

Business/Operating unit:		Department:										Date:		Revision number:		Revision date:																			
Kasle Project		GHS										31-May-23		5		30-Apr-27																			
Date:		Prepared by:										Name: Anville Rhode		Document identifier:		Revision number:																			
		NET										Designation: Safety Manager				Revision date:																			
		Date: 31 May 2023										Date: 31 May 2023																							
Refer to Occupational Health and Safety Risk assessment procedure 32-540																																			
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	Compliance	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 (Routine/Non-routine)		Anything with potential to cause 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.		Who is exposed to the hazard i.e. visitors, members of the public, etc.		Who is accountable for making sure the controls and measures 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 worst case scenario without controls?		Include: - Preventative Controls (controls implemented to eliminate hazards or reduce the likelihood of the risk occurring), and - Reactive Controls (controls implemented to reduce the immediate impact of the risk occurring)		Elimination, Substitution, Engineering controls, Administrative controls, Personal protective equipment (PPE)		RCE Risk Control Effectiveness		Additional Controls or Tasks Aimed at Improving Existing Controls		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 (if applicable)		Where relevant, list the relevant legislation and/or Eskom requirements that require the control.		Once a date has been agreed to, this can not be changed (if applicable)		Pending, In Progress, Complete (if applicable)		Where applicable, add IRM system reference number to tracking of treatment actions. (applicable to risks that have an impact on business objectives or require intervention from Senior or Executive management such as implementing major engineering projects as a control)	
Crane operations		R	KS01	1) Adverse Weather Conditions	RS1	1) Lighting, strong winds and Falling loads, 2) Boom Failure, tipping over and dropped loads	Safety	1) Natural causes, 2) unstable/uneven ground, improper operation of the crane, inadequate task of barricade	KET Employees, Visitors, Equipment and Contractor's Employees	Construction Managers, Contractor Managers, Superintendent Supervisors	Daily	Fatality, injuries and property damage	1) Weather Monitoring, 2) Training and awareness, inspections and maintenance, compliance to legislation and Eskom	4	B	Fully effective	2) Competency verification, Crane Coordinators Forum.	Audits, Inspections & BBS	KET SHE Manager	KET SHE Specification Section 3.31, OHS Act (CR 22)															
Lifting & Rigging		R	KS02	1) Lifting equipment 2) Rigging Equipment	RS2	1) Mechanical Failure, Poor communication, Unauthorised operator, Overloading, ground conditions	Safety	1) Mechanical Failure, Poor communication, Unauthorised operator, Overloading, ground conditions	KET Employees and Contractor's Employees	Construction Managers, Contractor Managers, Superintendent Supervisors and Crane Coordinators	Daily	Fatality, injuries and Property damage	1 & 2) Competency and supervision, inspections and maintenance, DSTI, adherence to SWP and SWL	4	C	Fully effective	Review safe work procedures, Check Effectiveness of Maintenance on Equipment	Audits, Inspections & BBS	KET SHE Manager	KET SHE Specification Section 3.31, OHS Act (CR 18, DMR 18, Eskom Standard 30-98)															
Working at heights		R	KS03	Height/ elevated position	RS3	1) person falling from heights	Safety	1) Unprotected edges and medical conditions, 2) Falling Objects, 3) Sub-standard scaffolding uneven surface	KET Employees and Contractor's Employees	Construction Managers and Supervisors	Daily	Fatality, injuries and Property damage	1) FAS Competency and fall protection and prevention systems, medical surveillance provision of appropriate PPE, 2) Site Inspections, fall protection and prevention systems 3) Competency, inspections and maintenance	5	C	Mostly effective	Review safe work procedures, check Effectiveness of Maintenance on Equipment, KET employees to be incorporated in contractor Fall protection plans per section 8 of OHS Act, awareness.	Audits, Inspections & BBS	KET SHE Manager	KET SHE Specification Section 3.32, OHS Act (sec 8 & CR 10), Eskom Standard 30-418, SANS 10085															
Electrical Installations		R	KS04	Electricity	RS4	1) Electrocution	Safety	1) Unauthorised access, No lock out system, Working on a live plant, No warning, unauthorised operators	KET Employees and Contractor's Employees	Construction Managers and Supervisors	Daily	Fatality, injuries and Property damage	1) Competency training and Awareness, adherence to life saving rule 1 & 5, appropriate PPE, signage, security measures	4	B	Fully effective	Review safe work procedures, Check Effectiveness of Maintenance on Equipment, monitoring live saving rules violations	Audits, Inspections & BBS	KET SHE Manager	KET SHE Specification Section 3.28, 3.36, OHS Act (CR 24, EIR and EIR), Eskom Regulation 30-61, Eskom Regulation 30-61															
Commissioning activities		R	KS05	1) Electricity	RS5	1) Electrocution, 2) Overloading of Wires	Safety	1) Unauthorised access, No lock out system, Working on a live plant, No warning, unauthorised operators	KET Employees and Contractor's Employees	Construction Managers and Supervisors	Daily	Fatality, injuries and property damage	1) Competency training and Awareness, adherence to life saving rule 1 & 5, appropriate PPE, signage, security measures	5	C	Fully effective	Task risk Assessment, walk through assessments, use of Arch Flash PPE	Audits, Inspections & BBS	KET SHE Manager	KET SHE Specification Section 3.28, 3.36, OHS Act (CR 24, EIR and EIR), Eskom Regulation 30-61, Eskom Regulation 30-61															
Hot work		R	KS06	2) pressurised systems	RS6	2) Uncontrolled release of pressurised systems, explosions	Safety	2) Uncontrolled release of pressurised systems, explosions	KET Employees and Contractor's Employees	Construction Managers and Supervisors	Daily	Fatality, injuries and property damage	1) Competency training and Awareness, adherence to life saving rule 1 & 5, appropriate PPE, signage, security measures	4	C	Fully effective	Training & awareness, co-ordination permit	Audits, Inspections & BBS	KET SHE Manager	KET SHE Specification Section 3.27-28, 3.36, OHS Act (CR 24, EIR and EIR), Eskom Regulation 30-61, Eskom Regulation 30-61															
Working in open spaces and on structures		R	KS07	1) gas leaks	RS7	1) gas leaks	Safety	1) gas leaks	KET Employees and Contractor's Employees	Construction Managers and Supervisors	Daily	Fatality, injuries and property damage	1) proper ventilation, use of PPE, 2) routine inspections, feedback, arrestors, competency, 3) signage, training and awareness, inspections	4	B	Mostly effective	Training & awareness, co-ordination permit	Audits BBS, PTO, Inspections	KET SHE Manager	KET SHE Specification Section 3.27-28, 3.36, OHS Act (CR 24, EIR and EIR), Eskom Regulation 30-61, Eskom Regulation 30-61															
Working in confined space		R	KS08	2) compressed cylinders	RS8	2) compressed cylinders	Safety	2) compressed cylinders	KET Employees and Contractor's Employees	Construction Managers and Supervisors	Daily	Fatality, injuries and property damage	1) proper ventilation, use of PPE, 2) routine inspections, feedback, arrestors, competency, 3) signage, training and awareness, inspections	4	C	Mostly effective	Training & awareness, co-ordination permit	Audits BBS, PTO, Inspections	KET SHE Manager	KET SHE Specification Section 3.27-28, 3.36, OHS Act (CR 24, EIR and EIR), Eskom Regulation 30-61, Eskom Regulation 30-61															
Working in confined space		R	KS09	3) cables and hoses	RS9	3) cables and hoses	Safety	3) cables and hoses	KET Employees and Contractor's Employees	Construction Managers and Supervisors	Daily	Fatality, injuries and property damage	1) proper ventilation, use of PPE, 2) routine inspections, feedback, arrestors, competency, 3) signage, training and awareness, inspections	4	C	Mostly effective	Training & awareness, co-ordination permit	Audits BBS, PTO, Inspections	KET SHE Manager	KET SHE Specification Section 3.27-28, 3.36, OHS Act (CR 24, EIR and EIR), Eskom Regulation 30-61, Eskom Regulation 30-61															
Working in confined space		R	KS10	4) sparks, arch & flames	RS10	4) sparks, arch & flames	Safety	4) sparks, arch & flames	KET Employees and Contractor's Employees	Construction Managers and Supervisors	Daily	Fatality, injuries and property damage	1) proper ventilation, use of PPE, 2) routine inspections, feedback, arrestors, competency, 3) signage, training and awareness, inspections	4	C	Mostly effective	Training & awareness, co-ordination permit	Audits BBS, PTO, Inspections	KET SHE Manager	KET SHE Specification Section 3.27-28, 3.36, OHS Act (CR 24, EIR and EIR), Eskom Regulation 30-61, Eskom Regulation 30-61															
Working in confined space		R	KS11	Adverse weather conditions lightning storms, floods, heavy rains and strong winds	RS11	Adverse weather conditions lightning storms, floods, heavy rains and strong winds	Safety	Adverse weather conditions lightning storms, floods, heavy rains and strong winds	KET Employees and Contractor's Employees	EP Manager	Ad-hoc Basis	Fatality, LTI, minor injuries and property damage	1) Weather monitoring, 2) controlled access point, 3) competency	6	B	Fully effective	2) lifeloy rings & signage	Audits & Inspections	EP Manager	KET SHE Specification 3.42, Emergency Preparedness Plan 240-26297230															
Working in confined space		R	KS12	1) hazardous atmosphere and substances	RS12	1) hazardous atmosphere and substances	Safety	1) hazardous atmosphere and substances	KET Employees and Contractor's Employees	Construction Managers and Supervisors	Daily	Fatality, LTI, minor injuries and property damage	1) Proper ventilation, use of PPE, 2) routine inspections, feedback, arrestors, competency, 3) signage, training and awareness, inspections	3	A	Fully effective	SWP, calibrated equipment	Audits, Inspections, DSTI, Gas Monitoring	KET SHE Manager	KET SHE Specification Section 3.40, General Safety Regulations 5															
Working in confined space		R	KS13	2) Electrical & mechanical Equipments	RS13	2) Electrical & mechanical Equipments	Safety	2) Electrical & mechanical Equipments	KET Employees and Contractor's Employees	Construction Managers and Supervisors	Daily	Fatality, LTI, minor injuries and property damage	1) Proper ventilation, use of PPE, 2) routine inspections, feedback, arrestors, competency, 3) signage, training and awareness, inspections	4	C	Mostly effective	Review safe work procedures, Check Effectiveness of Maintenance	Audits, Inspections & BBS	KET SHE Manager	KET SHE Specification Section 3.40, Traffic Management Plan, OHS Act (CR22), Eskom Procedure 32-345															
Working in confined space		R	KS14	3) animal bite & stings	RS14	3) animal bite & stings	Safety	3) animal bite & stings	KET Employees and Contractor's Employees	Construction Managers and Supervisors	Daily	Fatality, LTI, minor injuries and property damage	1) Proper ventilation, use of PPE, 2) routine inspections, feedback, arrestors, competency, 3) signage, training and awareness, inspections	4	C	Mostly effective	Review safe work procedures, Check Effectiveness of Maintenance	Audits, Inspections & BBS	KET SHE Manager	KET SHE Specification Section 3.40, Traffic Management Plan, OHS Act (CR22), Eskom Procedure 32-345															
Transportation of Materials		R	KS15	1) improper stacking/securing of loads	RS15	1) improper stacking/securing of loads	Safety	1) improper stacking/securing of loads	KET Employees and Contractor's Employees	Contractor SHE Managers, Contractor Managers KET SHE Manager	2 - 4 hours	Fatality, LTI and property damage	1) regular inspection, training and awareness 2) load maintenance and inspection 3) competency and vehicle maintenance	4	B	Fully effective	Engineering drawings, adherence to load bearing capacity and detailed ergonomics risk assessment to be conducted	Audits, Inspections & BBS	KET SHE Manager	KET SHE Specification Section 3.40, Traffic Management Plan, OHS Act (CR22), Eskom Procedure 32-345															
Transportation of Materials		R	KS16	2) mode of transportation	RS16	2) mode of transportation	Safety	2) mode of transportation	KET Employees and Contractor's Employees	Contractor SHE Managers, Contractor Managers KET SHE Manager	2 - 4 hours	Fatality, LTI and property damage	1) regular inspection, training and awareness 2) load maintenance and inspection 3) competency and vehicle maintenance	4	B	Fully effective	Engineering drawings, adherence to load bearing capacity and detailed ergonomics risk assessment to be conducted	Audits, Inspections & BBS	KET SHE Manager	KET SHE Specification Section 3.40, Traffic Management Plan, OHS Act (CR22), Eskom Procedure 32-345															
Manual handling		R	KS17	(1) heavy loads	RS17	(1) heavy loads	Safety	(1) heavy loads	KET Employees and Contractor's Employees	Construction Managers and Supervisors	Daily	Fatality, LTI, minor injuries and property damage	1) SWP, buddy systems, pallet/dunnage, Assistance lifting (mechanical), 2) Rotation of team, SWP 3) Proper stacking and storage, good housekeeping, supervision, proper access/egress 4) Use of appropriate PPE, use of warning systems, fire watch, hot work permit	5	C	Mostly effective	Engineering drawings, adherence to load bearing capacity and detailed ergonomics risk assessment to be conducted	Audits, Inspections & BBS	KET SHE Manager	KET SHE Specification Section 3.35, OHS Act (Construction Regulations 13)															
Manual handling		R	KS18	(2) ergonomics	RS18	(2) ergonomics	Safety	(2) ergonomics	KET Employees and Contractor's Employees	Construction Managers and Supervisors	Daily	Fatality, LTI, minor injuries and property damage	1) SWP, buddy systems, pallet/dunnage, Assistance lifting (mechanical), 2) Rotation of team, SWP 3) Proper stacking and storage, good housekeeping, supervision, proper access/egress 4) Use of appropriate PPE, use of warning systems, fire watch, hot work permit	4	C	Mostly effective	Engineering drawings, adherence to load bearing capacity and detailed ergonomics risk assessment to be conducted	Audits, Inspections & BBS	KET SHE Manager	KET SHE Specification Section 3.35, OHS Act (Construction Regulations 13)															
Manual handling		R	KS19	(3) Storage area layout	RS19	(3) Storage area layout	Safety	(3) Storage area layout	KET Employees and Contractor's Employees	Construction Managers and Supervisors	Daily	Fatality, LTI, minor injuries and property damage	1) SWP, buddy systems, pallet/dunnage, Assistance lifting (mechanical), 2) Rotation of team, SWP 3) Proper stacking and storage, good housekeeping, supervision, proper access/egress 4) Use of appropriate PPE, use of warning systems, fire watch, hot work permit	4	C	Mostly effective	Engineering drawings, adherence to load bearing capacity and detailed ergonomics risk assessment to be conducted	Audits, Inspections & BBS	KET SHE Manager	KET SHE Specification Section 3.35, OHS Act (Construction Regulations 13)															
Manual handling		R	KS20	(4) stored energy	RS20	(4) stored energy	Safety	(4) stored energy	KET Employees and Contractor's Employees	Construction Managers and Supervisors	Daily	Fatality, LTI, minor injuries and property damage	1) SWP, buddy systems, pallet/dunnage, Assistance lifting (mechanical), 2) Rotation of team, SWP 3) Proper stacking and storage, good housekeeping, supervision, proper access/egress 4) Use of appropriate PPE, use of warning systems, fire watch, hot work permit	4	C	Mostly effective	Engineering drawings, adherence to load bearing capacity and detailed ergonomics risk assessment to be conducted	Audits, Inspections & BBS	KET SHE Manager	KET SHE Specification Section 3.35, OHS Act (Construction Regulations 13)															
Manual handling		R	KS21	(5) moving guard	RS21	(5) moving guard	Safety	(5) moving guard	KET Employees and Contractor's Employees	Construction Managers and Supervisors	Daily	Fatality, LTI, minor injuries and property damage	1) SWP, buddy systems, pallet/dunnage, Assistance lifting (mechanical), 2) Rotation of team, SWP 3) Proper stacking and storage, good housekeeping, supervision, proper access/egress 4) Use of appropriate PPE, use of warning systems, fire watch, hot work permit	4	B	Fully effective	Awareness	Inspection and BBS	KET SHE Manager	KET SHE Specification, OHS Act (DMR 10)															
Tightening, hammering and chipping		R	KS22	1) Restricted spaces	RS22	1) Restricted spaces	Health	1) Restricted spaces	KET Employees and Contractor's Employees	Contractor SHE Managers, Contractor Managers KET SHE Manager	Daily	LTI, Medical treatment case	1) Rest breaks, 2) Inspection and maintenance, SWP and awareness 3) dust suppression and proper PPE 4) Proper PPE	3	B	Fully effective	Training & awareness & Behavioural based observations	Audits, Inspections & BBS, Audiometric tests	KET Safety Manager	KET SHE Specification 3.26, OHS Act															
Tightening, hammering and chipping		R	KS23	2) Tools	RS23	2) Tools	Health	2) Tools	KET Employees and Contractor's Employees	Contractor SHE Managers, Contractor Managers KET SHE Manager	Daily	LTI, Medical treatment case	1) Rest breaks, 2) Inspection and maintenance, SWP and awareness 3) dust suppression and proper PPE 4) Proper PPE	4	C	Mostly effective	Training & awareness & Behavioural based observations	Audits, Inspections & BBS, Audiometric tests	KET Safety Manager	KET SHE Specification 3.26, OHS Act															
Tightening, hammering and chipping		R	KS24	3) Dust	RS24	3) Dust	Health	3) Dust	KET Employees and Contractor's Employees	Contractor SHE Managers, Contractor Managers KET SHE Manager	Daily	LTI, Medical treatment case	1) Rest breaks, 2) Inspection and maintenance, SWP and awareness 3) dust suppression and proper PPE 4) Proper PPE	3	B	Fully effective	Training & awareness & Behavioural based observations	Audits, Inspections & BBS, Audiometric tests	KET Safety Manager	KET SHE Specification 3.26, OHS Act															
Tightening, hammering and chipping		R	KS25	4) Noise	RS25	4) Noise	Health	4) Noise	KET Employees and Contractor's Employees	Contractor SHE Managers, Contractor Managers KET SHE Manager	Daily	LTI, Medical treatment case	1) Rest breaks, 2) Inspection and maintenance, SWP and awareness 3) dust suppression and proper PPE 4) Proper PPE	4	C	Mostly effective	Training & awareness & Behavioural based observations	Audits, Inspections & BBS, Audiometric tests	KET Safety Manager	KET SHE Specification 3.26, OHS Act															
Drilling		R	KS26	1) Drilling debris	RS26	1) Drilling debris	Health	1) Drilling debris	KET Employees and Contractor's Employees	Construction Managers and Supervisors	Weekly	LTI and medical cases	1) SWP, Dust suppression and screens 2) dust suppression and proper PPE 3) Proper PPE	3	A	Fully effective	Review safe work procedures, Check Effectiveness of Maintenance on Equipment, 1 in 10 changes of this activity to be done on site	Audits, Inspections & BBS	KET SHE Manager	KET SHE Specification 3.26, OHS Act															
Drilling		R	KS27	2) Dust inhalation	RS27	2) Dust inhalation	Health	2) Dust inhalation	KET Employees and Contractor's Employees	Construction Managers and Supervisors	Weekly	LTI and medical cases	1) SWP, Dust suppression and screens 2) dust suppression and proper PPE 3) Proper PPE	3	A	Fully effective	Review safe work procedures, Check Effectiveness of Maintenance on Equipment, 1 in 10 changes of this activity to be done on site	Audits, Inspections & BBS	KET SHE Manager	KET SHE Specification 3.26, OHS Act															
Drilling		R	KS28	3) Noise exposure	RS28	3) Noise exposure	Health	3) Noise exposure	KET Employees and Contractor's Employees	Construction Managers and Supervisors	Weekly	LTI and medical cases	1) SWP, Dust suppression and screens 2) dust suppression and proper PPE 3) Proper PPE	4	C	Mostly effective	Review safe work procedures, Check Effectiveness of Maintenance on Equipment, 1 in 10 changes of this activity to be done on site	Audits, Inspections & BBS	KET SHE Manager	KET SHE Specification 3.26, OHS Act															
Piling		R	KS29	4) Noise exposure	RS29	4) Noise exposure	Health	4) Noise exposure	KET Employees and Contractor's Employees	Construction Managers and Supervisors	Weekly	LTI and medical cases	1) SWP, Dust suppression and screens 2) dust suppression and proper PPE 3) Proper PPE	4	C	Mostly effective	Review safe work procedures, Check Effectiveness of Maintenance on Equipment, 1 in 10 changes of this activity to be done on site	Audits, Inspections & BBS	KET SHE Manager	KET SHE Specification 3.26, OHS Act															
Piling		R	KS30	5) Dust & debris	RS30	5) Dust & debris	Health	5) Dust & debris	KET Employees and Contractor's Employees	Construction Managers and Supervisors	Weekly	LTI and medical cases	1) SWP, Dust suppression and screens 2) dust suppression and proper PPE 3) Proper PPE	4	C	Mostly effective	Review safe work procedures, Check Effectiveness of Maintenance on Equipment, 1 in 10 changes of this activity to be done on site	Audits, Inspections & BBS	KET SHE Manager	KET SHE Specification 3.26, OHS Act															
Piling		R	KS31	6) Suspended/ displaced earth material	RS31	6) Suspended/ displaced earth material	Health	6) Suspended/ displaced earth material	KET Employees and Contractor's Employees	Construction Managers and Supervisors	Weekly	LTI and medical cases	1) SWP, Dust suppression and screens 2) dust suppression and proper PPE 3) Proper PPE	4	C	Mostly effective	Review safe work procedures, Check Effectiveness of Maintenance on Equipment, 1 in 10 changes of this activity to be done on site	Audits, Inspections & BBS	KET SHE Manager	KET SHE Specification 3.26, OHS Act															
Underground services		N	KS32	1) falling inside the excavation; employees struck by machinery, wall collapse, noise exposure exposure to exhaust fumes	RS32	1) falling inside the excavation; employees struck by machinery, wall collapse, noise exposure exposure to exhaust fumes	Safety	1) falling inside the excavation; employees struck by machinery, wall collapse, noise exposure exposure to exhaust fumes	KET Employees and Contractor's Employees	Construction Managers and Supervisors	Weekly	Fatality and property damage	1) SWP, contractor interface	5	C	Fully effective	Excavation permit procedure	Audits and site inspections	KET SHE Manager	SHE Spec, NHI, Regs, HCA regs and CR															
Excavation and Trenching		R	KS33	1) machinery or plant	RS33	1) machinery or plant	Safety	1) machinery or plant	KET Employees and Contractor's Employees	Construction Managers and Supervisors	Weekly	Fatality, LTI, minor injuries and property damage	1) SWP, contractor interface	5	C	Fully effective	Excavation permit procedure	Audits and site inspections	KET SHE Manager	SHE Spec, NHI, Regs, HCA regs and CR															
Excavation and Trenching		R	KS34	2) hand tools	RS34	2) hand tools	Safety	2) hand tools	KET Employees and Contractor's Employees	Construction Managers and Supervisors	Weekly	Fatality, LTI, minor injuries and property damage	1) SWP, contractor interface	5	C	Fully effective	Excavation permit procedure	Audits and site inspections	KET SHE Manager	SHE Spec, NHI, Regs, HCA regs and CR															
Excavation and Trenching		R	KS35	3) excavations	RS35	3) excavations	Safety	3) excavations	KET Employees and Contractor's Employees	Construction Managers and Supervisors	Weekly	Fatality, LTI, minor injuries and property damage	1) SWP, contractor interface	5	C	Fully effective	Excavation permit procedure	Audits and site inspections	KET SHE Manager	SHE Spec, NHI, Regs, HCA regs and CR															
Concrete works		R	KS36	1) concrete dust	RS36	1) concrete dust	Safety	1) concrete dust	KET Employees and Contractor's Employees	Construction Managers and Supervisors	Weekly	Fatality, LTI, minor injuries and property damage	1) SWP, contractor interface	5	C	Fully effective																			

Opening and Closing of doors	R	KS60	vehicles and facility doors	RS62	Struck by and pinch point	Safety	Poor maintenance, Lack of concentration, lack of knowledge/ awareness (restricted area) 2) Adverse weather condition	KET Employees and Contractors Employees	KET and Contractors Managers	Daily	Injury (minor to major)	Inspections, Awareness, warning signages	4	C	II	Mostly effective	SHE and Formen Forums, Safety vehicle campaign, installation of door transparency screens and PPE (gloves and safety boots)	Inspections audits	Security Manager, Support Services, Contractors managers	OHS Act, Facilities regulations and Construction Regulation 23, Kusile SHE specification			
workplace Psycho-Socio & Human Factors	R	KS61	1) workload	RS63	1) Fatigue 2) Frustration	Safety	1) Overworked, 2) uneven distribution of duties/responsibilities; planned events and acceleration of activities affect the schedule	KET Employees and Contractors Employees	Line managers and HR	Weekly	stress, mental illness	Proper planning (allocation of resources), Eskom assistance program and wellness clinic	3	C	II	Mostly effective	Targeted awareness campaigns; improvement of working relationship with line manager (brothers keeper)	Leave of absence monitoring; Time sheet	line manager and HR	Leave management procedure; Basic conditions of service, basic condition of employment Act and labour relations Act			
	R	KS62	2) work hours	RS64	1) Fatigue from working long hours	Safety	1) Long hours (overtime) and long travel times outside the feeding teams	KET Employees and Contractors Employees	Line managers and HR	Weekly	1) mental illness (e.g. stress) and Motor vehicle incidents	1) Project Labour Agreement and Basic conditions of service; Planned overtime schedule and	5	C	II	Mostly effective	Add extra resources to minimize long working hours	Time sheet, complain register to IR	line manager and HR	Leave management procedure; Basic conditions of service, basic condition of employment Act and labour relations Act			
	R	KS63	3) Inherent work place dynamics	RS65	1) harassment 2) Unfair treatment	Health	1) lack of diversity in a workforce, violation of human right, poor management of stress, lack of people management 2) Prejudice	KET Employees and Contractors Employees	Line managers and HR	Weekly	mental illness (e.g. depression, stress, etc.) joblessness, Resignation	1) EAP, Internal relation intervention, Diversity management Awareness, Ethics training	2	C	II	Mostly effective	External professional assistance	Complain register to IR	line manager and HR	Leave management procedure; Basic conditions of service, basic condition of employment Act and labour relations Act			
	R	KS64		RS66	3) Bullying	Health	1) Power dynamics, Cultural and language difference in the workplace & Immoral	KET Employees and Contractors Employees	Line managers and HR	Weekly	stress, mental illness, depression, absenteeism	EAP, awareness training on code of conduct practices and employees rights	2	C	II	Mostly effective	Ensure cultural diverse employees understand laws at workplace.	leave of absence monitoring; Time sheet, complain register to IR	line manager and HR	Leave management procedure; OHS Act Sec 14 Basic conditions of service, basic condition of employment Act and labour relations Act			
	R	KS65		RS67	Less aware of laws and workplace norms	Health	2) lack of orientation of new employees .	KET Employees and Contractors Employees	Line managers and HR	Weekly	stress, depressed, absenteeism	EAP, induction and training of new employees	3	C	II	Mostly effective	Full Orientation and continuous awareness training on legal updates and organization norms and standards	leave of absence monitoring; Time sheet, complain register to IR	line manager and HR	Leave management procedure; Basic conditions of service, basic condition of employment Act and labour relations Act			
	Provision of food and water	R	KS66	Hot surfaces steam, oil (Fire, Gas, machinery)	RS68	Burns, explosion, machine failure	Safety	Not following SWP, inspections on machinery not done, lack of machinery service	Contractor employees	site services	Daily	Fatality, injuries and property damage	SWP, Maintenance training and awareness	5	C	II	Mostly effective	Regular Audit Inspections	Inspections	Support Service Manager	FCD Act; Food Hygiene and safety management standards rev 3		
R		KS67	food handling, preparation and storage	RS69	expired food, and Food contamination	Health	No food labelling, No food samples, Not following sep, poor food hygiene practices, poor cleaning	Contractor employees	site services	Daily	fatalities, medicals	SWP Training, food samples, Food labelling for consumption period, awareness, Certificate of acceptability	5	C	II	Mostly effective	Regular Audit Inspections	Inspections	Support Service Manager	FCD Act; Food Hygiene and safety management standard rev 3			
R		KS68	Food conveyer	RS70	pinch point	Safety	No machine guard, not adhering to SWP, lack of maintenance	Contractor, Eskom employees & Visitors	site services	Daily	LTI	Maintenance, Training and SWP	4	C	II	Mostly effective	Regular Audit inspections	Inspections	Support Service Manager	FCD Act; Food Hygiene and safety management standard rev 3			
R		KS69	Walk in fridges	RS71	suffocation	Health	Not adhering to the swp .	Contractor Eskom employees & Visitors	site services	Daily	Fatalities, medicals	SWP, Training, maintenance, safety lock system	5	B	II	Mostly effective	Regular Audit Inspections	Inspections	Support Service Manager	FCD Act; Food Hygiene and safety management standards rev 3			
R		KS70	drinking water	RS72	contaminated water	Health	Poor cleaning, contamination from the source, poor hygiene practices	Contractor Eskom employees & Visitors	site services	Daily	medicals and LTI	cleaning schedule, SWP and Water sampling	4	C	II	Mostly effective	Regular Audit inspections	Inspections	Support Service Manager	FCD Act; Food Hygiene and safety management standard rev 3			
R		KS71	1) Chemicals 2) Wet surfaces 3) Tools 4) Hot surfaces (Hydrants) and water	RS73	1) Slip tripping and fall 2) slip trip and fall 3) cut by tools 4) Burn	Health	1) Not adhering to SOP and MSDS 2) No wet surface signage, 3) Defective tools, poor maintenance of facility, Using wrong tool for the job 4) Using wrong tool for the job, Not adhering to SWP, Tap not properly labelled	Contractor Eskom employees & Visitors	site services	Daily	LTI, Medical and first aid	MSDS, SWP, Training	4	C	II	Mostly effective	Awareness campaigns	Inspections	Support Service Manager	OHS Act; HCA Regulation Facilities rev 9			
Site and Public Unrest	N	KS72	1) Violent Uncontrolled people	RS74	1) Instability, fighting, damaging to property	Safety	1) Disrupts and disgruntled public / employees	KET public, visitors, employees and Contractors Employees	Security Manager	Adhoc Basis	Fatality, injuries and property damage	Project Labour agreement, Central management forum, stakeholder engagement, Communication alert sent to employees during unrest	5	C	II	Mostly effective	Intelligence gathering, Periodical refresher training and Mock drills	Mock drills	Security Management	PLA agreement, Criminal Law Procedure Act, Labour Relation Act			In progress
Waste Handling	R	KS73	Medical waste and biological waste	RS75	Cut by splashed by	Health	Improper handling, Not adhering to SOP	Contractor employee	Site services	Daily / Monthly	Medical	Training, Disposal in designated containers/Waste Separation, Use of appropriate PPE	3	C	II	Mostly effective	Awareness	Inspections and audits	Support service manager	NEMWA			
Walking on site	R	KS74	Uneven & slippery surfaces, cables, ropes, conduits, pipes, bricks	RS76	Slips, trips and falls	Safety	Poor housekeeping, liquid spillages, lack of maintenance and poor design of structures and surfaces	Contractor Eskom employees & Visitors	KET and Contractors Managers	Daily	LTI, Medical and first aid	Promote housekeeping, ban smoking hazardous areas, maintenance of buildings and structures, designated walk ways and setting of safety holds on site	4	C	II	Mostly effective	Awareness and site rules (i.e no running and no texting while walking), drainage/ detour of walkways during rain seasons	Inspections and audits	KET Management	OHS Act and SHE Basic 32			
Handling live arms	R	KS75	Fire arms	RS77	Accidental discharge	Safety	Deviation from Procedures, unfamiliar with a specific fire arm	Contractor Eskom employees & Visitors	Security Manager	Daily	Fatality, Medical and First aid cases	Gun Competency training, Fire arm procedures, bullet trap bin	5	B	II	Mostly effective	Re-refresher awareness and shift manager to cover see process	Inspections	Security Management	NKPAct and Fire arms control Act			
Horticulture	R	KS81	Uneven surfaces	RS83	Slips, trips and falls	Safety	landscaping	Contractor Eskom employees & Visitors	KET and Contractors Managers	Daily	Medical and first aid cases	awareness (foot placement) and correct PPE to be worn	4	C	II	Mostly effective	snake catching and relocation	Inspections and audits	Support service manager	The Fertilisers, Farm Fossils, Agricultural Remedies and Stock Remedies Act, 1947 Act 36 of 1947 and Health and Safety Act (Act 85 of 1993).			
	R	KS82	animal and insects	RS84	Bites and stings	Safety	animal encounter	Contractor Eskom employees & Visitors	KET and Contractors Managers	Daily	injuries and property damage	inspect before use, employee training, screening and use of alternative equipment	3	C	II	Mostly effective	Relocation of vehicles, signages and spotters	Inspections and audits	Support service manager	The Fertilisers, Farm Fossils, Agricultural Remedies and Stock Remedies Act, 1947 Act 36 of 1947 and Health and Safety Act (Act 85 of 1993).			
	R	KS83	Hand tools	RS85	Pinched points, Cut by and struck by	Safety	Damaged tools, improper handling, congested work areas, working near buildings/vehicles	Contractor Eskom employees & Visitors	KET and Contractors Managers	Daily	Medical cases	Use of long sleeve overalls, dust mask and job placement	3	B	III	Mostly effective	Awareness	Inspections and audits	Support service manager	The Fertilisers, Farm Fossils, Agricultural Remedies and Stock Remedies Act, 1947 Act 36 of 1947 and Health and Safety Act (Act 85 of 1993).			
	R	KS84	Vegetation	RS86	Skin irritation and respiratory irritation	Health	allergic reaction	Contractor Eskom employees & Visitors	KET and Contractors Managers	Daily	injuries and property damage	Training, Use of chemical as per SDS and correct PPE	3	B	III	Mostly effective	Awareness	Inspections and audits	Support service manager	The Fertilisers, Farm Fossils, Agricultural Remedies and Stock Remedies Act, 1947 Act 36 of 1947 and Health and Safety Act (Act 85 of 1993).			
	R	KS85	Chemical	RS87	Skin irritation and fires	Safety	Fuel and horticultural chemicals	Contractor Eskom employees & Visitors	KET and Contractors Managers	Daily	injuries and property damage	Training, Use of chemical as per SDS and correct PPE	3	B	III	Mostly effective	Awareness	Inspections and audits	Support service manager	The Fertilisers, Farm Fossils, Agricultural Remedies and Stock Remedies Act, 1947 Act 36 of 1947 and Health and Safety Act (Act 85 of 1993).			
Handling ash	R	KS100	Fly ash dust	RS102	Ash inhalation	Health	Suspended ash particles due moving	Eskom employees, contractor employees and visitors	Construction Managers	Daily	Fatality, Medical, first aid cases and property damage	Regular maintenance of plant, dust suppression, PPE	3	D	II	Mostly effective	Awareness and Air Monitoring	Inspections and audits	Construction Managers				
	R	KS101		Skin contact	Safety	machinery, manual handling,	Eskom employees, contractor employees and visitors	Construction Managers	Daily	Fatality, Medical, first aid cases and property damage	Regular maintenance of plant, dust suppression, PPE	3	D	II	Mostly effective	Awareness and Air Monitoring	Inspections and audits	Construction Managers					
	R	KS102		Eye irritation	Safety	machinery, manual handling,	Eskom employees, contractor employees and visitors	Construction Managers	Daily	Fatality, Medical, first aid cases and property damage	Regular maintenance of plant, dust suppression, PPE	3	D	II	Mostly effective	Awareness and Air Monitoring	Inspections and audits	Construction Managers					
	N	KS103		Poor visibility	Safety		Eskom employees, contractor employees and visitors	Construction Managers	Adhoc	Fatality, Medical, first aid cases and property damage	Regular maintenance of plant, dust suppression, PPE	5	B	II	Mostly effective	Temporary stop activities	Inspections and audits	Construction Managers	HCA Regulation				

		RISK MATRIX				
Consequences	6	I	I	I	I	I
	5	II	II	II	I	I
	4	III	III	II	I	I
	3	IV	III	II	II	I
	2	IV	IV	III	II	II
	1	IV	IV	III	III	III
		A	B	C	D	E
		Likelihood				

Priority	Risk ranking	Action required
I	Very high	Immediate action required.
II	High	Strong mandatory action required
III	Medium	Action required, possibly at administrative level.
IV	Low	Minor or no action required.