visitors	Site Project Manager	Daily	Last time injuries, medicals, first aid incidents; near miss incidents, property damage	Designs are evaluated and the construction methodology approved before construction starts	4	C	II	Mostly effective	Temporary signage must be posted every 50m along the edge of the Dam walls so as to warn operators of the whereabouts thereof. Effective lighting must be placed along the edges of the dam walls so as to provide sufficient illumination for operators to observe the edges. Access is controlled to allow only construction personnel	Construction Manager, Supervisor, Safety Officer	CR 2014 regulations 6 & 13 & 23, Client SHE Specification, Contractor SHE Plan		
		R	63	High walls narrows the higher they are constructed	63.1	Mobile plant and machinery can drive off the edge of the high wall in an uncontrolled manner	Safety	The design of the dam walls results in the high walls narrowing as it is construction higher	Employees, Visitors	Site Project Manager	Daily	Multiple fatalities, Last time injuries, medicals; first aid incidents; near miss incidents, property damage	Designs are evaluated and the construction methodology approved before construction starts	6	C	I	Mostly effective	Access must be restricted to construction personnel, the Designer, The Project Manager, the CHS Agent and Safety personnel, Construction vehicles only. Spotters must be actively present when mobile plant and machinery are being used for construction of the high walls	Construction Manager, Supervisor, Safety Officer	CR 2014 regulations 6 & 13 & 23, Client SHE Specification, Contractor SHE Plan		
Erecting and Dismantling of Scaffold and Support Work		R	64	Inadequate designs for scaffolding and support work	64.1	Scaffold & support work may collapse under load	Safety	Incompetent Temporary Works Designer, Erection of scaffolding without an approved design	Employees, Visitors	Site Project Manager	On occurrence	Last time injuries, medicals, first aid incidents; near miss incidents, property damage	Designs are appointed to design scaffolding and to oversee the erection thereof	4	C	II	Mostly effective	A competent Designer that is registered with ECSSA must be used to design all temporary works, Competent Scaffold Supervisors, Erectors and Inspectors are appointed on the project	Designer, Scaffold Supervisors, Erectors and Inspectors	CR 2014 regulation 6 & 12, SANS 10081, Client Safety Specification, Contractor Safety Plan		
		R	65	Scaffold and support work not erected as per the designs	65.1	Scaffold & support work may collapse under load	Safety	Incompetent Scaffold Supervisors, Erectors and Inspectors are appointed on the project	Employees, Visitors	Site Project Manager	On occurrence	Last time injuries, medicals, first aid incidents; near miss incidents, property damage	Competencies of Scaffold Erectors/Supervisors/Inspectors are evaluated prior to appointment on the project	4	C	II	Mostly effective	All will indicate that the Scaffold Supervisors/Erectors & Inspectors are competent	Designer, Scaffold Supervisors, Erectors and Inspectors	SANS 10081, Client Safety Specification, Contractor Safety Plan		
		R	66	No competent person to erect, inspect and supervise scaffold and support work erection	66.1	Scaffold & support work may collapse under load	Safety	Insufficient Scaffold Supervisors, Erectors and Inspectors available for appointment on the project	Employees, Visitors	Site Project Manager	On occurrence	Multiple fatalities, Last time injuries, medicals; first aid incidents; near miss incidents, property damage	The Power Station has appointed a competent Scaffold Erection Company that have the necessary competencies for the safe erection & dismantling of scaffolding	6	C	I	Mostly effective	Supervisors & Safety Officers are to undergo basic scaffold erection course training to improve their skills in managing scaffold safety. Competencies of the scaffold erection team must be audited to ensure compliance to legal requirements	Project Manager, Supervisor, Safety Officers	SANS 10081, Client Safety Specification, Contractor Safety Plan		
		R	67	Scaffold and support work not inspected as required and records kept accordingly	67.1	Employees unknowingly working on unsafe scaffolding	Safety	Ignorance of procedures, No Scaffold Inspector available	Employees, Visitors	Site Project Manager	On occurrence	Last time injuries, medicals, first aid incidents; near miss incidents, property damage	Safety Officers & Supervisors are to be inspected accordingly by a competent person and records made available, and given tagged accordingly	4	C	II	Mostly effective	Daily inspections to be done by the Safety personnel and deviations corrected accordingly	Supervisor, Scaffold Inspector, Safety Officer	CR 2014 regulation 16, SANS 10081, Client Safety Specification, Contractor Safety Plan		
		R	68	Unauthorized modification to scaffolding takes place	68.1	The integrity of the scaffold may be compromised	Safety	Non-compliance to legislation & Easom requirements, Poor supervision, Employees do not know the legal requirements, No Scaffold Erectors available	Employees	Site Project Manager	On occurrence	Last time injuries, medicals, first aid incidents; near miss incidents, property damage	The designer of the temporary works is to authorize all modifications and drawings to be updated. Only an appointed and competent Scaffold Erector may modify modifications to scaffolding	4	C	II	Mostly effective	A scaffold modification process is to be developed by the contractor to ensure modifications are controlled and it is remain in compliance with all requirements to legislation & Easom requirements and are adequately documented accordingly	Supervisor, Scaffold Inspector, Safety Officer	CR 2014 regulation 16, SANS 10081, Client Safety Specification, Contractor Safety Plan		
Working in Elevated Positions (Scaffolding, Roof work, Power line poles, Ladders etc)		R	69	Employees not hooking up when working at elevated positions	69.1	Employees can fall from heights	Safety	No harnesses or attachment points available, Non-compliance to hook up at heights risk, Untrained employees utilized for working in elevated positions	Employees, Visitors	Site Project Manager	Daily	Last time injuries, medicals, first aid incidents; near miss incidents, property damage	Legislation, Training, Procedures, Safety specification, Life-saving rule	4	C	II	Mostly effective	Only employees trained in the use of wearing full body safety harnesses are to allow for working at heights or from elevated positions	Supervisors, Safety Officer	CHS Act section 8, CR 2014 regulation 10, Client Safety Specification, Contractor Safety Plan, Contractor Fall Protection Plan, Contractor Method Statement & Risk Assessment		
		R	70	Employees have a fear for working in elevated positions, Untrained employees are utilized for working at elevated positions, Non-compliance to legal & Easom requirements	70.1	Employees can fall from heights	Safety	Employees have a fear for working in elevated positions, Untrained employees are utilized for working at elevated positions, Non-compliance to legal & Easom requirements	Employees, Visitors	Site Project Manager	On occurrence	Last time injuries, medicals, first aid incidents; near miss incidents, property damage	Life saving rules, Fall protection plan, Entry medicals, Risk assessments, BBS and VFL inspections, Direct supervision	4	C	II	Mostly effective	Only employees found to be psychologically fit for working in elevated positions must be utilized for working at heights	Supervisors, Safety Officer	CHS Act section 8, CR 2014 regulation 9 & 10, Easom Procedure for medical surveillance (32-262), Client Safety Specification, Contractor Safety Plan		
		R	71	Employees not appropriately trained to work at heights	71.1	Employees can fall from heights	Safety	Training courses unavailable, Shortage of trained employees, Non-compliance to legal & Easom requirements	Employees, Visitors	Site Project Manager	Daily	Last time injuries, medicals, first aid incidents; near miss incidents, property damage	Audits are conducted to ensure all persons required to work at heights have been adequately trained to do so	4	C	II	Mostly effective	All employees required to work at heights or in elevated positions are to be trained to do so and their names kept on a register for identification	Supervisors, Safety Officer	CR 2014 regulation 10, Minimum Safety Training Procedure 32-10, Working at Heights Procedure - 32-418, Client Safety Specification, Contractor Safety Plan		
		R	72	Inappropriate usage of and or incorrect safety harnesses utilized for working at heights	72.1	Employees can fall from heights	Safety	Appropriate harnesses not available, Non-compliance to legal & Easom requirements	Employees, Visitors	Site Project Manager	Daily	Last time injuries, medicals, first aid incidents; near miss incidents, property damage	Employees trained for working at heights are trained on the safe & correct use of fall arrest PPE	4	C	II	Mostly effective	The method statement & safe working procedure are to identify the appropriate type of harness required for the task and placed on a register for easy control and management	Supervisors, Safety Officer	CHS Act section 8, CR 2014 regulation 10, Working at height procedure 32-418		
		R	73	Tools & equipment not secured whilst working in elevated positions	73.1	Tools & equipment falling or dropped from heights	Safety	Non-compliance to legislation & Easom requirements, Poor supervision, No training, No standard set	Employees, Visitors	Site Project Manager	Daily	Last time injuries, medicals, first aid incidents; near miss incidents, property damage	Awareness, Direct supervision, Task specific risk assessments, Safety inspections	4	C	II	Mostly effective	Supervisors are to ensure that all tools & equipment utilized for work conducted in elevated positions are to be secured in a lanyard and anchor point	Safety Officer & Supervisors	CHS Act section 8, CR 2014 regulation 27, Work at heights procedure 32-418, Client Safety Specification, Contractor Safety Plan		
		R	74	Employees allowed to work below work being conducted in elevated positions	74.1	Employees can be struck by falling objects from above	Safety	Poor supervision, Non-compliance to legal & Easom requirements, No safe working procedures	Employees, Visitors	Site Project Manager	Daily	Last time injuries, medicals, first aid incidents; near miss incidents, property damage	Legislation, Training, Procedures, Direct supervision, Safety inspections	4	C	II	Mostly effective	The method statement must make provision that no work is to be conducted underneath any work being conducted in an elevated position	Rigger, Supervisors, Safety Officers	CHS Act section 8, CR 2014 regulation 10 & 27, Work at heights procedure 32-418, Easom Procedure for fall safe use of lifting machines and lifting jacks 39-56, Client Safety Specification, Contractor Safety Plan, Contractor Method Statement & Risk Assessment		
		R	75	Tools lying loose on the scaffolding platform	75.1	Employees can slip, trip and fall & Tools can fall	Safety	Poor supervision and training, Poor housekeeping, Corroded working areas	Employees	Site Project Manager	On occurrence	Last time injuries, medicals, first aid incidents; near miss incidents, property damage	Awareness training, Employees working under direct supervision, Conduct safety walkabouts, Housekeeping initiatives	4	C	II	Mostly effective	Tools to be stored in a containers/drum	Safety Officer & Supervisors	CR 2017 regulation 27, Client Safety specification, Contractor Method Statement & Risk Assessment		
		R	76	No drop zone designated during work being conducted from an elevated position	76.1	Employees can be struck by falling objects from above	Safety	Poor supervision, Non-compliance to legal & Easom requirements, No safe working procedures	Employees, Visitors	Site Project Manager	Daily	Last time injuries, medicals, first aid incidents; near miss incidents, property damage	The Client Safety Specification requires that drop zones be designated and adequately managed to ensure that safety of employees below is	4	C	II	Mostly effective	Scaffold Supervisors have been trained to ensure that there is an adequate drop zone designated and installed prior to green tagging a scaffold for use	Supervisors, Riggers, Safety Officers	CHS Act section 8, CR 2014 regulation 16, SANS 10081, Safe use of lifting machines and lifting jacks 39-56, Client Safety Specification, Contractor Safety Plan, Contractor Method Statement & Risk Assessment		
		R	77	No emergency & response plan in place (rescue of falling from heights, victims, etc)	77.1	Employees are exposed to extended times of suspension in a fall arrest position	Safety	An Emergency Response Plan has not been developed for the project, Non-compliance to legal & Easom requirements w.r.t EMR	Employees, Visitors	Site Project Manager	Daily	Last time injuries, medicals, first aid incidents; near miss incidents, property damage	Contractual agreements are in place to ensure that EMR plans are in place for imminent emergency response in the event of an emergency	4	B	II	Fully effective	An emergency response plan is to be developed and implemented to ensure rapid response in emergency situations	Project Manager, Safety Officer, Fall Protection Planner, EMR Rescue Team Plan	CR 2014 regulation 10, Easom Emergency Planning Procedure 32-123, Client Safety Specification, Contractor Safety Plan, Contractor Fall Protection Plan		
		R	78	Openings on the floors on scaffold walkways	78.1	Employees & objects falling through floor openings	Safety	Floor openings not properly covered/baricaded off	Employees, Visitors	Site Project Manager	Daily	Last time injuries, medicals, first aid incidents; near miss incidents, property damage	Scaffold Designers design so as to ensure that there are no openings left & floor openings are adequately closed before green tagging scaffolding	4	B	II	Mostly effective	Employees are to report any openings left or created so as to ensure they are adequately covered	Supervisors, Scaffold Supervisor/Inspector, Safety Officer	CR 2017 regulation 27, SANS 10081, Client Safety Specification, Contractor Method Statement & Risk Assessment		
		R	79	Ladders not installed by competent persons	79.1	Ladders can fall under excessive weight	Safety	No competent Rope Technician has been appointed to the project	Employees	Site Project Manager	Daily	Last time injuries, medicals, first aid incidents; near miss incidents, property damage	Legislation indicates competent persons must install and inspect ladders before use thereof, Supervision	4	C	II	Mostly effective	An audit checklist is to be developed so as to ensure that competencies are audited and a suitable and competent person has been appointed to the project and indeed install and certifies a follow as effective for use, Fall protection plans are to indicate competencies required for a Rope Technician	Engineer, Construction Manager/Supervisors, Scaffold Supervisor/Inspector, Safety Officer	CR 2017 regulation 1 & 10, SANS 10081, SQA Unit Standard 20998, Client Safety Specification, Contractor Method Statement & Risk Assessment		
		R	80	No or inadequate fall protection plans developed	80.1	Employees are exposed to unknown risks	Safety	Incompetent and inexperienced Fall Protection Planners are appointed to the project	Employees	Site Project Manager	Daily	Last time injuries, medicals, first aid incidents; near miss incidents, property damage	Legislation indicates a competent person must be appointed to develop a fall protection plan, Auditing of competencies prior to and during commencement of the construction work	4	B	II	Mostly effective	The contractor must ensure that a competent and experienced person is appointed to the project so as to ensure an effective fall protection plan is developed	Engineer, Construction Manager, Supervisors, Scaffold Supervisor/Inspector, Safety Officer	CR 2017 regulation 1 & 10, SANS 10081, SQA Unit Standard 20998, Client Safety Specification, Contractor Method Statement & Risk Assessment		
		R	81	Ladders are in a poor condition	81.1	Ladders can fall whilst being utilized for working in elevated positions	Safety	Ladders are not checked for the condition before being put into use	Employees	Site Project Manager	Daily	Last time injuries, medicals, first aid incidents; near miss incidents	Ladders are inspected before use and are placed in a register. Employees are trained on the safety requirements for the use of ladders	4	D	I	Mostly effective	Inspections and audits indicate the correct ladder is used and the application thereof is correct. No incidents are reported w.r.t the use of ladders	Construction Manager, Supervisor, Safety Officer, Employee	CR 2014 regulation 9 & 10, Client SHE Specification, Contractor SHE Plan		
		R	82	Ladders are not appropriate for the specific working environment	82.1	Employees can fall from heights	Safety	The correct ladder is not identified or available for the specific task at hand	Employees	Site Project Manager	Daily	Last time injuries, medicals, first aid incidents; near miss incidents	The contractor is to identify specific ladders for specific tasks and create a register thereof and further include the type of ladder and application methodology within the method statement and risk assessment	4	C	II	Mostly effective	Inspections and audits indicate the correct ladder are in use. No incidents are reported w.r.t the use of ladders	Construction Manager, Supervisor, Safety Officer, Employee	CR 2014 regulation 9 & 10, Client SHE Specification, Contractor SHE Plan		
		R	83	Ladders are placed on uneven surfaces	83.1	Ladders can slip out of position whilst in use	Safety	Floors are not properly leveled during civil construction	Employees	Site Project Manager	Daily	Last time injuries, medicals, first aid incidents; near miss incidents	Ladders are held in place by an assistant employee when put into use	4	C	II	Mostly effective	The contractor must ensure that all ladders are placed on flat surfaces and are secured to the structure in a appropriate manner so as to ensure that it does not slip out of position	Construction Manager, Supervisor, Safety Officer, Employee	CR 2014 regulation 9 & 10, Client SHE Specification, Contractor SHE Plan		
		R	84	There is no assistant employees holding the ladder whilst someone else is climbing up or down from the ladder	84.1	The ladder can slip from position	Safety	There is no employee present at that moment to assist with securing the ladder at the time it is put into use	Employees	Site Project Manager	Daily	Last time injuries, medicals, first aid incidents; near miss incidents	Employees are trained on ladder safety and the risks thereof	4	D	I	Mostly effective	The contractor is to identify methods of securing the ladder to the structure so as to prevent the ladder from slipping or requiring support from an assistant employee	Construction Manager, Supervisor, Safety Officer, Employee			

	R	85	Ladders positioned incorrectly (1.4 height to distance away from a structure and or 5m past the highest point of a structure)	85.1	The ladder can slip from position	Safety	Employees are not trained on the requirements for ladders	Employees	Site Project Manager	Daily	Lost time injuries, medicals, first aid incidents, near miss incidents	Supervisors and Safety Officers are trained on ladder safety and the risks thereof	4	C	II	Mostly effective	The contractor must ensure that a comprehensive method statement and risk assessment is developed, identifying the type of ladder, condition and application methodology for each structure it will be put to use in	The contractor can implement a system whereby all ladder installations must be checked and verified safe to use by the Safety Officer, before commencing work on the site	Supervisor, Safety Officer	CR 2014 regulation 9 & 10, Client SHE Specification, Contractor SHE Plan
Erecting/finishing formwork and support work	R	86	Support work/ formwork not correctly installed and secured	86.1	Support work/ formwork failure	Safety	Incompetent erection of formwork & support work	Employees, Visitors	Site Project Manager	On occurrence	Lost time injuries, medicals, first aid incidents, near miss incidents	Support/ formwork to be inspected accordingly before work commencing by a competent person. Support/ formwork to be constructed as per the design drawings.	4	B	II	Mostly effective	Structural Engineers & Supervisors need to continuously inspect all support & formwork during installation and dismantling	No incidents involving formwork & support work are reported. All formwork & support work is installed & dismantled safely	Supervisor, Safety Officer	National Building Regulations, CR 2014 regulations 5 & 7, Client Safety Specification, Contractor Safety Plan, Contractor Method Statements & Risk Assessments
	R	87	Support work/ formwork not correctly installed and secured	87.1	Support work/ formwork failure	Safety	Incompetent persons utilized for the erection, supervision of scaffold towers & installations	Employees & Visitors	Site Project Manager	On occurrence	Lost time injuries, medicals, first aid incidents, near miss incidents	All appointed scaffold team members are to be found competent in compliance with SANS 10085 section 16.2	4	B	II	Mostly effective	Safety professionals and Project Managers are to be trained in basic scaffold erection and inspection	No incidents involving scaffolding work are reported. All scaffolding is installed & dismantled safely	Supervisor, Scaffold Inspector, Safety Officer	CR 2014 regulation 6 & 12 & 16, SANS 10085 section 16.2, Client Safety Specification, Contractor Safety Plan, Contractor Fall protection plan, Contractor Method Statements & Risk Assessments
Steel Work Erection	R	88	Employees not provided with the required PPE	88.1	Employees are exposed to increased risks of injuries	Safety	PPE not available, PPE not worn	Employees	Site Project Manager	On occurrence	Lost time injuries, medicals, first aid incidents, near miss incidents	Employees to be provided with the required PPE for the specific task	4	C	II	Mostly effective	The responsible supervisor to ensure that all the required PPE is issued to all employees and used when required. The Safety Department is to ensure that adequate PPE is available and in use	Supervisors are on hand to that each employee so as to ensure that they are wearing all required PPE and that the PPE is in a state of good repair	Supervisor, Safety Officer	OSR regulation 3, CR 2014 regulations 5 & 7, Eikon PPE Standard, Client Safety Specification, Contractor Safety Plan
	R	89	Good housekeeping not maintained in and around the vicinity of an activity	89.1	Employees are exposed to tripping on materials/off cuts lying around	Safety	Housekeeping practices are not implemented	Employees	Site Project Manager	On occurrence	Lost time injuries, medicals, first aid incidents, near miss incidents	Supervisors are to ensure that during and after activities, that the working area is cleared of all loose lying materials	4	C	II	Mostly effective	Magnets to be used to pick up any wire cut-off and disposed off accordingly and the area adequately cleared. Waste bins are to be provided on-site accordingly	Audits & Inspections indicate the working environment is kept clear of all loose lying materials and deposited in the correct waste bins	Supervisor, Safety Officer, Environmental Control Officer, Environmental Officer	CR 2014 regulation 27, Client Safety Specification, Contractor Safety Plan
	R	90	Rebars not protected by rebar caps	90.1	Sharp edges of rebars are exposed	Safety	No caps available, Caps are too small	Employees	Site Project Manager	On occurrence	Lost time injuries, medicals, first aid incidents, near miss incidents	All rebars to be covered by rebar caps at all times	4	C	II	Mostly effective	The responsible supervisor to ensure that all rebars are protected accordingly, safety department to conduct inspections daily and advise accordingly	Audits & Inspections indicate all rebars are adequately capped	Supervisor, Safety Officer	CR 2014 regulations 5 & 7, Client Safety Specification, Contractor Safety Plan, Contractor Method Statement & Risk Assessment
	R	91	Pinch points created whilst handling steel members	91.1	Hands and fingers can get caught between steel members	Safety	Incorrect positioning of fingers, Poor communication during positioning of steel members	Employees, Visitors	Site Project Manager	On occurrence	Lost time injuries, medicals, first aid incidents, near miss incidents	Teams to properly communicate while working on structures. Method Statements to be followed accordingly when erecting steel structures	4	D	I	Mostly effective	Supervisor to ensure work is done accordingly and safety personnel to conduct pinch point checks. Checklists need to be followed accordingly	No incidents related to steel work are reported	Supervisor, Safety Officer	National Building Regulations, CR 2014 regulation 5 & 7, Client Safety Specification, Contractor Safety Plan
	R	92	Installation methodology not followed for the erection of steel structures	92.1	Collapse of the unstable structure	Safety	Incompetent steel erection team	Employees, Visitors	Site Project Manager	On occurrence	Lost time injuries, medicals, first aid incidents, near miss incidents	The method statement and structural drawings to be followed accordingly and supervision to ensure that all work is done accordingly	4	B	II	Mostly effective	Site engineering and supervisors to ensure that work is done accordingly	No incidents related to steel work are reported	Supervisor, Safety Officer	National Building Regulations, CR 2014 regulation 5 & 7, Client Safety Specification, Contractor Safety Plan
Delivery and pouring of Ready Mix Concrete	R	93	Operators do not secure the area with barricading	93.1	Employees standing in close proximity to observe the pouring activity	Safety	Incompetent operator, No barricading available, Poor safety	Employees, Visitors	Site Project Manager	On occurrence	Lost time injuries, medicals, first aid incidents, near miss incidents	Method statements are developed and assessed with the risk assessment for the specific task	4	C	II	Mostly effective	Supervisors and employees are trained on the method statements and risk assessment for the specific task, and parties in the development of the Safe Task Instruction (STTI) before the task commences	Audits and inspections indicate compliance to safe practices and no incidents are reported	Supervisor, Safety Officer	OHSA Act section 8 & 14, CR 2014 regulation 5 & 7, Client Safety Specification, Contractor Safety Plan
	R	94	Operators do not take up a safe position when initiating the pouring (trip) and the concrete truck and or being struck by the (trip) when performing a task	94.1	Operators are exposed to being caught between the pouring (trip) and the concrete truck and or being struck by the (trip) when performing a task	Safety	Incompetent operator, Poor supervision	Employees	Site Project Manager	On occurrence	Lost time injuries, medicals, first aid incidents, near miss incidents	Method statements are developed and assessed with the risk assessment for the specific task, Operators are trained and assessed for competency	4	C	II	Mostly effective	Supervisors are to ensure that all employees are trained and assessed for competency	Audits and inspections indicate compliance to safe practices and no incidents are reported	Supervisor, Safety Officer	OHSA Act section 8 & 14, CR 2014 regulation 5 & 7, Client Safety Specification, Contractor Safety Plan
	R	95	Operators do not adhere to the Traffic Management Plan when accessing site with the concrete mixing truck	95.1	Operators cause collisions	Safety	Incompetent operator, Operators are not trained on the Traffic Management Plan and or do not attend a visitors induction	Employees, Visitors	Site Project Manager	On occurrence	Lost time injuries, medicals, first aid incidents, near miss incidents	Method statements are developed and assessed with the risk assessment for the specific task, Operators are trained and assessed for competency	4	C	II	Mostly effective	All assets and delivery vehicles are to be escorted from the access gate to the point of off loading and Supervisors are to ensure that safe practices are adhered to	Audits and inspections indicate compliance to safe practices and no incidents are reported	Supervisor, Safety Officer	OHSA Act section 8 & 14, CR 2014 regulation 5 & 7, Client Safety Specification, Contractor Safety Plan
Pouring of Concrete Making Use of Concrete Pump	R	96	Incompetent and unauthorized employees are allowed to operate the concrete pump	96.1	Employees operating the concrete pump are exposed to unknown risks	Safety	Non-compliance to legislation & Eikon requirements, Poor supervision, No competent person available to operate the concrete pump	Employees, Visitors	Site Project Manager	On occurrence	Lost time injuries, medicals, first aid incidents, near miss incidents	Only authorized and appointed persons to operate the concrete pump	4	C	II	Mostly effective	OSR requirements are analysed to determine appropriate remedial arrangements are to be obtained and employees effectively trained thereon	Audits & Inspections indicate that scaffold are being set up and dismantled according to compliance to legislation & Eikon requirements and are adequately documented accordingly	Supervisor, Safety Officer	CR 2014 regulations 5 & 7, Client Safety Specification, Contractor Safety Plan
	R	97	Concrete pump set up incorrectly and or placed on an uneven surface	97.1	Employees are exposed to unanticipated risks of the concrete pump falling at any given moment	Safety	Non-compliance to OEM requirements with regards to setting up of the concrete pump	Employees, Visitors	Site Project Manager	On occurrence	Lost time injuries, medicals, first aid incidents, near miss incidents	Training given by the OEM regarding the setting up of and operating of the concrete pump	4	C	II	Mostly effective	The area to be properly inspected by a competent person prior setting up the concrete pump	Inspections indicate concrete pumps are being set up and dismantled according to OEM requirements	Supervisor, Safety Officer	CR 2014 regulations 5 & 7, OEM requirements, Client Safety Specification, Contractor Safety Plan
	R	98	Concrete pump crew not part of the risk assessment for pouring concrete	98.1	Concrete pump crew exposed to unknown risks whilst operating the concrete pump	Safety	Risk assessments are conducted in isolation by a risk specialist and not including the concrete pouring team	Employees, Visitors	Site Project Manager	On occurrence	Lost time injuries, medicals, first aid incidents, near miss incidents	Training given by the OEM regarding the setting up of and operating of the concrete pump and the operating crew take part in the development of the risk assessment	4	C	II	Mostly effective	Supervisors are to ensure compliance to Client & Contractor requirements in that the operating crew do participate in the development of the risk assessment and are fully conversant with the hazards, associated risks and remedial actions and are fully aware of all risks and remedial actions required to mitigate these risks	Audits & Inspections indicate that all concrete pumps are being set up and dismantled according to OEM requirements	Supervisor, Safety Officer	CR 2014 regulations 5 & 7, OEM requirements, Client Safety Specification, Contractor Safety Plan
	R	99	Employees not provided with the required PPE (safety harness, hand tool with chin strap, eye protection, reflective boots when applicable)	99.1	Employees are exposed to the toxicity of the concrete	Safety	PPE not available or issued, Employees not abiding to the requirements of wearing the appropriate PPE required	Employees, Visitors	Site Project Manager	On occurrence	Lost time injuries, medicals, first aid incidents, near miss incidents	All employees conducting the task to be provided with the required PPE and trained on the use thereof and PPE registers to be maintained accordingly	4	C	II	Mostly effective	Supervisors are to inspect all employees and their PPE prior to commencing with the task, so as to ensure full compliance with the said requirement	Inspections & Audits indicate that all employees are wearing all the required PPE accordingly	Supervisor, Safety Officer	CR 2014 regulations 5 & 7, OEM requirements, Eikon PPE Standard, Client Safety Specification, Contractor Safety Plan
	R	100	Defective concrete buckets are used for pouring concrete	100.1	Concrete bucket falling while fully loaded with concrete	Safety	No buckets that are in a state of good repair are available for use, No pre-use inspection or conducted on the bucket prior to use	Employees, Visitors	Site Project Manager	On occurrence	Lost time injuries, medicals, first aid incidents, near miss incidents	Pre-use inspections must be conducted by a competent person appointed to do so and inspections are to be documented accordingly	4	C	II	Mostly effective	The integrity of the concrete bucket is to be certified on a regular basis and in accordance with the OEM requirements	Audits & Inspections indicate that all concrete buckets have been inspected and the integrity thereof verified in accordance with the OEM requirements	Supervisor, Safety Officer	OHSA Act section 8, Client Safety Specification, Contractor Safety Plan
	R	101	Guide ropes not used to steady the concrete bucket whilst being hoisted or lowered	101.1	Concrete bucket slewing out of control	Safety	No or insufficient guide ropes available	Employees, Visitors	Site Project Manager	On occurrence	Lost time injuries, medicals, first aid incidents, near miss incidents	Manual guide ropes are to be used at all times when loads are lifted, Competent persons are to be used to safely guide the hoisted concrete bucket	4	C	II	Mostly effective	Supervisors are to ensure that employees are adequately trained and the correct guide ropes are available and being used	Audits & Inspections indicate that manual ropes are in use and in a state of good repair and that all employees used for the guiding of the concrete bucket have been trained in use thereof	Supervisor, Safety Officer	CR 2014 regulations 5 & 7, OEM requirements, Eikon PPE Standard, Client Safety Specification, Contractor Safety Plan
	R	102	Rigger not clearing the area of obstacles when the concrete bucket is hoisted	102.1	Employees are exposed to a hoisted load	Safety	Employees are unaware of the legal & Eikon requirements that no person may be in the vicinity or underneath a hoisted load	Employees, Visitors	Site Project Manager	On occurrence	Fatality	Riggers are to ensure that all employees are evacuated to a safe area prior to executing the hoist except those under his direct supervision and operating the guide ropes	5	C	II	Mostly effective	Supervisors are to ensure that the area is adequately barricaded and signage displayed and that all other requirements are met prior to commencing with the task	Audits & Inspections indicate that the area hoisting area is adequately barricaded and all obstacles have been safely evacuated from the area and all signage is conspicuously displayed	Supervisor, Safety Officer	CR 2014 regulations 5 & 7, General Safety Regulations 28, OEM requirements, Eikon PPE Standard, Client Safety Specification, Contractor Safety Plan
	R	103	Employees not provided with the required PPE (safety harness, hand tool with chin strap, eye protection, reflective boots when applicable)	103.1	Employees are exposed to the toxicity of the concrete	Safety	PPE not available or issued, Employees not abiding to the requirements of wearing the appropriate PPE required	Employees, Visitors	Site Project Manager	On occurrence	Lost Time Injury	All employees conducting the task to be provided with the required PPE and trained on the use thereof and PPE registers to be maintained accordingly	4	C	II	Mostly effective	Supervisors are to inspect all employees and their PPE prior to commencing with the task, so as to ensure full compliance with the said requirement	Inspections & Audits indicate that all employees are wearing all the required PPE accordingly	Supervisor, Safety Officer	CR 2014 regulations 5 & 7, OEM requirements, Eikon PPE Standard, Client Safety Specification, Contractor Safety Plan
Pouring of Concrete Manually with Wheelbarrows	R	104	Lack of concentration by concrete workers	104.1	The employee exposes himself and other to unnecessary risks	Safety	Employees are pre-occupied with other thoughts and not focused on the task at hand	Employees, Visitors	Site Project Manager	On occurrence	Lost time injuries, medicals, first aid incidents, near miss incidents	Employees undergo training and awareness regarding the risks and identify focused on the task at hand	4	C	II	Mostly effective	Employees who are liable to report to their responsible supervisor before the task commences. Dedicated walkways to be maintained and kept clear at all times	No incidents are reported relating to manual mixing of concrete	Supervisor, Safety Officer	CR 2014 regulations 5 & 7, OEM requirements, Eikon PPE Standard, Client Safety Specification, Contractor Safety Plan
	R	105	Wheel barrows are loaded above the physical weight the employees are able to handle safely	105.1	Employees are unable to execute their duty in handling the loaded wheel barrow safely	Safety	Physical capabilities are not assessed to determine if employees ability to handle a loaded wheel barrow	Employees	Site Project Manager	Daily	Lost time injuries, medicals, first aid incidents, near miss incidents	Legislation requires that employees ensure that persons are competent to execute their duties safely	4	C	II	Mostly effective	Supervisors are to include in the Supervisor when they are physically constant to handle a loaded wheel barrow	No incidents are reported relating to manual mixing of concrete	Supervisor, Safety Officer	CR 2014 regulations 5 & 7, OEM requirements, Eikon PPE Standard, Client Safety Specification, Contractor Safety Plan
Mixing Cement Making Use of a Mechanical Cement Mixer	R	106	Employees are not following the correct method of operating the mechanical concrete mixer	106.1	Employees are exposed to additional risks	Safety	Employees are not adequately trained in the use of the mechanical concrete mixer	Employees	Site Project Manager	Daily	Lost time injuries, medicals, first aid incidents, near miss incidents	Employees are trained on the use of mechanical mixers as per the OEM Manual	4	C	II	Mostly effective	Supervisors & Safety Officers must conduct observations so as to ensure employees operating the mechanical concrete mixer do so in a safe manner	No incidents are reported with regards to the use of mechanical concrete mixers	Supervisor, Safety Officer	CR 2014 regulations 5 & 7, Client Safety Specification, Contractor Safety Plan
	R	107	Employees not making use of the correct PPE whilst manually mixing concrete	107.1	Employees are exposed to HCS burns & Foreign body injury	Safety	Employees are not adequately trained in the use of the mechanical concrete mixer	Employees	Site Project Manager	Daily	Lost time injuries, medicals, first aid incidents, near miss incidents	Employees are issued with the required PPE for their specific task, PPE is available for replacement when worn or damaged at the contractor sites	4	C	II	Mostly effective	Supervisors are to check that all employees are equipped with the required PPE for the task of manually mixing concrete	No incidents are reported relating to manual mixing of concrete	Supervisor, Safety Officer	OSR regulation 3, CR 2014 regulations 5 & 7, Client Safety Specification, Contractor Safety Plan
Mixing of Concrete Manually	R	108	Incorrect ergonomic techniques are used to mix concrete manually	108.1	Employees expose themselves to possible injuries	Safety	Employees are not adequately trained in the use of the mechanical concrete mixer	Employees	Site Project Manager	Daily	Lost time injuries, medicals, first aid incidents, near miss incidents	Employees are trained on lifting techniques when performing their tasks so as to prevent musculoskeletal injury	4	C	II	Mostly effective	The Supervisor must be present when manual concrete mixing is being conducted to ensure employees are making use of the correct techniques to do so	No incidents are reported relating to manual mixing of concrete	Supervisor, Safety Officer	OSR regulation 3, CR 2014 regulations 5 & 7, Client Safety Specification, Contractor Safety Plan
	R	109	Employees not making use of the correct PPE whilst manually mixing concrete	109.1	Employees are exposed to HCS burns & Foreign body injury	Safety	Employees are not adequately trained in the use of the mechanical concrete mixer	Employees	Site Project Manager	Daily	Fatal or treatment case, and temporary discomfort case	All employees are issued with the required PPE for their specific task, PPE is available for replacement when worn or damaged at the contractor sites	2	C	II	Mostly effective	Supervisors are to check that all employees are equipped with the required PPE for the task of manually mixing of concrete	No incidents are reported relating to manual mixing of concrete	Supervisor, Safety Officer	OSR regulation 3, CR 2014 regulations 5 & 7, Client Safety Specification, Contractor Safety Plan
Blasting of Hard Rock & Excavations for the Purpose of Construction Works (if required)	R	110	Blasts are uncontrolled	110.1	Employees are about at risk of being exposed to blast risk & damage caused to infrastructure	Safety	No lock-out procedure in place, Lock-out procedure not followed	Employees	Site Project Manager	Daily	Lost time injuries, medicals, first aid incidents, near miss incidents	The competency & registration of the blasting contractor are evaluated prior to appointment to conduct blasting activities on site	4	B	II	Mostly effective	Employees are moved to a safe zone before blasting takes	No incidents are reported w/ 7 employees and infrastructure being struck by fly rock from the blast	Project Manager, Explosives Contractor, Supervisor	Explosives Regulations, Client Safety Specification, Contractor Safety Plan, Contractor Method Statement & Risk Assessment for Managing & Use of Explosives on site
	R	111	Explosives are left unattended to on the construction site	111.1	Explosives can be stolen and used for criminal activities	Safety	No lock-out procedure in place, Lock-out procedure not followed	Employees	Site Project Manager	Daily	Multiple fatalities	Explosives are delivered on the day of the blast in exact quantities as is required and immediately charged into the blast holes as arrival at the construction site	6	A	I	Fully effective	Security checks are conducted at the access gates, all employees are recorded and signed off in an explosives control register	All explosives are accounted for and stored in a controlled manner by a competent person authorized and bonded to do so	Project Manager, Explosives Contractor, Supervisor	Explosives Regulations, Client Safety Specification, Contractor Safety Plan, Contractor Method Statement & Risk Assessment for Managing & Use of Explosives on site
	R	112	Fly rock becomes airborne	112.1	Employees & Infrastructure can be struck by blasted fly rock	Safety	No lock-out procedure in place, Lock-out procedure not followed	Employees	Site Project Manager	Daily	Fatally, Lost time injuries, medicals, first aid incidents, near miss incidents	Explosives are delivered on the day of the blast in exact quantities as is required and immediately charged into the blast holes as arrival at the construction site	5	B	II	Mostly effective	Employees are evacuated to a safe zone of 500m away from the blast to an area identified by the blasting contractor	No incidents are reported w/ 7 employees and infrastructure being struck by fly rock from the blast	Project Manager, Explosives Contractor, Supervisor	Explosives Regulations, Client Safety Specification, Contractor Safety Plan, Contractor Method Statement & Risk Assessment for Managing & Use of Explosives on site
	R	113	Blasted holes are buried by surrounding blasted rock	113.1	Explosives can be accidentally detonated during clearing activities after the blast	Safety	No lock-out procedure in place, Lock-out procedure not followed	Employees	Site Project Manager	Daily	Fatally, Lost time injuries, medicals, first aid incidents, near miss incidents	Explosives are delivered on the day of the blast in exact quantities as is required and immediately charged into the blast holes as arrival at the construction site	5	B	II	Mostly effective	Regulations require that blasted explosives be dealt with and detonated in a controlled manner by a competent person authorized and bonded to do so	No incidents are reported w/ 7 employees and infrastructure being struck by fly rock from the blast	Project Manager, Explosives Contractor, Supervisor	Explosives Regulations, Client Safety Specification, Contractor Safety Plan, Contractor Method Statement & Risk Assessment for Managing & Use of Explosives on site
Stockpiling of Excavated Materials at the Stockpiles	R	114	Stockpile entry & exit routes do not comply with the construction site Traffic Management Plan (One way in & one way out)	114.1	Collisions between mobile machinery take place	Safety	Non-adherence to the requirements of the Traffic Management Plan during the stockpile establishment	Employees, Visitors	Site Project Manager	Daily	Fatally, Lost time injuries, medicals, first aid incidents, near miss incidents	The project Traffic Management Plan stipulates that traffic routes must be designated as one-way routes	5	B	II	Mostly effective	Traffic routes must be indicated with adequate & sufficient signage & operators are to be trained on the routes to follow when hauling excavated materials	No mobile machinery & plant incidents are reported having occurred at the stockpile location areas	Supervisor, Safety Officer	CR 2014 regulation 5.7 & 23, Client Safety Specification, Contractor Safety Plan, Contractor Traffic Management Plan
	R	115	No spotters are present whilst dumping of excavated materials take place	115.1	Mobile machinery & plant reverse over the edge of the stockpile	Safety	No spotters available or present during dumping operations	Employees	Site Project Manager	Daily	Fatally, Lost time injuries, medicals, first aid incidents, near miss incidents	The project Traffic Management Plan stipulates that spotters must be present to guide operators during dumping operations	5	C	II	Mostly effective	Spotters must conduct regular observations so as to ensure that spotters are present and assisting operators on the safe dumping of excavated materials	No mobile machinery & plant incidents are reported having occurred at the stockpile location areas	Supervisor, Safety Officer	CR 2014 regulation 5.7 & 23, Client Safety Specification, Contractor Safety Plan, Contractor Traffic Management Plan
	R	116	Stockpiles are inadequately compacted	116.1	Loose materials can cause rock slides under uncontrolled conditions (Reaction, Wet weather)	Safety	Insufficient knowledge of stockpiling mechanics w/ r rolling rock exposure	Employees, Visitors	Site Project Manager	Daily	Fatally, Lost time injuries, medicals, first aid incidents, near miss incidents	The contractor developed a risk assessment & method statement for the management of stockpiles	5	B	II	Mostly effective	Supervisors are to ensure that stockpiles are adequately compacted as risk is deemed	No incidents of uncontrolled rock slides have been reported and stockpiles have been adequately compacted	Supervisor, Safety Officer	OSR regulation 3, CR 2014 regulation 5.7 & 23, Client Safety Specification, Contractor Safety Plan, Contractor Traffic Management Plan
Collecting Excavated Material from the Stockpiles	R	117	Vertical walls have been created at the stockpiles	117.1	Collapse of stockpile walls	Safety	Insufficient knowledge of stockpiling mechanics w/ r rolling rock exposure	Employees	Site Project Manager	Daily	Fatally, Lost time injuries, medicals, first aid incidents, near miss incidents	The contractor is to develop a risk assessment & method statement for the management of stockpiles	5	C	II	Mostly effective	The contractor Environmental Officer and the Construction Manager to ensure that stockpile shaping is managed on a daily basis	No incidents of uncontrolled rock slides have been reported and stockpiles have been adequately compacted	Supervisor, Safety Officer	OSR regulation 3, CR 2014 regulation 5.7 & 23, Client Safety Specification, Contractor Safety Plan, Contractor Traffic Management Plan
Laying/Installation of Concrete, Steel and HDPE pipes	R	118	Mobile machinery & plant encroach on excavations when hauling pipes into position	118.1	Excavations can collapse	Safety	Employees not wearing the required PPE for first protection	Employees, Visitors	Site Project Manager	On occurrence	Fatally, Lost time injuries, medicals, first aid incidents, near miss incidents	A standard has been set by the contractor stating that no mobile machinery or plant may encroach within a 2m zone from an excavation. Barricading is placed at all excavations with appropriate signage	5	C	II	Mostly effective	Excavation Supervisor & Safety Officers are to conduct regular observations so as to ensure that no mobile machinery or plant encroaches to an excavation	No incidents have been reported whereby mobile machinery & plant are caused the collapse of an excavation	Excavation Supervisor, Safety Officer	CR 2014 regulation 5.7 & 13, Client Safety Specification, Contractor Safety Plan, Contractor Method Statement & Risk Assessment for Managing & Use of Excavations on site
	R	119	Pipes being delivered are unsafely stacked & secured on delivery trucks	119.1	Pipes can roll off the delivery truck once off loading commences in an uncontrolled manner	Safety	Employees not wearing the required PPE for first protection	Employees, Visitors	Site Project Manager	On occurrence	Lost time injuries, medicals, first aid incidents, near miss incidents	A method statement & risk assessment must be developed in conjunction with delivery companies based on the risks involved with deliveries and the methods of mitigating these risks so as to ensure safe delivery & off loading	4	C	II	Mostly effective	Delivery companies must adhere to and ensure compliance with the method statements and remedial actions indicated within the risk assessment	No incidents involving delivery vehicles are reported and all deliveries have been completed in a safe manner	Supervisor, Safety Officer	CR 2014 regulation 23, Client Safety Specification, Contractor Safety Plan, Contractor Method Statement & Risk Assessment for Managing & Use of Excavations on site
Installing Cables and Trunking at buildings and Electrical Plant	R	120	Cables are installed in restricted work spaces	120.1	Employees are exposed to injuries due to insufficient work space	Safety	Plant designed with restricted areas	Employee	Site Project Manager	On occurrence	Lost time injuries, medicals, first aid incidents, near miss incidents	Employees are provided with safe working platforms and ladders take cover the exposure risks of the task	4	C	II	Mostly effective	Insufficient inspection of the area are to identify safe means of access and operations are reported	Inspections and audits indicate compliance to safe practices and no incidents are reported	Supervisor, Safety Officer	CR 2014 regulation 5 & 24, Client Safety Specification, Contractor Safety Plan, Method Statements & Risk Assessments
	R	121	Cables are installed making use of manual handling methods	121.1	Employees are exposed to injuries resulting from twisting cables and ergonomic postures	Safety	Cables gain weight and are cumbersome when being installed, No cable pulling equipment is made available	Employees	Site Project Manager	On occurrence	Lost time injuries, medicals, first aid incidents, near miss incidents	Employees are to be provided with cable pulling equipment, so as to alleviate the need for manual work	4	C	II	Mostly effective	Employees are to be provided with cable pulling equipment, so as to alleviate the need for manual work	Inspections and audits indicate compliance to safe practices and no incidents are reported	Supervisor, Safety Officer	CR 2014 regulation 5 & 24, Client Safety Specification, Contractor Safety Plan, Method Statements & Risk Assessments
	R	122	Cables are not tied in correctly	122.1	Cables can dislodge from the installation technique	Safety	Insufficient materials to secure cables into position, Poor quality cable ties utilized to secure the cable in the trunking channel	Employees	Site Project Manager	On occurrence	Lost time injuries, medicals, first aid incidents, near miss incidents	Inspections are conducted by the Quality department to ensure that all materials purchased and used conform to the required quality standard	4	C	II	Mostly effective	Regular inspections are to be conducted to ensure that cables remain properly secured in position	Inspections and audits indicate compliance to safe practices and no incidents are reported	Supervisor, Safety Officer	CR 2014 regulation 5 & 24, Client Safety Specification, Contractor Safety Plan, Method Statements & Risk Assessments
Stacking & Storage	R	123	Materials & equipment not stored safely or according to legal requirements	123.1	Employees are exposed to risks when fetching materials & equipment from storage areas	Safety	No or an incompetent storeroom is appointed to manage stacking & storage	Employees, Visitors	Site Project Manager	Daily	Lost time injuries, medicals, first aid incidents, near miss incidents	Legislation requires that the employer ensure that employees are competent to perform their duties in a safe manner	4	C	II	Mostly effective	Storage areas are to be adequately designed and provided with ample storage space and racks for the safe storage of materials & equipment	Audits & Inspections on stacking & storage activities indicate that the storeroom is completed & appointed and that all materials are safely stored	Supervisors, Storeroom, Safety Officer	OHSA Act section 8 & 14, CR 2014 regulation 28, Eikon Stacking and Storage Standard 260-0341426, Client Safety Specification, Contractor Safety Plan, Contractor Method Statement & Risk Assessment for Fuel Storage
	R	124	Storage facilities do not comply with legal & other requirements	124.1	Legal contravention, Work stoppages	Safety	No drainage and HCS containment facilities are present at HCS Storeroom or Maintenance Workshops	Employees, Visitors	Site Project Manager	On occurrence	Medical incidents	Legislation requires that storage facilities are built to ensure safe storage of HCS and contain any possible spillage	3	C	II	Mostly effective	Safety Representative inspectors to include storage areas of HCS	Audits & Inspections on fuel storage facilities indicate full compliance to legislation & Eikon requirements & a valid permit has been issued and is up to date	Supervisors, Storeroom, Safety Officer	HCS Regulations, Client Safety Specification, Contractor Safety Plan, Contractor Method Statement & Risk Assessment for Fuel Storage
Lifting & Rigging Operations	R	125	Poor ground/uneven ground/improper setting up of the mobile cranes	125.1	Mobile cranes capable due to improper setup	Safety	Ground topography does not allow for a level working surface, near miss incidents	Employees, Visitors	Site Project Manager	On occurrence	Lost time injuries, medicals, first aid incidents, near miss incidents	Inspections by the Rigger are conducted to determine that the lifting zone is safe and will allow for lifting to take place unless the crane is stable and on a level surface	4	C	II	Mostly effective	Electronic system within the crane monitors the stability and level of the crane and will not allow for lifting to take place unless the crane is stable and on a level surface	Audits & Inspections during lifting & rigging operations indicate all conditions are compliant to allow for a safe lift	OSR 2, Rigger, Supervisors, Safety Officers, Crane Operators	CR 2014 regulation 22, OEM Requirements, Eikon Machinery Regulations, Eikon Procedures for the Safe Use of Lifting Equipment & Lifting Tackle - 39-98, Client Safety Specification, Contractor Safety Plan, Rigging Study
	R	126	Incompetent Crane Operators and Riggers are utilized for lifting operations	126.1	Lifting operations are conducted with minimal knowledge and experience	Safety	Rated Riggers and Crane Operators are not available at the time of the lift	Employees, Visitors	Site Project Manager	On occurrence	Lost time injuries, medicals, first aid incidents, near miss incidents	Crane Operators are trained, found competent and appointed for the specific crane to be operated	4	C	II	Mostly effective	The responsible supervisor and the safety personnel to ensure that all crane operators comply to the (printed or observed) competencies to the basic requirements and documents are kept updated accordingly	Audits & Inspections during lifting & rigging operations indicate all conditions are compliant to allow for a safe lift	OSR 2, Rigger, Supervisors, Safety Officers, Crane Operators	CR 2014 regulation 22, OEM Requirements, Eikon Machinery Regulations, Eikon Procedures for the Safe Use of Lifting Equipment & Lifting Tackle - 39-98, Client Safety Specification, Contractor Safety Plan, Rigging Study
	R	127	Lifting tackle & equipment are in a state of last repair/condition	127.1	Failure of lifting tackle during lifting operations	Safety	Poor management, inspections and maintenance of lifting tackle & equipment, No competent person available to conduct inspections on lifting tackle & equipment	Employees, Visitors	Site Project Manager	On occurrence	Lost time injuries, medicals, first aid incidents, near miss incidents	Lifting tackle are load tested and colour coded to ensure condition thereof for use	4	C	II	Mostly effective	The Supervisor is to be trained and found competent to manage & issue the lifting tackle & equipment accordingly & maintain a			

	R	132	Employee drinking over or on top of suspended loads	132.1	Lifting gear can fall due to additional weight and load fall with the employee. Employees can fall from heights	Safety	Procedures not followed when working in elevated positions	Employees	Site Project Manager	On occurrence	Fatally. Lost time injuries, medicals, first aid incidents, near miss incidents	Employees are trained and made aware of the requirements and requirements when working in elevated positions. Client SHE Specification stipulates requirements for lifting operations	5	C	II	Mostly effective	Method statement to be developed, implemented & cover employee location in relation to loads being lifted. Employees to be trained on Lifting & Rigging hazards	Audits & Inspections indicate full compliance to these requirements and no incidents are reported	Rigger, Supervisors, Safety Officers	CR 2014 regulation 19 & 22, SANS Standards, Eskom Procedure for the Safe use of lifting machine and lifting tools procedure 39-98, Eskom Procedure for working at heights, Client Safety Specification, Contractor Safety Plan, Contractor Method Statement & Risk Assessment
	R	133	Signals from the rigger during lifting & rigging operations unclear and incorrect	133.1	Failure to execute the lifting work safely and as intended	Safety	Poor visibility. Poor line of sight between the rigger and operator. Poor supervision. Untrained employees are utilized for rigging & rigging operations. Non-compliance to legal & Eskom requirements	Employees, Visitors	Site Project Manager	On occurrence	Fatally. Lost time injuries, medicals, first aid incidents, near miss incidents	The lifting & rigging study identifies the communication rule and medium to be used during lifting operations	5	B	II	Mostly effective	The method statement & rigging studies must incorporate the type of communication in place between the operator of lifting machines and the riggers and under what conditions operators are to be halted. Code of signals to be posted up at areas where lifting & rigging activities are taking place	Audits & Inspections indicate full compliance to these requirements and no incidents are reported	Rigger, Rigging Supervisor, Safety Officer	CR 2014 regulation 19 & 22, SANS Standards, Eskom Procedure for the Safe use of lifting machine and lifting tools procedure 39-98, Client Safety Specification, Contractor Safety Plan, Contractor Method Statement & Risk Assessment
Making use of Welding, Cutting & Grinding Equipment	R	134	Untrained employees utilized for hot work operations	134.1	Possible explosions or fires can occur	Safety	No trained or competent employees available for use to conduct hotwork	Employees, Visitors	Site Project Manager	On occurrence	Lost time injuries, medicals, first aid incidents, near miss incidents	Artisans are trained, found competent and appointed to make use of power actuated devices, cutting torches & grinding machines. Client SHE Specification stipulates all requirements for hotwork	4	B	II	Mostly effective	Hotwork permits are required for all hotwork to be conducted	Audits & Inspections indicate full compliance to these requirements and no incidents are reported	Supervisors, Safety Officers, Storeman	CHG Act section 8 & 14, CR 2014 regulation 5, 7 & 21, Client Safety Specification, Contractor Safety Plan
	R	135	Airchylene & oxygen bottles not stored or placed as per legal requirements	135.1	Gas bottles can be damaged or stolen	Safety	No bottle trolley available. No store available. Stores not locked or isolated	Employees, Visitors	Site Project Manager	On occurrence	Lost time injuries, medicals, first aid incidents, near miss incidents	A Storeman is appointed to ensure that all gas bottles are stored, secured and locked correctly so as to prevent unauthorised access to them. Client SHE Specification stipulates all requirements for the storage of gas cylinders	4	B	II	Mostly effective	Bottle carts to be made available & inspections to ensure safe storage and positioning during utilization. Suitable flammable liquid stores to be provided and a competent storeman to be appointed to oversee the management of gas bottles	Audits & Inspections indicate full compliance to these requirements and no incidents are reported	Supervisors, Safety Officers, Storeman	CR 2014 regulation 5 & 7, SANS Standards, CEM requirements, GSR regulation 9, Client Safety Specification, Contractor Safety Plan, Hotwork Permit System
	R	136	Safety mechanisms, such as flashback arrestors not being utilized on the acetylene and oxygen hoses	136.1	A flashback can occur	Safety	No flashback arrestors available. Flash back arrestors not functioning as intended	Employees, Visitors	Site Project Manager	On occurrence	Lost time injuries, medicals, first aid incidents, near miss incidents	Artisans are trained, found and appointed competent in the safe use of cutting torches. Pre-use inspection checklists are completed by the artisan prior to use of gas bottles & torches Client SHE Specification stipulates all requirements for hotwork equipment	4	B	II	Mostly effective	Pre-use inspections to be conducted that ensure flashback arrestors are in sound condition are utilized	Audits & Inspections indicate full compliance to these requirements and no incidents are reported	Supervisors, Safety Officers, Storeman, Artisan	CR 2014 regulation 5 & 7, SANS Standards, CEM requirements, GSR regulation 9, Client Safety Specification, Contractor Safety Plan, Hotwork Permit System
	R	137	Hotwork takes place in the vicinity of flammable liquids & materials	137.1	Fires and explosion can occur	Safety	Combustion/ignition levels of flammable liquids & materials. Requirements of fire ignition is present (Heat, Air & Fuel)	Employees, Visitors	Site Project Manager	On occurrence	Lost time injuries, medicals, first aid incidents, near miss incidents	Fire extinguishers are present. Employees are trained on basic fire fighting. Artisans are trained on the dangers of hotwork in relation to housekeeping & flammables. Fire watches are appointed	4	B	II	Mostly effective	Supervisors & employees required to inspect the area where hotwork is to take place and clear of all flammable liquids & materials	Audits & Inspections indicate full compliance to these requirements and no incidents are reported	Supervisors, Safety Officers, Artisan	CR 2014 regulation 5 & 7, GSR regulation 4 & 9, CEM requirements, Client Safety Specification, Contractor Safety Plan, Contractor Method Statement & Risk Assessment
	R	138	Damaged or equipment in a poor state of repairs is utilized for hotwork	138.1	Equipment can fall under duress during use	Safety	No pre-use inspections are conducted on hotwork equipment. No maintenance conducted on hotwork equipment	Employees, Visitors	Site Project Manager	On occurrence	Lost time injuries, medicals, first aid incidents, near miss incidents	Storeman & Artisans are trained on the inspection of equipment prior to issuing & Safety Officers to verify that it has been conducted and documented	4	C	II	Mostly effective	Supervisors are appointed to ensure that pre-use inspections are conducted and Safety Officers to verify that it has been conducted and documented	Audits & Inspections indicate full compliance to these requirements and no incidents are reported	Supervisors & Safety Officers, Artisan	CR 2014 regulation 5 & 7, GSR regulation 4 & 9, CEM requirements, Client Safety Specification, Contractor Safety Plan, Contractor Method Statement & Risk Assessment
	R	139	Employees make use of home-made tools & equipment	139.1	Home-made tools & equipment can fail during usage	Safety	Appropriate tools & equipment unavailable	Employees, Visitors	Site Project Manager	Daily	Lost time injuries, medicals, first aid incidents, near miss incidents	Inspections are conducted on all tools & equipment to ensure that they are in a state of good repair and are manufactured by a registered manufacturer	4	C	II	Mostly effective	Sufficient tools & equipment are to be made available for the safe execution of all work	Inspections on tools will indicate that home-made tools are not in use	Supervisors, Safety Officers, Storeman, Artisan	GSR regulation 3, Client Safety Specification, Contractor Safety Plan
	R	140	Use of defective handtools	140.1	Handtools can fail during the use thereof	Safety	No inspections prior to use. Incompetent person conducting the inspection	Employees, Visitors	Site Project Manager	On occurrence	Lost time injuries, medicals, first aid incidents, near miss incidents	Pre-use inspections are to be conducted on all tools and a tool list to be documented	4	C	II	Mostly effective	The supervisor and safety personnel to conduct spot checks to ensure all handtools are safe for use	Inspections on tools will indicate that tools are in a state of good repair	Supervisors, Safety Officers, Storeman, Artisan	GSR regulation 3, Client Safety Specification, Contractor Safety Plan, Pre-use Inspection Form
	R	141	Unauthorized access of employees access to tools, equipment and materials	141.1	Theft, Laceration, Contamination, Possible injuries, Work stoppages	Safety	Thrift, Locked container. Possible injuries, Work stoppages	Employees, Visitors	Site Project Manager	Daily	Lost time injuries, medicals, first aid incidents, near miss incidents	Tools are checked by security off a tools register before entering & leaving the construction site	4	B	II	Mostly effective	Employees to be appointed to ensure the safe-keeping of tools & equipment	Tools & equipment are signed out & in on tool registers and accounted for	Supervisors, Safety Officers, Storeman, Artisan	CR 2014 regulation 27, Eskom Security Requirements, Client Safety Specification, Contractor Safety Plan
Using Portable Electrical Equipment	R	142	Use of defective portable electrical equipment	142.1	Portable Electrical Equipment can fail during the use thereof	Safety	No inspections prior to use. Inspection conducted by incompetent persons	Employees, Visitors	Site Project Manager	On occurrence	Lost time injuries, medicals, first aid incidents, near miss incidents	All portable tools to be used by competent person and inspected accordingly before use & documented on a pre-use inspection form	4	C	II	Mostly effective	All portable and safety personnel to conduct spot checks to ensure that portable electrical equipment are safe for use	Audits & Inspections will indicate that portable electronic tools are in a state of good repair	Supervisors, Safety Officers, Storeman, Artisan	CR 2014 regulation 27, GSR regulation 3, Client Safety Specification, Contractor Safety Plan
	R	143	Employees not trained on the safe use of portable electrical equipment	143.1	Employees are exposed to unknown risks	Safety	Trained & competent artisans were not available. Ignorance of compliance & OEM requirements	Employees, Visitors	Site Project Manager	On occurrence	Lost time injuries, medicals, first aid incidents, near miss incidents	All employees using portable electrical equipment are to be assessed and certified competent to use these tools	4	C	II	Mostly effective	The responsible supervisor and the safety personnel to ensure all employees using tools are competent to do so	Audits on competencies will indicate that all artisans and employees making use of portable electrical tools are competent to do so	Supervisors, Safety Officers, Storeman, Artisan	CR 2014 regulation 27, GSR regulation 3, Client Safety Specification, Contractor Safety Plan
Use of Explosive Actuated Fastening Devices (if required)	R	144	Incompetent, Unlicensed and unauthorized employees allowed to use explosive actuated fastening devices	144.1	Employees are exposed to unknown risks	Safety	Trained & competent artisans are not available. Ignorance of compliance & OEM requirements	Employees, Visitors	Site Project Manager	On occurrence	Lost time injuries, medicals, first aid incidents, near miss incidents	All employees using explosive actuated devices to be trained, certified and authorized accordingly	4	C	II	Mostly effective	The supervisor and safety personnel to ensure that all employees using these tools are trained by an accredited body and certified accordingly	Audits on competencies will indicate that all artisans and employees making use of explosive actuated fastening devices are competent to do so	Supervisors, Artisan, Security Officer	CR 2014 regulation 21, GSR regulation 3, Client Safety Specification, Contractor Safety Plan
	R	145	Explosive actuated fastening devices not controlled as per the legal requirement	145.1	Unauthorized access is gain to explosive actuated fastening devices	Safety	No store is available. There is no control system in place	Employees, Visitors	Site Project Manager	On occurrence	Lost time injuries, medicals, first aid incidents, near miss incidents	Explosive actuated fastening devices to be controlled as per the legal requirement and records kept accordingly	4	C	II	Mostly effective	The supervisor and safety personnel to ensure that all explosives are properly stored and controlled as per the legal requirement	Audits & Inspections will indicate that explosive actuating devices are stored correctly	Supervisors, Safety Officers, Storeman, Artisan, Security Officer	CR 2014 regulation 21, GSR regulation 3, Client Safety Specification, Contractor Safety Plan
	R	146	Required signage not made available and posted where explosive actuated fastening devices are used	146.1	Employees are exposed to unknown risks	Safety	Unauthorised employees accessing areas where explosives are used	Employees, Visitors	Site Project Manager	On occurrence	Lost time injuries, medicals, first aid incidents, near miss incidents	The contractor to ensure that all the required signage is posted accordingly where explosive actuating devices are used	4	C	II	Mostly effective	The supervisor and safety personnel to ensure that all the required signage is made available and posted accordingly	Audits & Inspections will indicate that where explosive actuating devices are being used	Supervisors, Safety Officers, Artisan	CR 2014 regulation 21, GSR regulation 3, Client Safety Specification, Contractor Safety Plan
Conducting Work in close Proximity to Overhead Powerlines	R	147	Airchylene High voltage power lines are present where construction activities are taking place	147.1	A hot work can take place between the power line and mobile machinery & plant	Safety	The work clearance between overhead power lines & mobile machinery & plant is breached	Employees, Visitors	Site Project Manager	On occurrence	Lost time injuries, medicals, first aid incidents, near miss incidents	Work permit to be obtained for all work conducted below or near power lines. All employees are to be made aware of the conditions stipulated within the permit. Height restriction poles to be installed and maintained accordingly	4	C	II	Mostly effective	Supervisors are to ensure that method statements & risk assessments are developed and all employees made aware of the risks. Supervisors are to ensure that employees fully comply with all requirements during the execution of these activities	No incidents are reported involving the working below or in close proximity to active overhead power lines	Supervisor, Safety Officer	CR 2014 regulation 5, 7 & 24, Eskom Permit System, Eskom Transmission Workplace application System, Client Safety Specification, Contractor Safety Plan, Contractor Method statements & risk assessments for working around overhead powerlines
	R	148	Slips and fall while connecting the water pipes from water truck and placing in the stream	148.1	Employees can slip and fall into the stream/dam	Safety	No method statement or risk assessment was developed and communicated to employees, highlighting the method & risks involved with the activity	Employees, Visitors	Site Project Manager	On occurrence	Lost time injuries, medicals, first aid incidents, near miss incidents	Safe access is to be provided for the employees connecting pipes. Life jackets are to be worn and employees trained and the use thereof. Employees must work in pairs for rescue purposes	4	C	II	Mostly effective	Supervisors are to ensure that regular observations are conducted on the activity so as to ensure the process is followed and these observations are to be documented. Equipment/buddy system	No incidents involving collecting water from the clean and dirty water dam and that the task is completed in a safe manner	Supervisor, Safety Officer	CR 2014 regulation 23 & 26, CEM requirements, Client Safety Specification, Contractor Safety Plan, Contractor Method Statement & Risk Assessment for delivery of supplies and materials
	R	149	No spotter is used when reversing during water collection activities	149.1	The water tanker can reverse into the Clean and Dirty water dam	Safety	Poor visibility & judgment of the operator due to the design of the vehicle. No spotter available	Employees	Site Project Manager	Daily	Lost time injuries, medicals, first aid incidents, near miss incidents	Spotters have been employed and utilized for all reversing activities	4	B	II	Mostly effective	The Supervisor must ensure that a spotter is assigned to the water tanker during water collection activities	No incidents involving collecting water from the Clean and Dirty water dam and that the task is completed in a safe manner	Supervisor, Safety Officer	CR 2014 regulation 23 & 26, CEM requirements, Client Safety Specification, Contractor Safety Plan, Contractor Method Statement & Risk Assessment for delivery of supplies and materials
	R	150	No effective recovery equipment is available on the construction to rescue a safe recovery of the water tanker when stuck in mud	150.1	Incorrect methods are used to recover the water tanker	Safety	Muddy conditions prevail on the construction site which results in the water tanker being stuck in the mud	Employees, Visitors	Site Project Manager	On occurrence	Lost time injuries, medicals, first aid incidents, near miss incidents	Ensure a procedure for recovery of stuck water tanker is followed accordingly, the right recovery equipment is used	4	C	II	Mostly effective	The Supervisor must ensure that a method statement & risk assessment are conducted for the recovery of mobile machinery & plant & communicated to the operators accordingly	No incidents involving the recovery of mobile machinery & plant and that the task is completed in a safe manner	Supervisor, Safety Officer	CR 2014 regulation 23, Client Safety Specification, Contractor Safety Plan, Contractor Method Statement & Risk Assessment for recovery of mobile machinery & plant when stuck
Delivery & Offloading Liners & Pipes from the delivery vehicles	R	151	Delivery trucks not escorted to site	151.1	Delivery vehicles can cause collisions with other mobile machinery, plant and vehicles	Safety	Muddy conditions prevail on the construction site which results in the water tanker being stuck in the mud	Employees, Visitors	Site Project Manager	On occurrence	Lost time injuries, medicals, first aid incidents, near miss incidents	Ensure a procedure for recovery of stuck water tanker is followed accordingly, the right recovery equipment is used	4	C	II	Mostly effective	The Traffic Management Plan must be adhered to all delivery vehicle operators and delivery vehicles are to be escorted onto the construction site	No incidents involving delivery vehicles are reported and all deliveries have been completed in a safe manner	Supervisor, Safety Officer	CR 2014 regulation 23, Client Safety Specification, Contractor Safety Plan, Contractor Method Statement & Risk Assessment for delivery of supplies and materials
	R	152	Employees standing in close proximity to the offloading activity	152.1	Employees can be struck by the forklift used to offload rolls of liners	Safety	Muddy conditions prevail on the construction site which results in the water tanker being stuck in the mud	Employees, Visitors	Site Project Manager	On occurrence	Lost time injuries, medicals, first aid incidents, near miss incidents	Ensure a procedure for recovery of stuck water tanker is followed accordingly, the right recovery equipment is used	4	C	II	Mostly effective	Baricading must be erected around the off-loading zone and no warning signs are to be displayed warning employees that off-loading of materials is in progress	No incidents involving delivery vehicles are reported and all deliveries have been completed in a safe manner	Supervisor, Safety Officer	CR 2014 regulation 23, Client Safety Specification, Contractor Safety Plan, Contractor Method Statement & Risk Assessment for delivery of supplies and materials
	R	153	Materials being delivered are unsafely stacked & secured on delivery trucks	153.1	Materials can roll off the delivery truck once off-loading commences in an uncontrolled manner	Safety	Muddy conditions prevail on the construction site which results in the water tanker being stuck in the mud	Employees, Visitors	Site Project Manager	On occurrence	Lost time injuries, medicals, first aid incidents, near miss incidents	Ensure a procedure for recovery of stuck water tanker is followed accordingly, the right recovery equipment is used	4	C	II	Mostly effective	Delivery companies must adhere to and ensure compliance with the method statements and remedial actions indicated within the risk assessment	No incidents involving delivery vehicles are reported and all deliveries have been completed in a safe manner	Supervisor, Safety Officer	CR 2014 regulation 23, Client Safety Specification, Contractor Safety Plan, Contractor Method Statement & Risk Assessment for delivery of supplies and materials
Delivery of GE Materials to site>Loading & Off-loading on site	R	154	There is an increase of transportation on the construction site	154.1	Collisions between mobile machinery take place	Safety	Existing operators have not been made aware of the introduction of new and additional transportation being placed site	Employees, Visitors	Site Project Manager	On occurrence	Lost time injuries, medicals, first aid incidents, near miss incidents	Interlink trucks are escorted to the dumping site	4	C	II	Mostly effective	Speed limit signs and traffic controls must be placed at strategic positions to ensure compliance to the traffic rules of the site	No incidents are reported and all deliveries are delivered in a safe manner	Supervisor, Safety Officer	CR 2017 regulations 9 & 23, Client Safety Specification, Contractor Safety Plan
	R	155	Operators are not accustomed to or adhere to the traffic rules on the construction site	155.1	Collisions between mobile machinery take place	Safety	Operators have not been trained in the site Traffic Management Plan	Employees, Visitors	Site Project Manager	On occurrence	Lost time injuries, medicals, first aid incidents, near miss incidents	All operators attend induction are made aware of the risks on the construction site and the rules of travel	4	C	II	Mostly effective	All operators must be trained on the contents of the site Traffic Management Plan	No incidents are reported and all deliveries are delivered in a safe manner	Supervisor, Safety Officer	CR 2017 regulations 9 & 23, Client Safety Specification, Contractor Safety Plan
Laying of liners	R	156	Employees stand in close proximity to the decanting of the GE material	156.1	Employees can be unharmed with rolling GE material	Safety	Employees have not been made aware of the risk of being unharmed with GE material	Employees	Site Project Manager	On occurrence	Lost time injuries, medicals, first aid incidents, near miss incidents	Access to the dumping site and operations must be restricted and supervised	4	B	II	Mostly effective	Supervisors are to ensure that all employees involved in the activity of positioning & unrolling liners are fully conversant with the methods & rules of the task and fully comply as such	No incidents involving the positioning & unrolling of liners	Supervisor, Safety Officer	CR 2014 regulation 23, Client Safety Specification, Contractor Safety Plan, Contractor Method Statement & Risk Assessment for delivery of supplies and materials
	R	157	Employees manually handling bulk liners	157.1	Method statement & risk assessment are developed on the positioning & unrolling of the liners. Employees are trained on material handling techniques	Safety	Method statement & risk assessment are developed on the positioning & unrolling of the liners. Employees are trained on material handling techniques	Employees	Site Project Manager	On occurrence	Lost time injuries, medicals, first aid incidents, near miss incidents	Method statement & risk assessment are developed on the positioning & unrolling of the liners. Employees are trained on material handling techniques	4	C	II	Mostly effective	Supervisors are to ensure that all employees involved in the activity of positioning & unrolling liners are fully conversant with the methods & rules of the task and fully comply as such	No incidents involving the positioning & unrolling of liners	Supervisor, Safety Officer	CR 2014 regulation 23, Client Safety Specification, Contractor Safety Plan, Contractor Method Statement & Risk Assessment for delivery of supplies and materials
Installation of Powerlines	R	158	Poles are manually handled when installed	158.1	Employees may be exposed to injuries. Poles may be dropped during the installation thereof	Safety	No lifting equipment available for the installation of poles	Employees	Site Project Manager	On occurrence	Lost time injuries, medicals, first aid incidents, near miss incidents	A method statement & risk assessment is developed and includes safe practices when lifting poles into position	4	C	II	Mostly effective	The Construction Manager and Supervisor are appointed to ensure safe practices when lifting poles into position	Audits and inspections indicate compliance to these requirements and no incidents are reported	Supervisor, Safety Officer	CR 2014 regulation 8 & 6, Client SHE Specification, Method Statements & Risk Assessments
	R	159	Poles are not securely placed into the ground	159.1	Poles may collapse when cables are strung and tensioned	Safety	Failure to manage the weighted conditions and effectively secure the poles into position	Employees	Site Project Manager	On occurrence	Lost time injuries, medicals, first aid incidents, near miss incidents	A design is approved approved so as to ensure that the worker in which poles are placed is intrinsically safe	4	C	II	Mostly effective	The Construction Manager and Designer are mandated to ensure compliance to design drawings	Designs are issued with the Client SHE Specification, highlighting the risk of wetland conditions. Geotech studies are conducted prior to design	Supervisor, Safety Officer	CR 2014 regulation 8 & 6, Client SHE Specification, Method Statements & Risk Assessments
	R	160	Poles are installed in muddy wetland soil	160.1	Design of Powerline takes the line through the wetlands	Safety	Quality checks are conducted to ensure construction work complies with design drawings	Employees	Site Project Manager	On occurrence	Lost time injuries, medicals, first aid incidents, near miss incidents	Responsible Persons & Authorized Persons in term of the PPR & CRVUS Regulations have undergone assessment and found compliant	4	C	II	Mostly effective	During installation, all employees are made aware of the safety requirements i.e. working on electrical equipment and plant. Inspections and audits are conducted on activities by management and Safety professionals	Inspections and audits are conducted on electrical work. No injuries or incidents are reported	Responsible Persons (RP)	CR 2014 regulation 24, Electrical Installations Regulations, 240-5622793-Air-Insulated Withdrawable AC Metal-Enclosed Switchgear and Control Gear for Rated Voltages above 10kV up to and including 240-56307424, MV and LV Switchgear Protection Standard, Client Safety Specification, Contractor Safety Plan
Working on Electrical Equipment	R	161	The lockout procedure is not followed for isolating electrical equipment	161.1	Employees work on energized plant and equipment	Safety	No or incompetent persons appointed as a RP for voltage work	Employees	Site Project Manager	On occurrence	Lost time injuries, medicals, first aid incidents, near miss incidents	Responsible Persons & Authorized Persons in term of the PPR & CRVUS Regulations have undergone assessment and found compliant	4	C	II	Mostly effective	During installation, all employees are made aware of the safety requirements i.e. working on electrical equipment and plant. Inspections and audits are conducted on activities by management and Safety professionals	Inspections and audits are conducted on electrical work. No injuries or incidents are reported	Responsible Persons (RP)	CR 2014 regulation 24, Electrical Installations Regulations, 240-5622793-Air-Insulated Withdrawable AC Metal-Enclosed Switchgear and Control Gear for Rated Voltages above 10kV up to and including 240-56307424, MV and LV Switchgear Protection Standard, Client Safety Specification, Contractor Safety Plan
	R	162	There is no integration or communication between different groups of people working in the same HV, MV & LV areas	162.1	Employees can unknowingly be exposed to and work on energized plant and equipment	Safety	No or incompetent persons appointed as RP's for voltage work	Employees	Site Project Manager	On occurrence	Fatally or life threatening health effects	Permits are issued at a central permit office and the issuer thereof is aware of all permits pertaining to all areas of voltage work	5	C	II	Mostly effective	During installation, all employees are made aware of the safety requirements i.e. working on electrical equipment and plant. Inspections and audits are conducted on activities by management and Safety professionals	Inspections and audits are conducted on electrical work. No injuries or incidents are reported	Responsible Persons (RP)	CR 2014 regulation 24, Electrical Installations Regulations, 240-5622793-Air-Insulated Withdrawable AC Metal-Enclosed Switchgear and Control Gear for Rated Voltages above 10kV up to and including 240-56307424, MV and LV Switchgear Protection Standard, Client Safety Specification, Contractor Safety Plan
	R	163	The appropriate PPE is not worn while working on HV, MV & LV Switchgear or equipment	163.1	Employees can unknowingly be exposed to and work on energized plant and equipment	Safety	No or incompetent persons appointed as a RP for voltage work. No available PPE. Contractor not budgeting sufficiently for PPE	Employees	Site Project Manager	On occurrence	Fatally or life threatening health effects	Contractors under induction training and are made aware of the requirements for PPE when working on voltage equipment and plant	5	C	II	Mostly effective	During installation, all employees are made aware of the safety requirements i.e. working on electrical equipment and plant. Inspections and audits are conducted on activities by management and Safety professionals	Inspections and audits are conducted on electrical work. No injuries or incidents are reported	Responsible Persons (RP)	CR 2014 regulation 24, Electrical Installations Regulations, 240-5622793-Air-Insulated Withdrawable AC Metal-Enclosed Switchgear and Control Gear for Rated Voltages above 10kV up to and including 240-56307424, MV and LV Switchgear Protection Standard, Client Safety Specification, Contractor Safety Plan
Dealing with Adverse Weather Conditions (cold, heat, heavy rains, storms, lightning, strong winds, heavy dust and mist)	R	164	Employees works through extreme thermal variations in the weather (cold, heat, heavy rains, storms, lightning, strong winds, heavy dust and mist)	164.1	Employees are exposed to a higher risk of incidents occurring due to thermal fatigue	Safety	Seasonal weather conditions	Employees, Visitors	Site Project Manager	On occurrence	Fatally or life threatening health effects	Adverse weather to be monitored accordingly and work stopped when required	5	C	II	Mostly effective	Lightning detector device to be used accordingly. Any adverse weather conditions to be properly assessed and proper decision taken	No incidents are reported as a result of adverse weather	Project Manager, Supervisor, Safety Officers	CR 2014 regulation 24, Electrical Installations Regulations, 240-5622793-Air-Insulated Withdrawable AC Metal-Enclosed Switchgear and Control Gear for Rated Voltages above 10kV up to and including 240-56307424, MV and LV Switchgear Protection Standard, Client Safety Specification, Contractor Safety Plan
	R	165	No or inadequate storm water channels constructed around the construction site	165.1	Excessive water dams up on the construction site	Safety	Contractor does not cater sufficiently for drainage of storm water	Employees, Visitors	Site Project Manager	On occurrence	Lost time injuries, medicals, first aid incidents, near miss incidents	Stormwater drains have been excavated as per the Environmental Management Plan Report (EMPR). Diversion berms are constructed to ensure water flows away from roads	4	C	II	Mostly effective	Supervisors & Environmental Officers are to regularly inspect the stormwater management system to ensure it is operational and adequately maintained during extreme rain weather. Functions accordingly	Inspections indicate the stormwater management system is well-maintained and during extreme rain weather, functions accordingly	Environmental Officer, Construction Manager, Safety Officer, Supervisor	CR 2014 regulation 5, 7, EMPR, Client Safety Specification, Method Statements & Risk Assessments
Wild Fires & Fighting Wild Fires	R	166	Wetler grass is prone to ignition	166.1	Employees, mobile machinery & plant, materials and infrastructure are exposed to the risk of fires	Safety	Dry grass can be ignited by a spark or flame from an unknown source	Employees, Visitors, Public	Site Project Manager	On occurrence	Lost time injuries, medicals, first aid incidents, near miss incidents, property damage, Environmental incidents	An emergency procedure has been developed and implemented by the Tshaba PS Fire Department for managing wild fires. Fire breakers are established at the start of the winter season	4	C	II	Mostly effective	The contractor has water tankers on stand-by in the event of a wild fire ignition	Seasonal Fire break burning. Wild fires are dealt with swiftly and in a safe and controlled manner	Supervisor, Environmental Officer, Safety Officer	National Environmental Management Act (No. 107 of 1998), National Veld and Forest Fire Act (No. 101 of 1998), Tshaba Refurbishment & Construction Project Aspects and Impacts Register
	R	167	Incompetent person utilized for the fighting of wild fires	167.1	Employees, mobile machinery & plant, materials and infrastructure are exposed to the risk of fires	Safety	There are no trained wild fire fighting persons on the project	Employees, Visitors, Public	Site Project Manager	On occurrence	Fatally or life threatening health effects	An emergency procedure has been developed and implemented by the Tshaba PS Fire Department for managing wild fires	5	B	II	Mostly effective	The contractor has water tankers on stand-by in the event of a wild fire ignition. The EMR Team from the Tshaba Power Station Fire Department are trained with the lightning	Seasonal Fire break burning. Wild fires are dealt with swiftly and in a safe and controlled manner	Supervisor, Environmental Officer, Safety Officer	National Environmental Management Act (No. 107 of 1998), National Veld and Forest Fire Act (No. 101 of 1998), Tshaba Refurbishment & Construction Project Aspects and Impacts Register
Administration or Treatment of Injuries	R	168	First aid does not using surgical gloves while administering first aid	168.1	First aid exposes him or herself to possible infections	Health	Ignorance in not using surgical gloves. No surgical gloves available	Employees	Site Project Manager	On occurrence	Life threatening health effects	First aiders are to ensure that the contents of the first aid box are checked on a monthly basis for completeness of contents	5	C	II	Mostly effective	Refresher training to highlight the use of the appropriate PPE	Client doctor examines the first aid box on a monthly basis and all the required contents are present	Safety Officers and First aiders	GSR regulation 3, Client Safety Specification, Contractor Safety Plan
	R	169	Employees are not trained on the emergency preparedness plan	169.1	There is no emergency preparedness plan available. Ignorance towards training employees on the EMR Plan	Safety	There is no emergency preparedness plan available. Ignorance towards training employees on the EMR Plan	Employees, Visitors	Site Project Manager	Daily	Medical incidents	Induction & EMR Training. Emergency preparedness plan. Emergency drills	3	C	II	Mostly effective	Employees are to be trained on the requirements for compliance towards the emergency response plan, and regular drills are to be conducted to ensure constant awareness thereof	Quadrant drills are conducted to ensure employees awareness in preparation for times of an emergency	On Medical Station, Project Manager, Evacuation wardens, Tshaba PS Fire Chief	Emergency planning procedure 32-123, Client Safety Specification, Contractor Safety Plan (include On Medical Station)
Fatally or life threatening health effects	R	170	An injured person is not attended to immediately	170.1	Delay in treatment can cause an increase in the severity of the injury	Health	Delayed reporting of injury. No trained First aiders present. No medical supplies available	Employees	Site Project Manager	On occurrence	More than one first aiders to be appointed. First aid box to be kept where work is carried out at all times	4	C	II	Mostly effective	First aiders to comply to emergency response procedure at all times	Multiple first aiders are appointed to the team and first aid boxes are regularly checked and replenished if need be	Audits and inspections reveal that the first aid box is inspected and if necessary, replenished on a monthly basis. No incidents are reported whereby first aid injuries were not treated from a first aid box	First Aider, Safety Officer	CHG Act, GSR regulation 3, Client Safety Specification, Contractor Safety Plan
	R	171	There is a shortage of first aid equipment in the first aid box	171.1	The First Aider is unable to treat injuries effectively	Health	First aid box not regularly inspected	Employees, Visitors	Site Project Manager	On occurrence	Inability to administer Effective first aid due to unavailability of some first aid box components	First Aid registers require a monthly inspection and documentation thereof to be completed in the first aid box	3	C	II	Mostly effective	The First Aider is to verify the Safety Officer and Tshaba Power Station clinic on a monthly basis to conduct a joint inspection and if necessary, replenishment of supplies of the first aid box	Audits and inspections reveal that the first aid box is inspected and if necessary, replenished on a monthly basis. No incidents are reported whereby first aid injuries were not treated from a first aid box	First Aider, Safety Officer	CHG Act, GSR regulation 3, Client Safety Specification, Contractor Safety Plan
Managing Pregnant Employees	R	172	Pregnant employees are exposed to hygiene stressors	172.1	Unborn foetus & miscarriage	Safety	Pregnant employees do not declare their pregnancies. Pregnant employees are expected to perform under normal conditions and effort	Employees, Visitors, Public	Site Project Manager											

	R	176	Employees are pre-occupied with employment security and not focused on work being conducted	176.1	Employees can expose themselves to unnecessary risks	Safety	Loss of income due to insufficient job creation in the local municipal area	Employees	Site Project Manager	On occurrence	Lost time injuries, medicals, first aid incidents, near miss incidents	Safety meetings are held to discuss work related risks and motivate employees to ensure that they go home safely to their families, as per the Oa Coal Safety Culture	4	C	II	Mostly effective	Employees are to be inducted into the Safety Culture of Oa Coal Projects and should be inducted regularly to ensure they understand the importance of compliance to the CH&S Act section 14 and also ensuring they focus on the task at hand and not worry about the future	Audits are conducted between the Client and the Contractor discussing HR related matters	Project Manager, Construction Manager, Contracts Manager	CH&S Act section 14, Client Safety Specification, Contractor Safety Plan			
	R	177	Employees deliberately sabotage plant, equipment or the works as a result of the project meeting to an end	177.1	Loss of revenue, project delays and enforcement to violence	Safety	Loss of income due to insufficient job creation in the local municipal area	Employees	Site Project Manager	On occurrence	Lost time injuries, medicals, first aid incidents, near miss incidents	Security is present and patrols the construction site to ensure that no tampering with plant and machinery takes place	4	C	II	Mostly effective	Employees are employed on a contract basis and are given a contract start date and a contract ending date	Audits are conducted between the Client and the Contractor discussing HR related matters	Project Manager, Construction Manager, Contracts Manager	CH&S Act section 14, Client Safety Specification, Contractor Safety Plan			
Managing the Office Work Environment	R	178	Wet & slippery floor conditions prevail after cleaning or mopping	178.1	Persons can slip and fall	Safety	Wet floors, Wearing heelclogs without rubber sole (that slip), No safety signage warning persons of the risk	Employees, Visitors	Site Project Manager	Daily	Lost time injuries, medicals, first aid incidents, near miss incidents	Cleaning Signages, Supervision, Training, Wear safety shoes or flat shoes, Safety warning signs	4	C	II	Mostly effective	Employees to comply to cleaning signages and Cleaners to place signages at all times when cleaning, Shoes restriction at the workplace (no heels)	Inspections & observations indicate compliance to the relevant requirements	Project Manager, Cleaners, Individuals	CH&S Act section 8, ERW regulation 6, Eskom PPE Standard, Client Safety specification, Contractor Safety Plan			
	R	179	Cleaning substances and chemicals not labelled or stored correctly	179.1	Ingesting chemicals, Using wrong substance for wrong use	Safety	Unknown content (unaware what is the content), Poor discipline, Non-compliance to legislation & Eskom requirements	Employees, Visitors	Site Project Manager	On occurrence	Lost time injuries, medicals, first aid incidents, near miss incidents	Safety signs are displayed warning employees of to be aware and cautious of wet floors	4	C	II	Mostly effective	Label all chemical containers, MSDS copy of all chemical substances to be available, Employees to be made aware of the risks of these chemical substances	On cleaning substances are clearly marked and employees inducted into the risks thereof	Safety Officer, Hygienist	Safety specifications, HCS regulations, Client Safety specification, Contractor Safety Plan, MSDS Substances			
	R	180	Floor illumination bright light or glare	180.1	Protruding objects are not clearly visible, Eyes under strain	Safety	Lighting unavailable, Lighting damaged, Power failures	Employees, Visitors	Site Project Manager	Daily	Lost time injuries, medicals, first aid incidents, near miss incidents	A defects reporting system has been implemented to ensure that all damaged or blown lights are replaced to ensure adequate lighting prevails in offices	4	C	II	Mostly effective	Occupational hygiene surveys, Portable lights, Maintenance schedules & Defects report systems	All lighting is working and lux levels are in accordance with the ERW schedule	Project Manager, Safety Officers, Hygienist	Safety specification, ERW regulation 3 & Lux schedule, Client Safety specification, Contractor Safety Plan			
	R	181	Floor stacking and storage of materials, substances, documentation	181.1	Employees can bump against or slip, trip & fall over materials & objects lying in walkways	Safety	Poor housekeeping standards, Non-compliance to legislation & Eskom requirements, Poor knowledge of housekeeping requirements	Employees, Visitors	Site Project Manager	On occurrence	Lost time injuries, medicals, first aid incidents, near miss incidents	Office inspections are conducted and BB3 observations are done to ensure compliance to creating a safe working environment	4	C	II	Mostly effective	Appoint a competent person responsible for stacking & storage of materials & equipment	Observations & inspections indicate that all materials, substances and documents are correctly stored and the work space is clear of clutter	Project Manager, Safety Officers	Stacking and storage standard 240-0041426, CHS Act section 8, CR 2014 regulation 30(a)			
	R	182	Restricted working space for both men & machinery	182.1	Congestion within the construction site	Safety	Limited working space due to design of the plant & construction area	Employees, Visitors	Site Project Manager	Daily	Lost time injuries, medicals, first aid incidents, near miss incidents	Designs and layouts of working environments are evaluated prior to the creation thereof	4	C	II	Mostly effective	The Client Safety Specification is issued to the Designer for incorporation of sufficient working space when designing laydown areas/site construction facilities and the works themselves	Designs are evaluated and accepted prior to the construction thereof	Engineers, Project Manager, Pr CHS Agent	CR 2014 regulation 6, Building Regulations, Client Safety Specification, Contractor Safety Plan			
	R	183	Uneven ground surfaces	183.1	Employees & visitors can trip and fall	Safety	No surfaced walking routes available	Employees, Visitors, Public	Site Project Manager	Daily	Lost time injuries, medicals, first aid incidents, near miss incidents	Handrails have been installed to assist employees with negotiating stairways	4	C	II	Mostly effective	Employees to be vigilant whilst walking to and from the construction site w.r.t uneven walking surfaces	Prevalence of related incident analysis, Supervision	Health & Safety Representative, Safety Officers	CH&S Act section 8, National Building Regulations, Client Safety Specification, Contractor Safety Plan			
	R	184	Employees spend 95% of their time in the office and exposed to large amounts of PC usage	184.1	Eye and muscle strain	Safety	Employees not taking breaks, Poor body postures	Employees	Site Project Manager	Daily	Lost time injuries, medicals, first aid incidents, near miss incidents	Procedures, Awareness, Periodic medical testing, Ergonomics assessment	4	C	II	Mostly effective	Employees to take breaks when working on computer	Lunch breaks & Tea breaks are allowed	Project Manager, Safety Officers and individuals	CR 2104 regulation 6, Facilities Regulations regulation 6, Eskom Health & Hygiene Management Procedures, Client Safety Specification, Contractor Safety Plan, Health Risk Assessment			
	R	185	Incorrect use of office equipment e.g. Microwave oven, Kettle, etc (Exposure to 220V domestic circuits)	185.1	Electric shock, Exposure to microwave energy, Exposure to hot water from the hydrobal	Safety	Not following instructions on use of office equipment, Not reporting defective unsafe electrical office equipment	Employees, Visitors	Site Project Manager	Daily	Lost time injuries, medicals, first aid incidents, near miss incidents	Safety Representative inspections, Awareness and training, OEM requirements	4	B	II	Mostly effective	Follow instructions on use of office equipment, Report unsafe electrical office equipment, Monthly Safety representative inspections	Awareness training material is to be distributed to all employees highlighting to be reported and correct use of kitchen appliances	Project Manager, Safety Officers, Health & Safety Representatives, Employees	CH&S Act section 10, CHS Act section 14, OEM requirements, Client Safety Specification, Contractor Safety Plan			
	R	186	Utilizing buildings equipped with a central HVAC system	186.1	Poor inadequate air flow	Health	Inadequate supply of fresh air indoor environment and accumulation of gases and dust in offices (using air conditioning units that do not ventilate air to the atmosphere)	Employees, Visitors	Site Project Manager	On occurrence	Occupational disease with reversible/non-permanent effect	Airconditioners are regularly maintained and when dysfunctional, a defect raised for repair	3	B	II	Mostly effective	Increased awareness training to be conducted regarding ambient air temperatures & ergonomics issues	All air-conditioners are correct operating and set to the correct temperature	Project Manager, Safety representative, Hygienist	CH&S Act section 8, ERW Regulations, Client Safety Specification, Contractor Safety Plan			
	R	187	Bad working posture (office ergonomics)	187.1	Poor seating posture, repetitive motions, strain on employees body	Health	Poorly designed work areas, Wear and tear of furniture, Sitting in a wrong position or with an incorrect posture	Employees, Visitors	Site Project Manager	Daily	Irreversible health effects/occupational disease with permanent consequence	Ergonomic awareness training, Risk assessment, Ergonomics surveys	4	B	II	Mostly effective	Employees to ensure that they adjust their chairs according to their height, Risk/Safety ergonomic awareness, Designers to take ergonomics into consideration when designing	Employees are correct seated and no injury reports have been submitted	Safety Officer, Hygienist, Employees	CH&S Act section 8, Facilities Regulations regulation 6, Project Health Risk Assessment, Client Safety Specification, Contractor Safety Plan			
	R	188	Not paying attention or working under pressure while handling papers	188.1	Paper cuts	Safety	Improper handling of paper, Not focusing on the job	Employees	Site Project Manager	Daily	First aid treatment case, and temporary discomfort case	Awareness training, First aid box and first aid availability	2	C	II	Mostly effective	Time management (just to work in pressure) and time management training hours	No incidents are reported during working hours	Safety Officers, Employees	CH&S Act section 14, GSR regulation 3, Client Safety Specification, Contractor Safety Plan			
	R	189	Not applying the three point contact when ascending and descending steps	189.1	Employees can slip, trip and fall	Safety	Steps not marked as per CHS Act - Facilities Regulation 4, No signages displayed, Employees forgetting or neglecting the alternate with full hands	Employees, Visitors	Site Project Manager	Daily	Lost time injuries, medicals, first aid incidents, near miss incidents	Display appropriate signage, Procedures, Awareness training	4	C	II	Mostly effective	Communicate hazards with employees (Toolbox talks)	The incidents are reported during working hours	Project Manager, Safety Officers, Employees	CH&S Act section 8, Facilities Regulation 4, Client Safety Specification, Contractor Safety Plan			
	R	190	Employees removing paper jammed in the printer whilst the printer is on	190.1	Fingers can get caught in moving parts	Safety	Employees not trained on printer safety	Employees, Visitors	Site Project Manager	Daily	Lost time injuries, medicals, first aid incidents, near miss incidents	Employees to undergo printer safety awareness training	4	C	II	Mostly effective	The OEM is to conduct basic awareness training on how to safely remove jammed paper from a printer	No incidents are reported during working hours	Project Manager, Safety Officers, Employees	CH&S Act section 8, Facilities Regulation 4, Client Safety Specification, Contractor Safety Plan			
	R	191	Buildings access and parking area not accommodating disabled people	191.1	Disabled persons unable to access or leave the premises safely	Safety	Poor planning, Unidentified access for disable people	Employees, Visitors	Site Project Manager	Daily	Lost time injuries, medicals, first aid incidents, near miss incidents	Access for disable people to the office area and disable parking to be provided	4	C	II	Fully effective	Parking spaces to be designated for disabled persons	Disabled persons are parked in designated parking spaces and are able to freely ingress and egress their vehicles	Safety Officers, Individuals	Basic condition of employment Act, Health risk assessment, Client Safety Specification, Contractor Safety Plan			
	R	192	Employees heat up clean water in the microwave	192.1	Water heats up to a supermow status and is not visible to the naked eye	Safety	Employees are not trained on the risks of heating water in a microwave	Employees, Visitors	Site Project Manager	Daily	Lost time injuries, medicals, first aid incidents, near miss incidents	A flyer was communicated throughout Eskom regarding the risk of heating water in a microwave	4	C	II	Mostly effective	Awareness training to be refreshed to create a greater awareness w.r.t the hazards of water in a microwave	No incidents are reported during working hours	Safety Officer, Employees	CH&S Act section 8, Facilities Regulation 4, Client Safety Specification, Contractor Safety Plan			
	R	193	Air conditioners are not regularly serviced	193.1	Employees contract Legionnaires sickness	Health	Bacteria builds up in the filters	Employees, Visitors	Site Project Manager	Daily	Irreversible health effects/occupational disease with permanent consequence	Air conditioners are serviced on a regular basis	4	B	II	Fully effective	Awareness training must be refreshed to create a greater awareness w.r.t Legionnaires sickness and prevention measures	No incidents are reported during working hours	Safety Officers, Employees and visitors	Basic condition of employment Act, Health risk assessment, Client Safety Specification, Contractor Safety Plan			
Managing Emergencies and Evacuations	R	194	Fire fighting equipment is inadequate for the building	194.1	Fire fighters are unable to extinguish a fire	Safety	A fire risk assessment was not conducted to identify the types of the extinguishers required for the office building	Employees, Visitors	Site Project Manager	Daily	Lost time injuries, medicals, first aid incidents, near miss incidents	The Fire Master and the fire fighting team has been appointed for the Tutuka Power Station and construction project, to inspect and maintain all fire-fighting equipment	4	B	II	Mostly effective	The Fire Warden and Safety Officer for the project is to check all fire extinguishers on a regular basis, but no less than monthly and notify the Tutuka PS Fire Department should any be found empty or needed in the red	No incidents are reported during working hours	Fire Master, Fire Warden, Safety Officer	CR 2014 regulations 9 & 29, Tutuka PS EMR Procedure 004 4036 Emergency Preparedness Plan Rev 07, Client SHE Specification, Contractor SHE Plan			
	R	195	Fire extinguishers are empty or needs pointing in the red	195.1	Fire fighters are unable to extinguish a fire	Safety	Fire extinguishers are not inspected on a monthly or regular basis	Employees, Visitors	Site Project Manager	Daily	Lost time injuries, medicals, first aid incidents, near miss incidents	The project has appointed a Fire Warden and has conducted basic fire fighting training training	4	B	II	Mostly effective	Safety officers and the project Fire Warden are to inspect all fire extinguishers in the building to ensure it is in good order and full charged	No incidents are reported during working hours	Fire Warden, Safety Officer	CR 2014 regulations 9 & 29, Tutuka PS EMR Procedure 004 4036 Emergency Preparedness Plan Rev 07, Client SHE Specification, Contractor SHE Plan			
	R	196	Employees are unable to fight fires	196.1	Fire spreads and causes more damage than necessary	Safety	Employees are not trained in basic fire fighting skills	Employees, Visitors	Site Project Manager	On occurrence	Lost time injuries, medicals, first aid incidents, near miss incidents	The project has appointed a Fire Warden and has conducted basic fire fighting training training	4	B	II	Mostly effective	Regular awareness training must be conducted to ensure that fire fighters remain fully aware of the procedures to follow when attempting to extinguish a fire	No incidents are reported during working hours	Fire Warden, Safety Officer	CR 2014 regulations 9 & 29, Tutuka PS EMR Procedure 004 4036 Emergency Preparedness Plan Rev 07, Client SHE Specification, Contractor SHE Plan			
	R	197	Employees are unaware of the emergency evacuation procedures for the office buildings	197.1	Employees are unable to evacuate the building safely	Safety	Employees are not trained in emergency evacuation procedures	Employees, Visitors	Site Project Manager	On occurrence	Lost time injuries, medicals, first aid incidents, near miss incidents	The project has appointed a Fire Warden and has conducted basic emergency evacuation training, Emergency evacuation procedures are discussed at each meeting held in the office building boardroom	4	B	II	Mostly effective	Emergency evacuation positions are to be developed and posted conspicuously throughout the office building	No incidents are reported during working hours	Safety Officer	CR 2014 regulations 9 & 29, Tutuka PS EMR Procedure 004 6008 Emergency Evacuation Plan Rev 03, Client SHE Specification, Contractor SHE Plan			
	R	198	Employees are unaware of who the fire warden and evacuation wardens are	198.1	Employees are unable to notify the fire warden of a fire and will be unable to identify who the evacuation warden is to follow instructions from	Safety	The appointed Fire Warden and Evacuation Warden have not been communicated to the staff	Employees, Visitors	Site Project Manager	On occurrence	Lost time injuries, medicals, first aid incidents, near miss incidents	A Fire Warden and Evacuation Warden has been identified for the office building	4	B	II	Mostly effective	Posters identifying the key appointees responsible for emergencies must be developed and posted throughout the office building	No incidents are reported during working hours	Safety Officer	CR 2014 regulations 9 & 29, Tutuka PS EMR Procedure 004 6008 Emergency Evacuation Plan Rev 03, Client SHE Specification, Contractor SHE Plan			
Manual Handling in the Office Building	R	199	Employees making use of incorrect methods to manually carry heavy objects	199.1	Employees sustain injuries from lifting objects	Health	Employees were not trained on the correct lifting techniques to be used when lifting objects	Employees, Visitors	Site Project Manager	On occurrence	Irreversible health effects/occupational disease with permanent consequence	Awareness training has been conducted and flyers communicated w.r.t lifting techniques used Eskom	4	C	II	Mostly effective	An awareness training refresher must be conducted to refresh employees employees w.r.t lifting techniques	No incidents are reported during working hours	Safety Officer	CR 2014 regulations 9 & 27, Client SHE Specification, Contractor SHE Plan			
	R	200	Employees slip on wet floors after being cleaned by the cleaning staff	200.1	Employees sustain injuries from slipping and falling	Safety	No "Caution Wet Floor" signs were placed on either side of the area that was washed and cleaned	Employees, Visitors	Site Project Manager	On occurrence	Lost time injuries, medicals, first aid incidents, near miss incidents	Cleaning staff have been issued with safety signed indicating "Caution Wet Floor"	4	C	II	Mostly effective	Employees must be motivated to walk around areas where signage indicates and floors	Audits and inspection reveal that cleaning staff are correctly placing safety signage after either side of the area being washed and cleaned, No incidents are reported during working hours	Safety Officer, Cleaning Staff	CR 2014 regulations 9 & 27 & 30, Facilities Regulations 03 August 2004 regulation 9, Client Specification, Contractor SHE Plan			
	R	201	Employee showers are not kept clean and hygienic	201.1	Employees sustain foot diseases from dirty contaminated showers	Health	Showers are not cleaned at regular intervals	Employee	Site Project Manager	On occurrence	Irreversible health effects/occupational disease with permanent consequence	Cleaning staff have been contracted to the project and clean the entire building on a daily basis	4	B	II	Fully effective	Employees must be educated in person hygiene when making use of the shower facilities at the project office building	No incidents are reported during working hours	Safety Officer, Cleaning Staff	CR 2014 regulations 9 & 30, Facilities Regulations 03 August 2004 regulation 9, Client Specification, Contractor SHE Plan			

COVID-19 BASELINE RISK ASSESSMENT																							
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	Ratings			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	Integrand Risk Management (IRM) reference number
													Consequence	Likelihood	Risk Priority Rating		Include: - Exposure/Control (controls implemented to eliminate hazards or reduce the likelihood of the risk occurring), and - Residual Controls (controls implemented to reduce the immediate impact of the risk occurring) Elimination Substitution Engineering controls Administrative controls Personal protective equipment (PPE)	Include: - Exposure/Control (controls implemented to eliminate hazards or reduce the likelihood of the risk occurring), and - Residual Controls (controls implemented to reduce the immediate impact of the risk occurring) Elimination Substitution Engineering controls Administrative controls Personal protective equipment (PPE)	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
Travelling or Transporting employees to the work place and back home	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?										
	R	1	People seating too close together when being transported	1.1	The virus can easily spread from one person to another	Health	Non adhere to the 70% allowable limit during transportation	Employees/Visitors, Family members, People in the public	Site Project Manager	Daily for 2 hrs	Hospitalised, Infecting other (unknownly), Fatal	Adhere to 70% of approved capacity when transporting employees in private vehicles / buses / taxis.	4	E	I	Mostly effective	Sanitizing of buses before boarding and after off-loading. Sanitizers to be available for passenger usage. Social distance should be maintained. All passengers should wear masks at all times.	A register of employees per bus should be kept daily for all commuters. Project Manager to ensure they adhere to the rules.	SHE Dept., Project Managers, Drivers/ of fleet and individual responsibility	COVID-19 Occupational Health and Safety Measures in Workplaces COVID-19 (C19 OHS), 2020	March	Ongoing	
	R	2	People talking to each other, while sitting close together without masks on	2.1	The virus can easily spread from one person to another	Health	Non adherence to the rules	Employees/Visitors, Family members, People in the public	Site Project Manager	Daily for 2 hrs	Hospitalised, Infecting other (unknownly), Fatal	Ensure employees wear masks while being transported. Ensure social distance is adhere when transported	3	E	I	Mostly effective	Social distance should be maintained. All passengers should wear masks at all times.	A register of employees per bus should be kept daily for all commuters. Project Manager to ensure they adhere to the rules.	SHE Dept., Project Managers, Drivers/ of fleet and individual responsibility	COVID-19 Occupational Health and Safety Measures in Workplaces COVID-19 (C19 OHS), 2020	March	Ongoing	
	R	3	Other people coughing and sneezing	3.1	The virus can easily spread from one person to another	Health	Non disclosure when filling in the COVID-19 Travel / Access Questionnaire	Employees/Visitors, Family members, People in the public	Site Project Manager	Daily for 2 hrs	Hospitalised, Infecting other (unknownly), Fatal	Ensure employees wear masks while being transported. Ensure social distance is adhere when transported	5	E	I	Mostly effective	Social distance should be maintained. All passengers should wear masks at all times.	A register of employees per bus should be kept daily for all commuters. Project Manager to ensure they adhere to the rules.	SHE Dept., Project Managers, Drivers/ of fleet and individual responsibility	COVID-19 Occupational Health and Safety Measures in Workplaces COVID-19 (C19 OHS), 2021	March	Ongoing	
Alcohol test using a breathalyser	R	4	Transporting a lot of employee with the same vehicle	4.1	The virus can easily spread from one person to another	Health	Not adhering to the rules by sanitising the vehicle before and after each drop off	Employees/Visitors, Family members, People in the public	Site Project Manager	Daily for 12 hrs	Hospitalised, Infecting other (unknownly), Fatal	All own and contracted transport companies are to adhere to site sales risk assessment to ensure that a reasonably practicable sanitisation plan is in place	5	E	I	Mostly effective	Sanitizing of buses before boarding and after off-loading. Sanitizers to be available for passenger usage. Social distance should be maintained. All passengers should wear masks at all times.	Checklist and register to be kept when sanitation was done.	SHE Dept., Project Managers, Drivers/ of fleet and individual responsibility	COVID-19 Occupational Health and Safety Measures in Workplaces COVID-19 (C19 OHS), 2022	March	Ongoing	
	R	5	These instruments pose a risk to cross contamination with a previous infected user and to the person conducting the test.	5.1	The virus can easily spread from one person to another	Health	Cross contamination through: touching or inhaling where an infected person droplets fell or touching contaminated surface	Employees/Visitors, Contractors	Site Project Manager	Daily for 30 min	Hospitalised, Infecting other (unknownly)	The use of the breathalyzer for alcohol testing has been stopped at Eskom since COVID-19	4	D	I	Mostly effective	- All testers will receive refresher training on the standard operating conditions of the breathalyzers by 20 March 2020. - Managers and supervisors must be conversant with the Eskom Management of Substance Abuse in the Workplace Procedure to ensure the well-being and safety of all persons at our sites.		SHE Dept. and Line management, individual responsibility	COVID-19 Occupational Health and Safety Measures in Workplaces COVID-19 (C19 OHS), 2022	January & June	Ongoing	
	R	6	Temporary suspended the use of biometric access system due to PPE shortage	6.1	Cross Contamination	Health	Cross contamination through: touching where an infected person droplets fell or contaminated surface	Employees/Visitors, Contractors	Site Project Manager	Daily for 12 hrs	Hospitalised, Infecting other (unknownly)	Awareness; Inductions; Communications	4	D	I	Mostly effective	Correct PPE to be used. Access cards to be produced at the gate.	Observations	SHE Dept. and Line management, individual responsibility	COVID-19 Occupational Health and Safety Measures in Workplaces COVID-19 (C19 OHS), 2022	March	Ongoing	240-10032692 Outbreak, Pandemic or Epidemic Disaster Management Plan
	Gate Access	R	7	Gatherings at security gate to enter the site	7.1	Lack of knowledge, Start-up plan not followed, non adherence to rule and regulations	Health	Non adherence to Go To/Back requirements. Cross contamination when too many people are gathered at the Security gate for access. Non adherence of social distancing of 1-1.5m	Employees/Visitors, Contractors and members of public	Site Project Manager	Daily for 12 hrs	Hospitalised, Infecting other (unknownly)	Awareness, Toolbox talks: Limit gatherings at the gate by implementing certain time's people need to be at the gate to enter (Just for the first time and those after they need to Manage the gatherings). Access cards to be readily available before entering gate.	4	E	I	Mostly effective	a) Keep the employees informed and to calm the fear; b) Develop education messages to provide employees with information about recognizing the confirmed disease (signs and symptoms), its mode of transmission, how to treat the disease at home (if home treatment is recommended), how to prevent its transmission, when to seek medical care including immunisation; c) Promote and improve access to safe and clean water; d) Promote safe disposal of human waste/sanitation; e) Promote good personal hygiene; f) Improve food handling practices; h) Improve infection control practices; and i) Make the appropriate personal protective equipment available.	Observations	SHE Dept. and Line management, individual responsibility, Security	COVID-19 Occupational Health and Safety Measures in Workplaces COVID-19 (C19 OHS), 2022	March	Ongoing
Gathering in the morning to discuss tool box talks and DSTTA.	R	8	Non disinfection of security office and surroundings	8.1	Contaminated surfaces and objects	Health	Cross contamination when touching handrails, door handle, pen, book etc.	Employees/Visitors, Contractors and members of public	Site Project Manager	Daily for 12 hrs	Hospitalised, Infecting other (unknownly)	Disinfecting of Security Office on regular basis. Employees to ensure they have their own pen with them to sign into the register. Do not touch any surfaces. Doors to be kept open to minimise touching other surfaces	4	E	I	Mostly effective	a) disinfect with wet wipes and surroundings with detergent. b) disinfect phones with appropriate wipes. c) use hand sanitizers or wash your hands regularly after contact with surfaces. d) avoid touching your face. e) Ensure you have your own pen as you need to sign the register.	Checklist of cleaning company doing disinfection	SHE Dept. and Line management, individual responsibility, Security	COVID-19 Occupational Health and Safety Measures in Workplaces COVID-19 (C19 OHS), 2022	March	Ongoing	
	R	9	People standing close to each other in a large group	9.1	Cross contamination when standing too close to each other.	Health	Virus can spread to other workers when coughing. Virus can spread through handshakes. The virus can be transmitted from one person to another through the usage of one pen circulating within a group of people.	Visitors	Site Project Manager	Daily for 30 min	Lost Time Injury, Irreversible health effects/occupational disease with permanent consequence	Awareness, posters	4	C	II	Mostly effective	All Guardians traveling in their personal capacity to China and/or affected countries with confirmed COVID-2019 cases are advised to suspend their trips until the outbreak is declared contained by the World Health Organisation (WHO) and the National Department of Health (NDOH)	Observations, Supervisor discretion	SHE Dept. and Line management, individual responsibility	COVID-19 Occupational Health and Safety Measures in Workplaces COVID-19 (C19 OHS), 2022	March	Ongoing	
	R	10	People coughing and sneezing	10.1	The virus can easily spread from one person to another	Health	People not wearing masks which are coughing and sneezing	Employees/Visitors, Family members, People in the public	Site Project Manager	Daily for 2 hrs	Hospitalised, Infecting other (unknownly)	Ensure employees wear masks while attending the toolbox talks. Ensure social distance is adhere using toolbox talks. People with flu symptoms to stay at home until they are better.	4	C	II	Mostly effective	Ensure people have enough masks. Masks should only be worn by people that are having flu symptoms.	Checklist, Observation	SHE Dept. and Line management, individual responsibility	COVID-19 Occupational Health and Safety Measures in Workplaces COVID-19 (C19 OHS), 2022	March	Ongoing	
	R	11	Greeting each other with hands	11.1	The virus can easily spread from one person to another	Health	Not adhering to the rules by sanitising and wash hands. Also no greeting to take part with hands.	Employees/Visitors, Contractors and members of public	Site Project Manager	Daily for 2 hrs	Hospitalised, Infecting other (unknownly)	Hand sanitizers to be readily available for people. Awareness, toolbox talks	4	C	II	Mostly effective	Greet with elbows and just a head-tilt to avoid making contact with people	Awareness	SHE Dept. and Line management, individual responsibility	COVID-19 Occupational Health and Safety Measures in Workplaces COVID-19 (C19 OHS), 2022	March	Ongoing	
Working with hand tools, electrical tools and other equipment's	R	12	Using the same pen to sign DSTT and tool box talk	12.1	The virus can easily spread from one person to another	Health	Not every person has their own pen	Employees/Visitors, Contractors and members of public	Site Project Manager	Daily for 30 min	Hospitalised, Infecting other (unknownly)	Ensure each employee use their own pen to sign.	4	B	III	Mostly effective	Print a list with their names on and the employees can only sign their signatures.	Observations	Site Project Manager, Team leaders	COVID-19 Occupational Health and Safety Measures in Workplaces COVID-19 (C19 OHS), 2022	March	Ongoing	
	R	13	Exchanging of tools from one worker to another	13.1	The virus can easily spread from one person to another	Health	Always wear safety gloves when using tools that are going to be used by more than one person	Employees/Visitors, Contractors and members of public	Site Project Manager	Daily for 12 hrs	Hospitalised, Infecting other (unknownly)	Awareness, Inductions, Toolbox talks	3	C	II	Mostly effective	Ensure people wear safety gloves. Hands to be washed everytime new Equipment / tools to be used and also after used. Tools / Equipment to be wiped off with a wipe.	Observations	Site Project Manager, Team leaders	COVID-19 Occupational Health and Safety Measures in Workplaces COVID-19 (C19 OHS), 2022	March	Ongoing	
	R	14	Borrowing tools from/to other workers	14.1	The virus can easily spread from one person to another	Health	Ensure tools / equipments are wiped off with a wipe before handing to another person.	Employees/Visitors, Contractors and members of public	Site Project Manager	Daily for 12 hrs	Hospitalised, Infecting other (unknownly)	Inductions, Awareness, Toolbox talks, Posters	3	C	II	Mostly effective	Ensure people wear safety gloves. Hands to be washed everytime new Equipment / tools to be used and also after used. Tools / Equipment to be wiped off with a wipe.	Observations, checklist	Site Project Manager, Team leaders	COVID-19 Occupational Health and Safety Measures in Workplaces COVID-19 (C19 OHS), 2022	March	Ongoing	
	R	15	More than one operator using the plant/machinery	15.1	The virus can easily spread from one person to another	Health	Non adherence to rules and return to work plan	Employees/Visitors, Contractors and members of public	Site Project Manager	Daily for 12 hrs	Hospitalised, Infecting other (unknownly)	Inductions, Awareness, Toolbox talks	3	C	II	Mostly effective	Ensure all operators are aware of the risk and their health. Proper monitoring will be done by the Supervisors	Observations, checklist	Site Project Manager, Team leaders	COVID-19 Occupational Health and Safety Measures in Workplaces COVID-19 (C19 OHS), 2022	March	Ongoing	
Operating of machines and yellow plant	R	16	Operator carrying passengers on the plant/machine	16.1	The virus can easily spread from one person to another	Health	Non adherence to rule and disaster management plan	Employees/Visitors, Contractors and members of public	Site Project Manager	Daily for 12 hrs	Hospitalised, Infecting other (unknownly)	Inductions, Awareness, Toolbox talks	3	B	III	Mostly effective	Ensure all operators are aware of the risk and their health. Proper monitoring will be done by the Supervisors	Observations, checklist of all plant and machinery	Site Project Manager, Team leaders	COVID-19 Occupational Health and Safety Measures in Workplaces COVID-19 (C19 OHS), 2022	March	Ongoing	
	R	17	People sitting close to each other at the eating facility	17.1	The virus can easily spread from one person to another	Health	No proper plan in place to ensure people keep to social distancing	Employees/Visitors, Contractors and members of public	Site Project Manager	Daily for 1 hr	Hospitalised, Infecting other (unknownly)	Inductions, Awareness, Toolbox talks	3	B	III	Mostly effective	Ensure there is enough seating facilities to cater for all employees while adhering to the social distance of 1.5m	Observations	Site Project Manager, Team leaders	COVID-19 Occupational Health and Safety Measures in Workplaces COVID-19 (C19 OHS), 2022	March	Ongoing	
	R	18	Kitchen hosted with people to warm up food and make tea/coffee	18.1	The virus can easily spread from one person to another	Health	No proper plan in place to ensure there is enough resources for employees	Employees/Visitors, Contractors and members of public	Site Project Manager	Daily for 1 hr	Hospitalised, Infecting other (unknownly)	Inductions, Awareness, Toolbox talks	3	B	III	Mostly effective	Ensure there are enough resources to prevent people to gather in one place. Have eating intervals for teams to minimize the number of employees at ones at the eating area	Observations	Site Project Manager, Team leaders	COVID-19 Occupational Health and Safety Measures in Workplaces COVID-19 (C19 OHS), 2022	March	Ongoing	
	R	19	Sharing utensils	19.1	The virus can easily spread from one person to another	Health	Non adherence of rules	Employees/Visitors, Contractors and members of public	Site Project Manager	Daily for 1 hr	Hospitalised, Infecting other (unknownly)	Inductions, Awareness, Toolbox talks	3	B	III	Mostly effective	Preferably every person must have cutlery that is specifically assigned to them. As far as practicable, crockery and eating utensils should be disposable.	Observations	Site Project Manager, Team leaders	COVID-19 Occupational Health and Safety Measures in Workplaces COVID-19 (C19 OHS), 2022	March	Ongoing	

Attending of meetings during working hours	R	20	Boardroom being over populated by people. People sitting too close to each other	20.1	The virus can easily spread from one person to another	Health	Non adherence to social distancing and not more than 50 people in a boardroom	Employees, Visitors, Contractors and members of public	Site Project Manager	Daily for 4 hrs	Hospitalised, Infecting other (unknownly)	Inductions, Awareness, Toolbox talks	3	C	II	Mostly effective	Make use of MS Team instead of sitting around boardroom table. If a boardroom is used, ensure social distance of 1.5m is adhere to.	Observations	Site Project Manager , Team leaders	COVID-19 Occupational Health and Safety Measures in Workplaces COVID-19 (C19 OHS), 2022	March	Ongoing	
	R	21	Signing of the attendance register	21.1	The virus can easily spread from one person to another	Health	No proper measures in place to prevent cross contamination	Employees, Visitors, Contractors and members of public	Site Project Manager	Daily for 4 hrs	Hospitalised, Infecting other (unknownly)	Inductions, Awareness, Toolbox talks	3	B	III	Mostly effective	Print register with names on already and each employee to sign with their own pen.	Observations	Site Project Manager , Team leaders	COVID-19 Occupational Health and Safety Measures in Workplaces COVID-19 (C19 OHS), 2022	March	Ongoing	
	R	22	Cleaning of Boardroom furniture	22.1	The virus can easily spread from one person to another	Health	Cleaning of boardroom furniture is not done often	Employees, Visitors, Contractors and members of public	Site Project Manager	Daily for 4 hrs	Hospitalised, Infecting other (unknownly)	Inductions, Awareness, Toolbox talks	3	B	III	Mostly effective	Disinfection of all boardrooms and furniture to be done on a regular basis. Appoint permanent cleaners for the duration of the Project.	Observations	Site Project Manager , Team leaders	COVID-19 Occupational Health and Safety Measures in Workplaces COVID-19 (C19 OHS), 2022	March	Ongoing	
Working within the site offices	R	23	People working closer to each other in the office	23.1	The virus can easily spread from one person to another	Health	Social distancing not adhere to	Employees, Visitors, Contractors and members of public	Site Project Manager	Daily for 12 hrs	Hospitalised, Infecting other (unknownly)	Inductions, Awareness, Toolbox talks	3	C	II	Mostly effective	Wear masks as per Gx Tutuka rules. Avoid going to their offices, rather give them a call.	Observations	Site Project Manager , Team leaders	COVID-19 Occupational Health and Safety Measures in Workplaces COVID-19 (C19 OHS), 2022	March	Ongoing	
	R	24	Workers visiting each other during working hours due to work related purposes	24.1	The virus can easily spread from one person to another	Health	Non adherence to social distancing and Disaster Management Plan	Employees, Visitors, Contractors and members of public	Site Project Manager	Daily for 1 hr	Hospitalised, Infecting other (unknownly)	Inductions, Awareness, Toolbox talks	3	C	II	Mostly effective	Teleconference, MS Team, Signe to be used	Observations	Site Project Manager , Team leaders	COVID-19 Occupational Health and Safety Measures in Workplaces COVID-19 (C19 OHS), 2022	March	Ongoing	
	R	25	Housekeeping and Hygiene of office and toilets	25.1	The virus can easily spread from one person to another	Health	No housekeeping done in the office's and toilets pose is serious hygiene matter	Employees, Visitors, Contractors and members of public	Site Project Manager	Daily for 12 hrs	Hospitalised, Infecting other (unknownly)	Inductions, Awareness, Toolbox talks	3	B	III	Mostly effective	Disinfecting of all office's, Kitchen's, boardrooms to be done by the Cleaning personnel	Observations	Site Project Manager , Team leaders	COVID-19 Occupational Health and Safety Measures in Workplaces COVID-19 (C19 OHS), 2022	March	Ongoing	
	R	26	Sharing the printing facilities	26.1	The virus can easily spread from one person to another	Health	Printing area is not disinfected regularly	Employees, Visitors, Contractors and members of public	Site Project Manager	Daily for 12 hrs	Hospitalised, Infecting other (unknownly)	Inductions, Awareness, Toolbox talks	3	B	III	Mostly effective	Disinfecting of printer area to be done more regularly	Observations	Site Project Manager , Team leaders	COVID-19 Occupational Health and Safety Measures in Workplaces COVID-19 (C19 OHS), 2022	March	Ongoing	
	R	27	People coughing and sneezing	27.1	The virus can easily spread from one person to another	Health	Non adherence to COVID19 Regulations	Employees, Visitors, Contractors and members of public	Site Project Manager	Daily for 12 hrs	Hospitalised, Infecting other (unknownly)	Inductions, Awareness, Toolbox talks	3	B	III	Mostly effective	When an person has a flu they need to inform the SHE Manager, Supervisor immediately. The employee need to stay at home until he/she is better.	Observations	Site Project Manager , Team leaders	COVID-19 Occupational Health and Safety Measures in Workplaces COVID-19 (C19 OHS), 2022	March	Ongoing	
If an employee is experiencing any Covid19 symptoms	R	28	Dry Coughing or sneezing, Shortness of breath, runny nose, headaches or fever	28.1	The virus can easily spread from one person to another	Health	This could possibly mean more than one person is likely to have the virus, based on how many people were in contact with the person who was experiencing symptoms.	Employees, Visitors, Contractors and members of public	Site Project Manager	Daily for 12 hrs	Hospitalised, Infecting other (unknownly)	Inform SHE Manager, Inform Medical staff at Gx Tutuka. Necessary tests will be done and person will be isolated for 14 days or 10 results are back. Share recent travel history. Avoid travel. Avoid contact with others. A temperature screening device will be used to check the temperature of the person. Person should be isolated from the rest of the team in an office until plans are in place. Once test positive of the disease. A group of people that worked in close proximity with the person must also be notified and tested as well. Within Eskom GGD all COVID-19 cases amongst employees, principle contractors and subcontractors will be reported to COIDA. First medical, progress medical and final medical report will need to be submitted to Eskom SHE Department. Eskom will inform Public at Head Office about any cases reported. Should an employee contract COVID-19, Eskom will apply its relevant sick leave policy to such an individual, and any time away from work will be considered as sick leave. Each Contractor will comply to their own Sick leave policy. Due to the nature of this illness, an employee with COVID-19 must not be permitted to return to work until a medical practitioner clears that employee healthy to do so. Anybody who may be feeling anxious can make use of Eskom's EAP for Eskom employees and every contractor to make use of their own wellness counselling services. This service is confidential, free and also available to immediate families.	4	E	I	Mostly effective	If a person suspects that he has contracted COVID-19, SHE Manager, Client SHE Manager and Contracts Manager to be informed immediately. Employee to stay at home, do not go to the medical centre. Contact the WHO to visit you at home. Isolate yourself. Any employee with flu symptoms needs to stay at home.	Observations	Site Project Manager , Team leaders	COVID-19 Occupational Health and Safety Measures in Workplaces COVID-19 (C19 OHS), 2022	March	Ongoing	