

Gx Coal and Clean		Occupational Health and Safety Baseline risk assessment template										Next Review Date (every 2 years):		Template identifier:		240-70044602									
Business/Operating unit:		Department:		Kusile 60 Year Ash Disposal Facility Project		Prepared by:		Musliwa Tshidavhu Joyce Mnani		Authorised by:		Name: Zalisile Mbangeli		Designation: Project Manager		Signed:		Date: 25 June 2021		Document identifier:		Revision number: 1		Revision date: 31-May-24	
Date: 05-May-21		Prepared by:		Musliwa Tshidavhu Joyce Mnani		Authorised by:		Name: Zalisile Mbangeli		Designation: Project Manager		Signed:		Date: 25 June 2021		Document identifier:		Revision number: 1		Revision date: 31-May-24					
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;	#	Anything with potential to cause of harm. Note: A hazard can pose more than one risk.	#	A chance that injury , ill health or damage could occur as a result of uncontrolled hazard.	Safety or health	What causes the risk to come into effect?	Who is exposed to the hazard i.e. visitors, members of the public, etc.	Who is accountable for making sure the controls and monitors are in place, implemented, regularly reviewed for effectiveness.	The frequency and duration the person/group is exposed to the hazard e.g. Daily for 3 hrs.	Consider the worse case scenario without controls?	Include: - Preventative Controls (controls implemented to eliminate hazards or reduce the likelihood of the risk occurring), and - Residue 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	Include: - Preventative Controls (controls implemented to eliminate hazards or reduce the likelihood of the risk occurring), and - Residue 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	Where applicable, add IRM system reference number for tracking of treatment actions.			
Crane operations	R	1	1) Adverse Weather Conditions	ADF501	1) Lightning, strong winds/rains	Safety	1) Natural causes.	All Employees, Visitors, Properties and Equipment	Construction Managers, Contractor Managers, SHE Managers and Construction Supervisors	Daily	Fatality, injuries and damage to property and equipment	1) Weather Monitoring Station.	5	C	II	Mostly effective	Inspections and maintenance. Toolbox Talks	Audits, Inspections & Observations	SHE Manager	Kusile Coal and Clean SHE Specification , OHSAct (CR 22 and DMR18), Eskom procedure 39 -98	31/06/2023	Pending.			
		2	2) Crane Operations	ADF502	2) Boom Failure and dropping the loads	Safety	1) Unstable/uneven ground, improper operation of the crane, inadequate Maintenance, Lack of Risk Assessment, Incorrect or defective lifting equipment (buckles), unsafe crane set-up, crane overload, unauthorised operator, Ignorance of rules/procedures.	All Employees, Visitors, Properties and Equipment	Construction Managers, Contractor Managers, SHE Managers and Construction Supervisors	Daily	Fatality, injuries and damage to property and equipment	1) Training and awareness , inspections and maintenance, compliance to legislation and Eskom procedures, Contractors Safe work procedures, Baricading, Warning Signals and rigging study/plan, Conduct DSTI for all crane activities, Competency verification	1) Training and awareness , inspections and maintenance, compliance to legislation and Eskom procedures, Contractors Safe work procedures, Baricading, Warning Signals and rigging study/plan, Conduct DSTI for all crane activities, Competency verification	5	D	I	Mostly effective	Inspections and maintenance. Toolbox Talks	Audits, Inspections & Observations	SHE Manager	Kusile Coal and Clean SHE Specification , OHSAct (CR 22 and DMR18), Eskom procedure 39 -98	31/06/2023	Pending.		
		3	3) Stationary Crane	ADF503	3) Collision onto a stationary crane.	Safety	1) Poor visibility	All Employees, Visitors, Properties and Equipment	Construction Managers, Contractor Managers, SHE Managers and Construction Supervisors	Daily	Fatality, injuries, damage to property and equipment	1) Reflective strips and amber lights	3	B	III	Mostly effective	Inspections and maintenance. Toolbox Talks	Audits, Inspections & Observations	SHE Manager	Kusile Coal and Clean SHE Specification , OHSAct (CR 22 and DMR18), Eskom procedure 39 -98	31/06/2023	Pending.			
Lifting & Rigging	R	4	1) Lifting and Rigging Equipment	ADF504	1) Equipment tip over	Safety	1) Poor communications, Unauthorised operator, overloading and ground conditions, improper rigging and mechanical failure.	All Employees, Visitors, Properties and Equipment	Construction Managers, Contractor Managers, SHE Managers and Construction Supervisors	Daily	Fatality, injuries, damage to property and equipment	1) Competency and supervision, training and awareness, inspections and maintenance, DSTI, Audits of SWP and SWL	1) Competency and supervision, training and awareness, inspections and maintenance, DSTI, Audits of SWP and SWL	4	C	II	Mostly effective	Review safe work procedures, Check effectiveness of Maintenance on Equipment, Refresher training and awareness.	Audits, Inspections, SHE Stats & Observations	SHE Manager	Kusile Coal and Clean SHE Specification , OHSAct (CR 22 and DMR18), Eskom level procedures 39 -98	31/06/2023	Pending.		
			1) Falling Objects	ADF507	1) Loose or unsecured material	Safety	1) Unprotected edging	Employees, Visitors and Contractor's Employees	Construction Managers, Contractor Managers, SHE Managers	Daily	Fatalities	1) Fall Arrest System, Competency, Fall protection and prevention systems, medical surveillance, provision of appropriate PPE	1) Fall Arrest System, Competency, Fall protection and prevention systems, medical surveillance, provision of appropriate PPE	5	B	I	Mostly effective	Review safe work procedures, check effectiveness of Maintenance on Equipment, employees to be incorporated in Contractors Fall protection plan (as per section 8 of OHS Act), awareness, Approval of designs by Professionals, Geotechnical tests.	Audits, Inspections & Observations	SHE Manager	Kusile Coal and Clean SHE Specification , OHSAct (CR 22 and DMR18), Eskom level procedures 39 -99	31/06/2023	Pending.		
Working at heights	R	5	1) Elevated position	ADF508	2) Structural collapse	Safety	1) Unprotected edges, loose/unsecured material	Employees, Visitors and Contractor's Employees	Construction Managers, Contractor Managers, SHE Managers	Daily	Property Damage	1) Fall Arrest System, Competency, Fall protection and prevention systems, medical surveillance, provision of appropriate PPE	1) Fall Arrest System, Competency, Fall protection and prevention systems, medical surveillance, provision of appropriate PPE	4	C	I	Mostly effective	Review safe work procedures, check effectiveness of Maintenance on Equipment, employees to be incorporated in Contractors Fall protection plan (as per section 8 of OHS Act), awareness, Approval of designs by Professionals, Geotechnical tests.	Audits, Inspections & Observations	SHE Manager	Kusile Coal and Clean SHE Specification , OHSAct (CR 22 and DMR18), Eskom level procedures 39 -100	31/06/2023	Pending.		
			3) Personnel falling from heights	ADF509	1) Unprotected edges and medical conditions 2) Fallure PPE Slippery surfaces	Safety	1) Unprotected edges and medical conditions 2) Fallure PPE Slippery surfaces	Employees, Visitors and Contractor's Employees	Construction Managers, Contractor Managers, SHE Managers	Daily	Fatality	1) Fall Arrest System, Competency, Fall protection and prevention systems, medical surveillance, provision of appropriate PPE	1) Fall Arrest System, Competency, Fall protection and prevention systems, medical surveillance, provision of appropriate PPE	5	C	II	Mostly effective	Review safe work procedures, check effectiveness of Maintenance on Equipment, employees to be incorporated in Contractors Fall protection plan (as per section 8 of OHS Act)	Audits, Inspections & Observations	SHE Manager	Kusile Coal and Clean SHE Specification , OHSAct (CR 22 and DMR18), Eskom level procedures 39 -101	31/06/2023	Pending.		
Electrical Installation (Tie in to live platy)Testing and Commissioning	N		1) Equipment Failure	ADF510	1) Unauthorised operations (tampering with plant by unauthorised), No-lock out system, . No earthing, theft	Safety	1) Unauthorised operations (tampering with plant by unauthorised), No-lock out system, . No earthing, theft	Employees, Visitors and Contractor's Employees	Construction Managers, Contractor Managers, Construction Supervisor	Daily	Plant damage, Injuries, Fatalities	1) Competency, training and Awareness, adherence to life saving rules, Appropriate PPE, Signages, 2) Inspections and maintenance, security measures, 3) Arc protection measures	1) Competency, training and Awareness, adherence to life saving rules, Appropriate PPE, Signages, 2) Inspections and maintenance, security measures, 3) Arc protection measures	5	C	II	Mostly effective	Review safe work procedures, Check Effectiveness of Maintenance on Equipment, monitoring life saving rules violations	Audits, Inspections & Observations	SHE Manager	Kusile Coal and Clean SHE Specification , OHSAct (CR 22 and DMR18), Eskom level procedures 39 -101	31/06/2023	Pending.		
		6	1) Electricity	ADF511	2) Electrocuton	Safety	1) Working on live plant, No earthing, Theft, unauthorised access and operations, Failing to follow approved operating procedures, Incorrect wiring and installation, Failing to comply to Life Saving rules.	Employees, Visitors and Contractor's Employees	Construction Managers, Contractor Managers, Construction Supervisor	Daily	Plant damage, Injuries, Fatalities	1) Competency, training and Awareness, adherence to life saving rules, Appropriate PPE, Signages, 2) Inspections and maintenance, security measures, 3) Arc protection measures	1) Competency, training and Awareness, adherence to life saving rules, Appropriate PPE, Signages, 2) Inspections and maintenance, security measures, 3) Arc protection measures	5	C	II	Mostly effective	Review safe work procedures, Check Effectiveness of Maintenance on Equipment, monitoring life saving rules violations	Audits, Inspections & Observations	SHE Manager	Kusile Coal and Clean SHE Specification , OHSAct (CR 22 and DMR18), Eskom level procedures 39 -101	31/06/2023	Pending.		
			3) Fires & Explosions	ADF512	1) Inccord wiring and installations, Overvolttages, Cable insulation failures.	Safety	1) Inccord wiring and installations, Overvolttages, Cable insulation failures.	Employees, Visitors and Contractor's Employees	Construction Managers, Contractor Managers, Construction Supervisor	Daily	Plant damage, Injuries, Fatalities	1) Competency, training and Awareness, adherence to life saving rules, Appropriate PPE, Signages, 2) Inspections and maintenance, security measures, 3) Arc protection measures, 4. Pest Control Measures.	1) Competency, training and Awareness, adherence to life saving rules, Appropriate PPE, Signages, 2) Inspections and maintenance, security measures, 3) Arc protection measures, 4. Pest Control Measures.	6	B	I	Mostly effective	Review safe work procedures, Check Effectiveness of Maintenance on Equipment, monitoring life saving rules violations	Audits, Inspections & Observations	SHE Manager	Kusile Coal and Clean SHE Specification , OHSAct (CR 22 and DMR18), Eskom level procedures 39 -101	31/06/2023	Pending.		
Hot work	R	7	1) Gases& fumes	ADF513	1) Inhalation	Health	1) Lack of PPE, Uncontrolled gases/fumes	Employees, Visitors and Contractor's Employees	Construction Managers, Contractor Managers, Construction Supervisor	Daily	Medical Treatment	1) Competency, training and Awareness, adherence to life saving rules, Appropriate PPE, Signages.	1) Competency, training and Awareness, adherence to life saving rules, Appropriate PPE, Signages.	3	C	II	Mostly effective	1) Review safe work procedures, Gas monitoring	Audits, Inspections & Observations	SHE Manager	Kusile Coal and Clean SHE Specification , OHSAct (CR 22 and DMR18), Eskom level procedures 39 -102	31/06/2023	Pending.		
		8	2) Compressed cylinders	ADF514	2) Fire & explosions	Safety	1) Improper storage and transportation, 2) High Temperatures.	Employees, Visitors and Contractor's Employees	Construction Managers, Contractor Managers, Construction Supervisor	Daily	Plant damage, Injuries, Fatalities	1) Competency, training and Awareness , appropriate PPE, 2) Inspections and maintenance.	1) Competency, training and Awareness , appropriate PPE, 2) Inspections and maintenance.	5	B	II	Mostly effective	Review safe work procedures and handling procedure, Check Effectiveness of Maintenance on Equipment.	Audits, Inspections & Observations	SHE Manager	Kusile Coal and Clean SHE Specification , OHSAct (CR 22 and DMR18), Eskom level procedures 39 -103	31/06/2023	Pending.		
		9	3) Cables & hoses	ADF515	3) Slips, Trips & Falls.	Safety	1) Poor housekeeping, poor connection and poor cable management	Employees, Visitors and Contractor's Employees	Construction Managers, Contractor Managers, Construction Supervisor	Daily	Injuries, property damage	1) Good housekeeping, cable management and routine inspections	1) Good housekeeping, cable management and routine inspections	4	C	II	Mostly effective	Training and awareness, coordination meetings	Audits, Inspections & Observations	SHE Manager	Kusile Coal and Clean SHE Specification , OHSAct (CR 22 and DMR18), Eskom level procedures 39 -104	31/06/2023	Pending.		
		10	4) Sparks & flames	ADF516	4) UV exposure & fire	Safety	1) Welding slag, Heat Treatment	Employees, Visitors and Contractor's Employees	Construction Managers, Contractor Managers, Construction Supervisor	Daily	Injuries, property damage	1) PPE, welding screens, fire watch and hot work permit	1) PPE, welding screens, fire watch and hot work permit	4	C	II	Mostly effective	Training and awareness, task risk assessment	Audits, Inspections & Observations	SHE Manager	Kusile Coal and Clean SHE Specification , OHSAct (CR 22 and DMR18), Eskom level procedures 39 -105	31/06/2023	Pending.		
		11	1) Adverse weather conditions lightning.	ADF517	1) Lightning strikes	Safety	1) Natural causes	Employees, Visitors and Contractor's Employees	EP Manager	Ad hoc	Fatalities, injuries, property damage	1) Weather monitoring	5	B	II	Mostly effective	Training and awareness	Audits, Inspections & Observations	SHE Manager	Kusile Coal and Clean SHE Specification , OHSAct (CR 22 and DMR18), Eskom level procedures 39 -105	31/06/2023	Pending.			
		12	2) Storms, floods & heavy rains.	ADF518	2) Drowning	Safety	1) Natural causes, unprotected water causes, lack of storm water management	Employees, Visitors and Contractor's Employees	Construction Managers, Contractor Managers, Construction Supervisor	Ad hoc	Fatalities, injuries, property damage	1) Weather monitoring, controlled access point 3) competency	1) Weather monitoring, controlled access point 3) competency	5	B	II	Mostly effective	2)Jellycoy dings & signages	Audits & Inspections	EP Manager	Kusile Coal and Clean SHE Specification , OHSAct (CR 22 and DMR18), Eskom level procedures 39 -107	31/06/2023	Pending.		
Working in open spaces and on structures	R		3) Collapsing structures, falling materials /loads.	ADF519	3) Collapsing structures, falling materials /loads.	Safety	1) Poor design and erection, unsecured structures.	Employees, Visitors and Contractor's Employees	Construction Managers, Contractor Managers, Construction Supervisor	Ad hoc	Fatalities, injuries, property damage	1) Weather monitoring, design approvals.	1) Weather monitoring, design approvals.	5	B	II	Mostly effective	Awareness	Audits & Inspections	SHE Manager	Kusile Coal and Clean SHE Specification , OHSAct (CR 22 and DMR18), Eskom level procedures 39 -108	31/06/2023	Pending.		
			4) Heavy dust	ADF520	4) Heavy dust	Health	1) Lack of dust suppression	Employees, Visitors and Contractor's Employees	Construction Managers, Contractor Managers, Construction Supervisor	Seasonal	Injuries	1) Dust suppression, PPE	1) Dust suppression, PPE	3	D	II	Mostly effective	Awareness	Audits, Inspections & Observations	SHE Manager	Kusile Coal and Clean SHE Specification , OHSAct (CR 22 and DMR18), Eskom level procedures 39 -109	31/06/2023	Pending.		
Transportation of Materials	R	14	1) Improper stacking/securing of loads	ADF22	2) Spillage	Health	1) Inappropriate packaging.	Employees, Visitors and Contractor's Employees	Construction Managers, Contractor Managers, Construction Supervisor	Ad hoc	II health	1) Risk Assessment, Stacking and storage, regular inspection, Awareness	1) Risk Assessment, Stacking and storage, regular inspection, Awareness	3	B	II	Mostly effective	Review work safe procedures	Audits, Inspections & Observations	SHE Manager	Kusile Coal and Clean SHE Specification , OHSAct (CR 22 and DMR18), Eskom level procedures 39 -110	31/06/2023	Pending.		
			3) Spillage	ADF23	3) Spillage	Safety	1) Inappropriate packaging.	Employees, Visitors and Contractor's Employees	Construction Managers, Contractor Managers, Construction Supervisor	Ad hoc	Injuries	1) Risk assessment, Signage, training awareness, MSDS	1) Risk assessment, Signage, training awareness, MSDS	4	B	II	Mostly effective	Review work safe procedures	Audits, Inspections & Observations	SHE Manager	Kusile Coal and Clean SHE Specification , OHSAct (CR 22 and DMR18), Eskom level procedures 39 -111	31/06/2023	Pending.		
		15	2) Uneven roads/Poor road conditions	ADF24	4) Dropped/falling loads.	Safety	1) Poor maintenance and poor workmanship weather conditions.	Employees, Visitors and Contractor's Employees	Construction Managers, Contractor Managers, Construction Supervisor	Daily	Injuries	1) Signage, Risk assessment, awareness	1) Signage, Risk assessment, awareness	3	B	II	Mostly effective	Inspections	Audits, Inspections & Observations	SHE Manager	Kusile Coal and Clean SHE Specification , OHSAct (CR 22 and DMR18), Eskom level procedures 39 -112	31/06/2023	Pending.		
Manual handling	R	16	1) Heavy loads	ADF25	1) Improper lifting, Falling loads, pinch points	Safety	1) Overloading, unsecured loads, poor lifting technique	Employees, and Contractor's Employees	Construction Managers, Contractor Managers, Construction Supervisor	Daily	Injuries	1) SWP, buddy systems, pallet/damage, Assistance lifting (mechanical), Rotation of team	1) SWP, buddy systems, pallet/damage, Assistance lifting (mechanical), Rotation of team	4	D	I	Mostly effective	Review work safe procedures, Inspections	Audits, Inspections & Observations	SHE Manager	Kusile Coal and Clean SHE Specification , OHSAct (CR 22 and DMR18), Eskom level procedures 39 -114	31/06/2023	Pending.		
		17	2) Ergonomics	ADF26	2) Awkward body positioning, repititive movement	Safety	1) Restricted/congested work area, task requirements	Employees, and Contractor's Employees	Construction Managers, Contractor Managers, Construction Supervisor	Daily	Injuries	1) Good housekeeping, proper body positioning, proper access and egress, adhering to load bearing capacity, detail ergonomic risk assessment to be conducted	1) Good housekeeping, proper body positioning, proper access and egress, adhering to load bearing capacity, detail ergonomic risk assessment to be conducted	4	C	I	Mostly effective	Review work safe procedures, Inspections	Audits, Inspections & Observations	SHE Manager	Kusile Coal and Clean SHE Specification , OHSAct (CR 22 and DMR18), Eskom level procedures 39 -115	31/06/2023	Pending.		
		18	3) Storage area layout	ADF27	3) Entrapment, slips/trips and falls	Safety	1) Poor design of storage/work area, poor illumination, poor housekeeping	Employees, and Contractor's Employees	Construction Managers, Contractor Managers, Construction Supervisor	Daily	Fatalities, property damage	1) Inspections, maintenance, good housekeeping, proper stacking and storage	1) Inspections, maintenance, good housekeeping, proper stacking and storage	4	C	I	Mostly effective	Review work safe procedures, Inspections	Audits, Inspections & Observations	SHE Manager	Kusile Coal and Clean SHE Specification , OHSAct (CR 22 and DMR18), Eskom level procedures 39 -116	31/06/2023	Pending.		
		19	1) Restricted spaces	ADF28	1) Poor ergonomics	Safety	1) Poor body postures, Unsafe practice	Employees, and Contractor's Employees	Construction Managers, Contractor Managers, Construction Supervisor	Daily	Injuries	1) Rest breaks 2) Inspection and maintenance, SWP and awareness	1) Rest breaks 2) Inspection and maintenance, SWP and awareness	4	C	II	Fully effective	Training and awareness, task risk assessment	Audits, Inspections & Observations	SHE Manager	Kusile Coal and Clean SHE Specification , OHSAct (CR 22 and EMR10), Eskom level procedures 39 -116	31/06/2023	Pending.		
Tightning, hammering and chipping	R	20	2) Tools	ADF29	2) Pinch point, chipping	Safety	1) Defective tools	Contractor's Employees	Construction Managers, Contractor Managers, Construction Supervisor	Daily	Injuries	1) Risk assessment, proper PPE, Inspection and maintenance, SWP	1) Risk assessment, proper PPE, Inspection and maintenance, SWP	3	C	II	Mostly effective	Training and awareness	Audits, Inspections & Observations	SHE Manager	Kusile Coal and Clean SHE Specification , OHSAct (CR 22 and DMR18), Eskom level procedures 39 -116	31/06/2023	Pending.		
		21	3) Dust	ADF30	3) Dust Inhalation	Health	1) Inccord No usage of respiratory equipment	Employees, and Contractor's Employees	Construction Managers, Contractor Managers, Construction Supervisor	Daily	II health	1) Dust suppression, proper PPE, SWP, Risk Assessment, baricading	1) Dust suppression, proper PPE, SWP, Risk Assessment, baricading	3	C	II	Mostly effective	Review work safe procedures, Inspections	Audits, Inspections & Observations	SHE Manager	Kusile Coal and Clean SHE Specification , OHSAct (CR 22 and DMR18), Eskom level procedures 39 -116	31/06/2023	Pending.		
		22	4) Excessive Noise	ADF31	4) Noise exposure	Health	1) No or incorrect usage of hearing protection	Employees, Visitors and Contractor's Employees	Construction Managers, Contractor Managers, Construction Supervisor	Daily	Hearing Impairment	1) Proper PPE, SWP, Risk Assessment	1) Proper PPE, SWP, Risk Assessment	3	B	II	Fully effective	Audiometric tests	Audits, Inspections & Observations	SHE Manager	Kusile Coal and Clean SHE Specification , OHSAct (CR 22 and DMR18), Eskom level procedures 39 -116	31/06/2023	Pending.		
Drilling	R	23	1) Drill rights	ADF32	1) Flying debris, dust inhalation, noise exposure	Safety	1) Release of the drilled material 2) Inccord No usage of respiratory equipment 3) No or incorrect usage of hearing protection	Employees and Contractor's Employees	Construction Managers, Contractor Managers, Construction Supervisor	Daily	Injuries	1) Proper PPE, SWP, Risk Assessment	1) Proper PPE, SWP, Risk Assessment	4	B	II	Mostly effective	Review work safe procedures, check effectiveness of maintenance of equipment	Audits, Inspections & Observations	SHE Manager	Kusile Coal and Clean SHE Specification , OHSAct (CR 22 and DMR18), Eskom level procedures 39 -116	31/06/2023	Pending.		

Excavation and Trenching	R	24	1) Machinery or plant	ADFS33	1) Falling inside the excavation; employees struck by machinery; wall collapse, noise exposure exposure to exhaust fumes, plant bump each other.	Safety	1) Poor ground stability; lack of inspection prior excavation; unprotected excavations; uncoordinated man machine interaction; lack of shoring and bracing;violation and overloading of excavation walls; operating plant	Employees, Visitors and Contractor's Employees	Construction Managers, Contractor Managers, Construction Supervisor	Daily	Injuries, work stoppage, fatalities, property damage	1) Training and competencies; inspections of excavations; plant inspection and maintenance; excavation permit; SWP and work coordination; PPE	5	C	II	Mostly effective	Training and competencies; inspections of excavations; plant inspection and maintenance; excavation permit; SWP and work coordination 2) tool inspections; SWP; 3) inspections; signage; sloping; benching; housekeeping; awareness training 4) underground services detection - Permit to work	Audits, Inspections & Observations	SHE Manager	Kusile Coal and Clean SHE Specification , OHSAct (CR 22 and DMR18). Eskom level procedures 39-116	31/06/2023	Pending.	
	R	25	2) Hand tools	ADFS34	2) Pinch points; struck by; ergonomic risks	Safety	1) Substandard tools; working in close proximity; restricted working space; awkward body position and repetitive work	Contractor's Employees	Construction Managers, Contractor Managers, Construction Supervisor	Daily	Injuries	1) Training and competencies; inspections of excavations; plant inspection and maintenance; excavation permit; SWP and work coordination; PPE 2) tool inspections; SWP and use of PPE 3) inspections; signage; sloping; benching; housekeeping; awareness training and proper PPE 4) underground services detection - Permit to work; SWP	4	C	II	Mostly effective	Review SWP; bracing and shoring and continuous monitoring	Audits, Inspections & Observations	SHE Manager	Kusile Coal and Clean SHE Specification , OHSAct (CR 22 and DMR18). Eskom level procedures 39-116	31/06/2023	Pending.	
	R	26	3) Excavations	ADFS35	3) Wall collapse; falling into; slips trips and falls	Safety	1) Improper sloping; inadequate bracing and shoring; unprotected excavations slippery and wet conditions; poor housekeeping and uneven surface	Employees, Visitors and Contractor's Employees	Construction Managers, Contractor Managers, Construction Supervisor	Daily	Fatalities and injuries	1) Signage, inspections, sloping, benching, housekeeping, awareness training; permit to work	4	C	II	Mostly effective	Review SWP; bracing and shoring and continuous monitoring	Audits, Inspections & Observations	SHE Manager	Kusile Coal and Clean SHE Specification , OHSAct (CR 22 and DMR18). Eskom level procedures 39-116	31/06/2023	Pending.	
	R	27	4) Underground services	ADFS36	4) Electrocution; flooding	Safety	1) undetected underground services, unknown services	Contractor's Employees	Construction Managers, Contractor Managers, Construction Supervisor	Daily	Fatalities	1) Underground services detection; permit to work; SWP	5	C	II	Mostly effective	Risk Assessment, work permit management	Audits, Inspections & Observations	SHE Manager	Kusile Coal and Clean SHE Specification , OHSAct (CR 22 and DMR18). Eskom level procedures 39-116	31/06/2023	Pending.	
***Concrete works	R	28	1) Cement dust	ADFS37	1) Dust exposure	Health	1) Inadequate PPE, improper handling of equipment, poor positioning, poor house keeping	Employees, Visitors and Contractor's Employees	Construction Managers, Contractor Managers, Construction Supervisor	Daily	II health	1) Training & awareness, SWP, work coordination, appropriate PPE, maintenance and inspection of plant, access restrictions and visible signage	4	B	II	Mostly effective	Review safe work procedures, check Effectiveness of Maintenance on Equipment	Audits, Inspections & Observations	SHE Manager	Kusile Coal and Clean SHE Specification , OHSAct (CR 22 and DMR18). Eskom level procedures 39-116	31/06/2023	Pending.	
	R	29	2) Equipment	ADFS38	2) Whiplash, pinch points, falling debris	Safety	1) Inadequate PPE, improper handling of equipment, poor positioning, poor house keeping	Employees, Visitors and Contractor's Employees	Construction Managers, Contractor Managers, Construction Supervisor	Daily	Injuries and property damage	1) Training & awareness, SWP, work coordination, appropriate PPE, maintenance and inspection of plant, access restrictions and visible signage	4	C	II	Mostly effective	Review safe work procedures, check Effectiveness of Maintenance on Equipment	Audits, Inspections & Observations	SHE Manager	Kusile Coal and Clean SHE Specification , OHSAct (CR 22 and DMR18). Eskom level procedures 39-116	31/06/2023	Pending.	
			3) Contact with concrete		Safety	1) Improper handling of equipment, poor positioning and poor housekeeping	Contractor's Employees	Contractor Manager		Daily	Skin Irritation	1) Awareness, visible signage, access restrictions	2	C	II	Mostly effective	Training, SWP and appropriate PPE	Audits, Inspections & Observations	SHE Manager	Kusile Coal and Clean SHE Specification , OHSAct (CR 22 and DMR18). Eskom level procedures 39-116	31/06/2023	Pending.	
	R	30	3) Concrete mixture	ADFS39	4) Dust emission and inhalation	Health	1) Cement wetting not done	Employees, Visitors and Contractor's Employees	Construction Managers, Contractor Managers, Construction Supervisor	Daily	II health	1) Training, procedures, SHE Spec	2	C	II	Mostly effective	Method statements developed, Supervision	Audits, Inspections & Observations	SHE Manager	Kusile Coal and Clean SHE Specification , OHSAct (CR 22 and DMR18). Eskom level procedures 39-116	31/06/2023	Pending.	
***Driving mobile machinery, plants and other vehicles on site	R	31	1) Motor Vehicle, Buses & Taxis	ADFS40	1) Motor vehicle accidents	Safety	1) Poor visibility, weather conditions (fog & mist) use of cellphones, poor maintenance and construction of road, human behavior, reckless driving (speeding, overtaking etc), driving under the influence of alcohol & drugs. Lapse in concentration	Employees, Visitors and Contractor's Employees	Construction Managers, Contractor Managers, Construction Supervisor	Daily	Multiple fatalities, injuries and property damage	1) Vehicle Training & campaigns, inspections and servicing of vehicles, substance abuse programme, licence renewal 2) Routine road maintenance and monitoring traffic management procedures	6	B	I	Mostly effective	Vehicle access permit and continuous traffic management enforcement	Audits, Inspections & Observations	SHE Manager	Kusile Coal and Clean SHE Specification , OHSAct (CR 22 and DMR18). Eskom level procedures 39-116	31/06/2023	Pending.	
	R	32	2) Pedestrians	ADFS41	2) Motor vehicle accidents	Safety	1) Poor maintenance and construction of road/human behavior, reckless driving (speeding, overtaking etc) and reckless walking, poor maintenance of vehicles, weather conditions (fog & mist), attention distraction driving under the influence of alcohol & drugs, poor visibility, use of cellphone. Lapse in concentration	Employees, Visitors and Contractor's Employees	Construction Managers, Contractor Managers, Construction Supervisor, Security Manager	Daily	Fatalities and injuries	1) Vehicle Training & campaigns, inspections and servicing of vehicles, substance abuse programme, licence renewal 2) Routine road maintenance and monitoring traffic management procedures	5	C	II	Mostly effective	Vehicle access permit and continuous traffic management enforcement, random testing	Audits, Inspections & Observations	SHE Manager	Kusile Coal and Clean SHE Specification , OHSAct (CR 22 and DMR18). Eskom level procedures 39-116	31/06/2023	Pending.	
	R	33	3) Poor Road conditions	ADFS42	3) Motor vehicle accidents	Safety	1) Poor visibility, weather conditions and use of cellphones	Employees, Visitors and Contractor's Employees	Construction Managers, Contractor Managers, Construction Supervisor, Security Manager	Daily	Property Damage and injuries	1) Routine road maintenance and monitoring, traffic management procedure, vehicle training and campaigns, inspection and servicing of vehicles,	4	C	II	Mostly effective		Audits, Inspections & Observations	SHE Manager	Kusile Coal and Clean SHE Specification , OHSAct (CR 22 and DMR18). Eskom level procedures 39-116	31/06/2023	Pending.	
			1) Hot water from hydroboiler	ADFS43	1. Contact with hot boiler or spilled with hot water	Health	1) overfilled container, damaged container, improper handling, bumping each other, defective hydroboiler	Employees, Visitors and Contractor's Employees	Site services manager Occupational Hygiene Officer	Daily	Injuries	1) Awareness and maintenance of the hydroboiler	3	B	II	Fully effective	Inspections and Risk Assessments	Audits, Inspections & Observations	Site Service Manager	Kusile Coal and Clean SHE Specification , OHSAct (CR 22 and DMR18). Eskom level procedures 39-117	Fully Implemented	Complete	
**Office hazards	R	35	2) Office furniture & equipment	ADFS44	1) Trip and fall 2) Edges pinch points, cut by, ergonomics, glare, fall off/on	Safety	1) defective furniture, improper position, poor illumination	Employees, Visitors and Contractor's Employees	Site services manager Occupational Hygiene Officer	Daily	Injuries	1) Illumination survey, ergonomic configuration and maintenance 2) Training and awareness 3) Reporting of nonconformances	3	B	II	Fully effective	Inspections and Risk Assessments	Audits, Inspections & Observations	Site Service Manager	Kusile Coal and Clean SHE Specification , OHSAct (CR 22 and DMR18). Eskom level procedures 39-118	Fully Implemented	Complete	
	R	36	3) Cables & uneven surface	ADFS45	1) Trip and fall	Safety	1) poor laying of cables, poor design	Employees, Visitors and Contractor's Employees	Site services manager Occupational Hygiene Officer	Daily	Injuries	Risk assessments, signage	3	C	II	Fully effective	Inspection of the Correct laying of cables, Auditing of the BBSO records	Audits, Inspections & Observations	End-user, Site Service Manager	Kusile Coal and Clean SHE Specification , OHSAct (CR 22 and DMR18). Eskom level procedures 39-119	31/06/2026	Pending.	
Occupational diseases	N	37	Outbreak of infectious diseases, communicable diseases (incl. Covid19)	ADFS46	Employees infected	Health	Not following Covid19 preventive measures	Employees, Visitors and Contractor's Employees	Occupational Hygiene Officer	Daily	Multiple infections on employees, illhealth, absenteeism, exacerbation of comorbidities	Cold compliance procedure	5	D	I	Mostly effective	Working from home, vaccination	Audits, Inspections & Observations	SHE Manager	Kusile Coal and Clean SHE Specification , OHSAct (CR 22 and DMR18). Eskom level procedures 39-120	Fully Implemented	Pending.	
**Opening and Closing of doors	R	38	Vehicles and facility doors	ADFS47	Struck by and pinch points	Safety	Ignorance, poor maintenance, lack of concentration, lack of knowledge and awareness	Employees, Visitors and Contractor's Employees	Occupational Hygiene Officer	Daily	Injuries	Warning signs, awareness	2	C	II	Mostly effective	Inspections self awareness	Self awareness	Employees	Kusile Coal and Clean SHE Specification , OHSAct (CR 22 and DMR18). Eskom level procedures 39-122	31/06/2029	Pending.	
workplace Psycho-Socio & Human Factors	R	39	Work load	ADFS49	Uneven distribution of duties and fatigue	Health	Lack of planning, acceleration of activities, shortage of resources	Employees, Visitors and Contractor's Employees	Line Manager and HR	Daily	Stress, mental illness, anxiety, depression,	Proper distribution of work, Leave management procedure	3	D	I	Mostly effective	Eskom assistance programme, awareness campaigns	Absenteeism monitoring, timesheet, job specification	Line Manager and HR	Basic conditions of employment act and Labour relations Act, Leave Management procedure	31/06/2031	Pending.	
	R	40	Working hours	ADFS50	Fatigue, long travelling times outside the feeding tents, Lack of time management	Health	Long hours (overtime), different conditions of service, mismanagement of time	Employees, Visitors and Contractor's Employees	Line Manager and HR	Daily	Stress, mental illness, motor vehicle incidents, consequence management	Project Labour Agreement, Basic Conditions of service, Daily timesheets	5	C	II	Mostly effective	Minimised working hours	Absenteeism monitoring, timesheet, complaint register to IR	Line Manager and HR	Basic conditions of employment act and Labour relations Act, Leave Management procedure	31/06/2032	Pending.	
	R	41	Harassment	ADFS51	Stress, mental illness, depression, absenteeism, homogenous workforce	Health	Lack of diversity, Minority feels isolated and feel vulnerable. Majority feels threatened by those who appear different/ Lack of boundaries, Different cultures	Employees, Visitors and Contractor's Employees	Line Manager, IR and HR	Daily	Stress, mental illness, absenteeism, depression,	Project Labour Agreement, Basic Conditions of service, Ethics policy and procedure, HR and IR procedure, Induction and training of new employees	2	C	II	Mostly effective	Ethics awareness training	Ethics training records	Line Manager, IR and HR	Basic conditions of employment act and Labour relations Act, Ethics policy	31/06/2033	Pending.	
	R	41	Bullying	ADFS52	Stress, mental illness, depression, absenteeism, homogenous workforce	Health	Lack of orientation of new employees, Different culture backgrounds, Minority feels isolated and feel vulnerable	Employees, Visitors and Contractor's Employees	Line Manager and HR	Daily	Stress, mental illness, absenteeism, depression,	Project Labour Agreement, Basic Conditions of service, Ethics policy and procedure, HR and IR procedure, Induction and training of new employees	2	C	II	Mostly effective	Equal consequence management to employees and managers. Full orientation and continuous awareness training on legal updates and organisational norms and standards	Ethics training records	Line Manager, IR and HR	Basic conditions of employment act and Labour relations Act, Ethics policy	31/06/2033	Pending.	
	R	42	Victimisation	ADFS53	Intimidation, hostile environment, lack of cooperation,	Health	Social discourse outside the workplace, mistreatment by senior employees	Employees, Visitors and Contractor's Employees	Line Manager and HR	Daily	Stress, mental illness, absenteeism, depression,	Implement Code of conduct	2	C	II	Mostly effective	Equal consequence management to employees and managers. Full orientation and continuous awareness training on legal updates and organisational norms and standards	Leave of absence monitoring, timesheet, complaint register to IR	Line Manager, IR and HR	Basic conditions of employment act and Labour relations Act, Ethics policy	31/06/2033	Pending.	
Site and Public Unrest	N	43	Violence and uncontrolled people	ADFS54	Instability, fighting and damage to property	Safety	Disputes, disgruntled public/employees	Employees, Visitors and Contractor's Employees	Security Manager	Adhoc	Injuries, property damage	Project Liaison Office, Stakeholder engagements, Evacuation of employees,	2	D	II	Mostly effective	Grievance mechanism procedure	Complaints register	Security	Labour relations Act	31/06/2036	Pending.	
Working in confined space		44	Hazardous substances	ADFS55	Asphyxiation, Airborne combustible dust/vapours	Health	Poor ventilation and hot works byproducts	Employees, Visitors and Contractor's Employees	Safety Manager	Daily	Loss of consciousness, occupational disease	Artificial ventilation, Hygiene monitoring, adequate ventilation, PPE, safe work procedures	4	C	II	Mostly effective	Safe working procedure, Calibrated equipment, DSTI	Regular awareness, inspections, gas monitoring, audits	SHE Manager	SHEspec, General Safety regulations	31/06/2022	Pending.	
		45	Electrical and mechanical equipment	ADFS56	Electrocution, fire and explosions	Safety	Insufficient earthing and defective equipment	Employees, Visitors and Contractor's Employees	Construction and Safety Managers, Supervisors	Adhoc	Injuries, fatalities	Maintenance of the equipment, PPE, Safework procedures	5	C	II	Mostly effective	Compliance to Life saving Rule, Awareness, Toolbox talks	Inspections, BBSO, Audits	SHE Manager	SHEspec, General Safety regulations	31/06/2022	Pending.	
		46	Animals	ADFS57	Bite and stings,	Safety	Encroaching into animal inhabitant	Employees, Visitors and Contractor's Employees	Construction and Safety Managers, Supervisors	Adhoc	Injuries, Fatalities (snakes, etc.)	Snakes catch and release, Inspection prior to entry	5	B	I	Mostly effective	Signage, Awareness,	Biodiversity (fauna) management register	SHE Manager	Environmental Management Plan, NEMBA	31/06/2022	Pending.	
		47	Floods	ADFS58	Drowning, Electrocution	Safety	Excessive rain	Employees, Visitors and Contractor's Employees	Construction and Safety Managers, Supervisors	Adhoc	Fatalities	Weather station, Stormwater Management, Risk Assessment, Controlled access	5	C	II	Mostly effective	Lifeline rings and signages	Audits, Inspections & Observations	SHE Manager	SHEspec, Emergency Preparedness	31/06/2022	Pending.	
		48	Limited access, or egress in workspace	ADFS59	Asphyxiation, engulfment, entrapment and entanglement	Safety	Blocked systems, limited space	Employees, Visitors and Contractor's Employees	Construction and Safety Managers, Supervisors	Adhoc	Injuries	PPE and a spotter, Lighting, Risk Assessments	4	C	II	Mostly effective	Safe working procedure, Calibrated equipment, DSTI	Audits, Inspections & Observations	SHE Manager	SHEspec, General Safety regulations	31/06/2022	Pending.	
		49	Temperature extremes	ADFS60	Heat and cold stress	Health	External cold temperatures, Lack of ventilation	Employees, Visitors and Contractor's Employees	Construction and Safety Managers, Supervisors	Adhoc	II health	PPE and procedures, Risk Assessments	3	C	II	Mostly effective	Safe working procedure, DSTI	Audits, Inspections & Observations	SHE Manager	SHEspec, General Safety regulations	31/06/2022	Pending.	
		50	Noise	ADFS61	Hearing loss	Health	Power tools and equipment	Employees, Visitors and Contractor's Employees	Construction and Safety Managers, Supervisors	Adhoc	II health	Safe working procedure, DSTI, PPE	4	C	II	Mostly effective	Noise monitoring and awareness	Audits, Inspections & Observations	SHE Manager	SHEspec, General Safety regulations	31/06/2022	Pending.	
		51	Poor lighting	ADFS62	Slip, fall and bumping into	Safety	Inadequate facilities, faulty lights	Employees, Visitors and Contractor's Employees	Construction and Safety Managers, Supervisors	Adhoc	LTI	Safe working procedure, DSTI, Risk Assessment	4	C	II	Mostly effective	Training and Awareness	Audits, Inspections & Observations	SHE Manager	SHEspec, General Safety regulations	31/06/2022	Pending.	
		52	Surfaces	ADFS63	Uneven and slippery surfaces, Trip and fall	Safety	Rain, oily areas, Pipe leaks, Poor cable management, Poor surface design, Poor housekeeping	Employees, Visitors and Contractor's Employees	Construction and Safety Managers, Supervisors	Adhoc	Injuries	Risk Assessments and Inspections	4	D	I	Mostly effective	Regular housekeeping, Safety walkdowns	Audits, Inspections & Observations	SHE Manager	SHEspec, General Safety regulations	31/06/2023	Pending.	
	Refuelling of plant	R	53	Slipping and falling, inhalation	ADFS64	Injuries	Housekeeping	Employees, Visitors and Contractor's Employees	Construction and Safety Managers, Supervisors	Daily	Injuries	SHEspec, Safework procedure	2	B	IV	Mostly effective	Bundling or drip trays to be utilised, sparklet to be available at all times, MSDS to be available	Audits, Inspections & Observations	SHE Manager	SHEspec, General Safety regulations	31/06/2024	Pending.	
	R	54	Fire	ADFS65	Injuries	Safety	Smoking while refuelling	Employees, Visitors and Contractor's Employees	Construction and Safety Managers, Supervisors	Daily	Injuries, Explosions	SHEspec, Safework procedure	3	C	II	Mostly effective	MSDS to be available, Fire extinguishers to be available	Audits, Inspections & Observations	SHE Manager	SHEspec, General Safety regulations	31/06/2025	Pending.	

