


Occupational Health and Safety Baseline risk assessment template																							
Business/Operating unit:	Medupi Power Station Project										Department:	All Departments						Next Review Date (every 2 years):			Template identifier:	240-70044602	
Date: 17-May-24											Prepared by:	Risk Assessment Team in consultation with employees as per the attendance register		Authorised by:	Name: Zandi Shange				Signature: 	Document Identifier			
															Designation: General Manager					Revision number		5	
															Date: 2024/06/19					Revision date:		30-Apr-27	
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. <b>Note:</b> 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: - <b>Preventative Controls</b> (controls implemented to eliminate hazards or reduce the likelihood of the risk occurring), and - <b>Reactive Controls</b> (controls implemented to reduce the immediate impact of the risk occurring) <b>Elimination</b> <b>Substitution</b> <b>Engineering controls</b> <b>Administrative controls</b> <b>Personal protective equipment (PPE)</b>  <b>NB:</b> The risk shall be evaluated, assessed and rated again once additional controls have been implemented and those					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 legislative and/or Eskom requirements that prescribe 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 for 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)	
OFFICE ENVIRONMENT																							
Office Environment: General Administrative work; Office Furniture/Equipment	R	1	Microwave	1.1	Explosion or fire,	Safety	1. Defective equipment 2. Putting metals inside the microwave (spoons, forks and knives)	Employees, People living with Disabilities & Visitors	Responsible Functional Managers (accountable) & Employees (responsible)	Daily 1 hr	1 Injury, 2 Fatality, 3 Property damage	1. Regular Inspection, 2. Never put sealed containers or metal implements into a microwave, 3. A fire extinguisher sited nearby 4. Air vents at side and rear be clear 5. Report (service request on sharepoint) and replace defective cables	4	B	III	Mostly effective	Reporting of defects followed by prompt corrective action Avoid putting metals inside microwave (employees to be made aware)	Audit Reports Inspection Reports Incidents Statistics	Departmental Managers & Employees	Medupi SHE Spec 50 OHS Act 85 of 1993, Facilities Regulation 5 Env Reg 9 Basic Conditions of employment Act;	2025/06/30	In-progress & continuous	
				1.2	Burns or Scald/blister	Safety	1. Removing of hot utensils from the oven 2. Coming into contact with overheated food/liquids	Employees, People living with Disabilities & Visitors	Responsible Functional managers( accountable ) & Employees(responsible)	Daily 1 hr	1 Injury, 2 Property damage	1. Plan ahead before pre-heating, 2. Open the container lead before you warm the food. 3. Leave the food to cool down before you remove food from the microwave.	4	B	III	Mostly effective	Awareness in safe use of microwave	Audit Reports Inspection Reports Incidents Statistics	Departmental Managers & Employees	Facilities Regulation 5 Env Reg 9 Gen Safety Reg 3	2025/06/30	In-progress & continuous	
		2	Hydro boilers( Contact with steam, hot water)	2.1	Burns or Explosion,	Safety	1. Defective equipment 2. Coming in contact with hot water	Employees, People living with Disabilities & Visitors	Responsible Functional Managers (accountable) & Employees (responsible)	Daily 1 hr	1 Injury, 2 fatality, 3 property damage	1. Regular Inspections 2. Report (service request on sharepoint) and replace defective cables	4	B	III	Mostly effective	Reporting of defects followed by prompt corrective action Approach with care	Audit Reports Inspection Reports Incidents Statistics	Departmental Managers & Employees	Facilities Regulation 7 Gen Safety Reg 3	2025/06/30	In-progress & continuous	
		3	IT & Electrical cables	3.1	Slip, Trip & Falls	Safety	1. Improper cable routing 2. Failure to secure the cables (cable trunking or conduits) 3. Lack of warning signages on cable trunking/conduits running on the floor	Employees, People living with Disabilities & Visitors	Responsible Functional Managers (accountable) & Employees (responsible)	Daily 9 hrs	Lost-time Injury	1. Proper cable routing	4	B	III	Mostly effective	1. Reporting of defects (poor cable routing/lack of securing) followed by prompt corrective action 2. Increase awareness on cables trunking/conduits on the floor (e.g. reflective strips/notices)	Audit Reports Inspection Reports Incidents Statistics	Departmental Managers & Employees	Facilities Regulation 5 & 8 Env Reg 6 (2c&d)	2025/06/30	In-progress & continuous	
				3.2	Electric Sparks/Shock (electrocution)	Safety	1. Defective cables and plugs 2. Exposed wires	Employees, People living with Disabilities & Visitors	Responsible Functional Managers (accountable) & Employees (responsible)	Daily 9 hrs	1 Injury, 2 fatality, 3 property damage	1. Regular Inspection of cables, DB boards 2. Report (service request on sharepoint) and replace defective cables	4	B	III	Mostly effective	Training and awareness	Audit Reports Inspection Reports Incidents Statistics	Departmental Managers & Employees	OHS Act 85 and Regs	2025/06/30	In-progress & continuous	
		4	Slippery Floor/ Uneven Surfaces (wooden walkway platforms)	4.1	Slip, Trip & Falls	Safety	1. Wet surfaces 2. Unaware of uneven surfaces 3. Rotten wooden platforms 4. Improper footwear (high-heels, flip-flops)	Employees, People living with Disabilities & Visitors	Responsible Functional Managers (accountable) & Employees (responsible)	Daily 9 hrs	Lost-time Injury	1. Routine cleaning warning signage 2. Raise awareness on uneven surface (signages) 3. Replace damaged wooden platforms 4. Awareness (Adhere to dresscode as per Induction)	4	B	III	Mostly effective	Route diversion Reporting followed by regular inspections and maintenance SHE Reps to include in their inspections	Audit Reports Inspection Reports Incidents Statistics	Departmental Managers & Employees	OHS Act ,Env Reg 6 (2f)	2025/06/30	In-progress & continuous	
		5	Stairways/Staircases & Handrails	5.1	Slip, Trip & Falls	Safety	1. Not holding to handrails 2. Failure to secure handrails 3. Apply three point contacts while ascending and descending.	Employees, People living with Disabilities & Visitors	Responsible Functional Managers (accountable) & Employees (responsible)	Daily 9 hrs	Lost-time Injury	1. Warning signs 2. Awareness 3. Structure inspections	4	C	II	Mostly effective	Personal awareness of surrounding	Audit Reports Inspection Reports Incidents Statistics	Departmental Managers & Employees	Env Reg 6 (2d) & 9 (e-f)	2025/06/30	In-progress & continuous	
		6	Chairs, tables	6.1	Bumping onto/against. Falling from chairs	Safety	1. Incorrectly placed tables/chairs 2. Defective chairs & Horseplay 3. Incorrect sitting posture	Employees, People living with Disabilities & Visitors	Responsible Functional Managers (accountable) & Employees (responsible)	Daily 9 hrs	Lost-time Injury	Correct placing of office furniture, Guarding around sharp edges	4	B	III	Mostly effective	Personal awareness of surrounding	Audit Reports Inspection Reports Incidents Statistics	Departmental Managers & Employees	Facilities Regulation 5 & 8 Env Reg 9 Gen Safety Reg 3	2025/06/30	In-progress & continuous	
		7	Doors and door handles	7.1	Caught By/Between the door or handle, (Sustain hand injuries)	Safety	1. Ensure proper door handling while getting inside and going outside the office 2. Lack of attention to the surrounding 3. Defective handles	Employees, People living with Disabilities & Visitors	Responsible Functional Managers (accountable) & Employees (responsible)	Daily 9 hrs	Lost-time Injury	Training & awareness, Occupational Health & Inspection/survey	4	A	III	Mostly effective	Personal awareness of surrounding	Audits Reports Inspections Reports Incidents Reports	Departmental Managers & employees	Facilities Regulation 5(2B)	2025/06/30	In-progress & continuous	
				7.2	Restricted wheelchair access	Safety	1. Obstruction and narrow space at the main access door	Employees, People living with Disabilities & Visitors	Responsible Functional Managers (accountable) & Employees (responsible)	Daily 9 hrs	Injury Property damage	1. Wider access provided at H-Block main entrance 2. Always keep H-block main entrance clear of obstructions	2	A	IV	Mostly effective	Training and Awareness, Risk assessment,	Audits Reports Inspections Reports Incidents Reports	Departmental Managers & employees	Env Reg 9 d	2025/06/30	In-progress & continuous	
		8	Storing items on cupboards	8.1	Falling objects Pinch-points	Safety	1. Poor stacking and storage of files 2. Unattention when stacking files 3. Shelves not secured 4. Defective doors	Employees Expectant Females People living with Disabilities Visitors	Responsible Functional Managers (accountable) & Employees (responsible)	Daily 9 hrs	Property damage , Injury	Inspect, Report and correct defects (shelves and doors) Be vigilant when stacking items Be vigilant when opening and closing doors Do not stack items on top of shelves Ensure proper stacking practices inside cupboards	2	C	III	Fully effective	Training and Awareness, Risk assessment,	Audits Reports Inspections Reports Incidents Reports	Departmental Managers & employees	Gen Safety Reg 8	2025/06/30	In-progress & continuous	
		9	Baboons, Monkeys	9.1	Attacking personnel	Safety	1. Interacting with baboons/monkeys 2. Monkeys looking/accessing food	Employees Expectant Females People living with Disabilities Visitors	Responsible Functional Managers (accountable) & Employees (responsible)	Daily 9 hrs	Lost-time Injury	Animal monitoring team in place	4	C	II	Mostly effective	Personal awareness of surrounding	Audits Reports Inspections Reports Incidents Reports	Departmental Managers & employees	OHS Act 85 and Regs	2025/06/30	In-progress & continuous	
				9.2	Poor waste management practices (littering)	Safety	1. Baboons toppling waste bins 2. Lack of animal proof waste receptacles	Employees Expectant Females People living with Disabilities Visitors	Responsible Functional Managers (accountable) & Employees (responsible)	Daily 9 hrs	Injury Property damage	1. Proper waste management (waste bins provided)	2	C	III	Mostly effective	Training and Awareness, Risk assessment,	Audits Reports Inspections Reports Incidents Reports	Departmental Managers & employees	OHS Act 85 and Regs	2025/06/30	In-progress & continuous	
		10	Smoking in undesignated areas	10.1	1. Improper disposal of cigarette buds leading to Fire risk	Safety	1. Ignorance of following the rules (Behavioural issue) 2. Insufficient designated smoking areas 3. Disposing of the cigarette buds next to combustible source (grass/papers/flammable liquids)	Employees Expectant Females People living with Disabilities Visitors	Responsible Functional Managers (accountable) & Employees (responsible)	Daily 9 hrs	Property damage Lost-time injuries	1. Provision of smoking areas	4	B	III	Mostly effective	Awareness and training on smoking	Audits Reports Inspections Reports Incidents Reports	Departmental Managers & employees	OHS Act 85 and Regs	2025/06/30	In-progress & continuous	
Incompetency while performing activities (	R	11	Unskilled personnel /untrained workforce	11.1	Poor judgement which lead to injuries	Safety	1. Lack of knowledge or skill, 2. Insufficient training, 3. Language barrier, 4. Incompetent trainer/assessor 5. Operating without authority	Employees People living with Disabilities Visitors	Responsible Functional Managers (accountable) & Employees (responsible)	Daily 9 hrs	Injury	1.Training needs analysis & matrix, 2. Training presented by accredited training service providers. 3. SHE Inductions	5	C	II	Mostly effective	On duty training and coaching Management Plant Walkabout Planned Task Observation Site operations rules	Audit Reports Incidents Reports Management Walkabout Reports	Departmental Managers & Employees	SHE Specification form 23 & 24 OHS Act, 1993 (Act 85 of 1993) & its regulations Basic Conditions of employment Act; The Constitution of the Republic of South Africa	2025/06/30	In-progress & continuous	
Working Conditions	R	12	Excessive / compressed working hours Night shift Pregnant woman Employees with disability	12.1	Fatigue Physiologically unfit Physical strain	Safety	1. Accelerated work program, 2. Working longer hours without rest periods 3. Meeting tight deadlines (work overload/pressure) 4. Limited resources (staff) 5. Unavailability of resources to accommodate need 6.Unsuitable work areas	Employees People living with Disabilities Visitors Pregnant woman	HR Health and Wellness Responsible Functional Managers (accountable) & Employees (responsible)	Daily 9 hrs	1.Fatality, 2. Injury, 3. Medicals	1. Rotation of employees 2. Compliance to Basic condition of employment Act 3. Providing Rest Period (days off) 4. Communication and awareness of overtime management 5. Availability of Employee Assistance Programme 6. Clinic /Health facility on site 7.Proper facilities to accomodate disabilities	5	C	II	Mostly effective	Leave management Long pay weekend	Signing register, Clocking device Incidents Reports	Departmental Managers & Employees	OHS Act 85 of 1993 & its Rulations Leave management procedure; Basic conditions of service, basic condition of employment Act and Labour relations Act	2025/06/30	In-progress & continuous	

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		13	Compromised rights of employees Abuse of employee	13.1	1. Limitations of employees to their benefits 2. Physiologically depressed employees 3. GBV to employees 4. Work violence	Health	Non compliance the BCEA Company process not in place Liability of Management to ensure	Employees Females Pregnant and breastfeeding females	GM Responsible Functional Managers (accountable) & Employees (responsible)	Daily 9 hrs	Injury Phycological disturbance	1. Compliance to the BCEA 2. Organisational procedure for managing e.g. Rights to refuse work, Disciplinary processes office and HR in place 3. Communication and Awareness 4. Availability of Employee Assistance Programme	5	C	II	Mostly effective	Posting the BCEA on site public areas Induction Record keeping POPIA compliance	Reports analysis	Responsible Managers & Employees	BCEA No 75 1997 POPIA OHS Act 85 of 1993 & its Rulations procedure; Basic conditions of service, basic condition of employment Act and Labour relations Act	2025/06/30	In-progress & continuous							
Communication of instructions and messages	R	14	Language barrier/misinterpretation	14.1	Poor information / knowledge transfer,	Safety	1. Unclear/ambiguous instructions, 2. Different language (cultures), 3. No interpreters	Employees People living with Disabilities Visitors	Responsible Functional Managers (accountable) & Employees (responsible)	Daily 9 hrs	1. Fatality, 2. Injury,	1. Appointment of interpreters, 2. Team leaders/supervisors understand preferred business language 3. SHE Induction	5	A	II	Mostly effective	1. Signage	Audit Reports Incidents Reports	Departmental Managers & Employees	SHE Spec Form 35, OHS Act 85 of 1993 sec 13 & its regulations	2025/06/30	In-progress & continuous							
		15	Network coverage due to loadshedding	15.1	Undelivered message/Unclear message reaching recipient	Safety	1. General network interruption (loadshedding/Cable theft at network towers) 1. Militant unions use workers to further their aims as competing unions present on site, 2. Trouble-makers incite unrest, 3. Lack of local employment opportunities 4. Employee Disgruntlement/dissatisfaction 5. Demobilisation due to project completion (Poor planning on demob strategy) 6. Poor communication 7. Unfair demob process 8. Unions and Shopstewards not consulted 9. Training provided not meeting employees needs for after project 10. Management/supervisor intolerance, 11. Peer pressure, 12. Unreasonable expectations 13. Misleading by local leaders	Employees People living with Disabilities Visitors	Responsible Functional Managers (accountable) & Employees (responsible)	During loadshedding schedule	1. Fatality, 2. Injury,	1. Planning of meetings according to loadshedding schedule 2. Notification of person whereabouts 3. Security Patrol vehicles				Mostly effective	Physical contact/engagements	Meeting minutes (emergency related)	Departmental Managers & Employees	Eskom Emergency Procedure	2025/06/30	In-progress & continuous							
Labour and community unrest	N	16	Strike (Protest action)	16.1		Safety		Employees Expectant Females People living with Disabilities Visitors	Responsible Functional Managers (accountable) & Employees (responsible)	Once in a while (adhoc / infrequent)	1. First aid and Lost-time injuries, 2. Fatalities	1. Extensive informer network across all contractors enabled timely knowledge of intended strikes. 2. Stakeholder forums made of all unions 3. Communication alert (sms) 4. Reactive: Discuss with contractors on correct staff retrenchment procedures, discussion with workers on process to be followed 5. Community Liasion structure in place 6. Have a open door policy communication 7. Emergency team on standby 8. Coverage by SANDF & SAPS team 9. Communication and awareness of PLA agreement 10. Employee Assistance Program 11. Demob plan and strategy in place 12. Demob plan communicated with employees in advance 13. Training programmes to equip employees with skills for after demob 14. Fair demob practises 15. Consultation with Unions and shopstewards	4	B	III	Mostly effective	1. Establish EP Centre to ensure prompt response 2. Establish SAPS Support, 4. Establish Security Intelligence gathering, 5. Establish Security Systems, 6. Establish stakeholder involvement and preventative programmes	Meeting Minutes Incidents reports Communication / complaints registers IR Reports	Departmental Managers & Employees	OHS Act, 1993 (Act 85 of 1993) & its regulations Basic Conditions of employment Act;	2025/06/30	In-progress & continuous							
				16.2		Safety		Employees Expectant Females People living with Disabilities Visitors	Responsible Functional Managers (accountable) & Employees (responsible)	Once in a while (adhoc / infrequent)	1. Property damage incidents	1. Extensive informer network across all contractors enabled timely knowledge of intended strikes. 2. Reactive: Discuss with contractors on correct staff retrenchment procedures, discussion with workers on process to be followed Community Liasion structure in place 3. Have a open door policy communication	1	C	III	Mostly effective	1. Security patrols, 2. Biometric system 3. Security Surveillance Camera 4. On bus access verification	Meeting Minutes Incidents reports Communication / complaints registers IR Reports	Departmental Managers & Employees	OHS Act, 1993 (Act 85 of 1993) & its regulations Basic Conditions of employment Act;	2025/08/08	In-progress & continuous							
Security / Access Control	R	17	Lack of access control points	17.1	Unauthorized entry,	Safety	1. Broken parameter fence 2. In adequate security control system	Employees Expectant Females People living with Disabilities Visitors	Responsible Functional Managers (accountable) & Employees (responsible)	Daily 9 hrs	1. Injury,	1. Access control at the gates., 2. Identification Cards, 3. Parameter Fencing 4. Activated EP response	2	A	IV	Mostly effective	1. Security patrols, 2. Biometric system 3. Security Surveillance Camera 4. On bus access verification	Audit Reports Incidents Reports Security Reports	Departmental Managers & Employees	SHE SpecForm 25 Plant safety Reg. General Safety Reg 2B	2025/08/30	In-progress & continuous							
CONSTRUCTION ACTIVITIES																													
Working at height	R	18	Heights/Elevated Position	18.1		Safety	1. Lack of training, 2. Not utilising fall prevention/arrest devices, 3. Unguarded floor openings, 4. Unsafe work areas	Employees Visitors	Responsible Functional Managers (accountable) & Employees (responsible)	Daily 9 hrs	1. Fatality	1. Working at height procedure implementation and enforcement, 2. Fall Protection Plan implementation and enforcement, 3. Working at height training, 4. Medical Surveillance, 5. Emergency Response and Rescue Plan 6. Monthly Audits 7. Management plant walkabout 8. Daily inspections	5	B	II	Mostly effective	1. Supervision, 2. Conformance to procedures, 3. Rescue Plan 4. Working at heights risk assessment 5. Toolbox talks 6. SHE Induction	Audits Reports Management walkabout reports Incidents Reports Scaffolding structure inspection checklist	Departmental Managers & Employees	SHE SpecForm 35 Constr Reg 10,16, 17, 18, 19 General Safety Reg 13A	2025/08/08	In-progress & continuous							
				18.2	Fall of persons	Safety	1. Lack of edge protection, 2. Use of tools without lanyards, 3. No containment / catchment (nets)	Employees Visitors	Responsible Functional Managers (accountable) & Employees (responsible)	Daily 9 hrs	1. Lost-time Injury, 2. Fatality	1. Work at height procedure followed implementation and enforcement 2. Lanyards attached to all tools 3. Good housekeeping enforcement 4. Monthly Audits	4	B	III	Mostly effective	1. Barricading/exclusion Zones, 2. Lanyards attached to all tools 3. Toolbox talks 4. SHE Induction	Audits Reports Inspections Reports Incidents Reports	Departmental Managers & Employees	SHE SpecForm 35 & 62 Constr Reg 10, 19, 22 General Safety Reg 6, 13B	2025/06/30	In-progress & continuous							
				18.3	Collapse of structure	Safety	1. Unstable structure 2. Soil instability 3. Failure to inspect, 4. Lacking of training/incompetent erectors	Employees Visitors	Responsible Functional Managers (accountable) & Employees (responsible)	Daily 9 hrs	1. Fatality,	1. Structure to be safety cleared (safe to work), 2. Supervision, 3. Plant Inspections 4. SHE Induction 5. Monthly audits	5	B	II	Mostly effective	1. Barricading/exclusion Zones, 2. Lanyards attached to all tools 3. Toolbox talks 4. SHE Induction	Audits Reports Inspections Reports Incidents Reports	Departmental Managers & Employees	Constr Reg 11 & 14	2025/06/30	In-progress & continuous							
				18.4	Physically unfit personnel	Safety	1. Underlining Medical Condition	Employees Visitors	Responsible Functional Managers (accountable) & Employees (responsible)	Daily 9 hrs	1. Injury	1. Work at height procedure implementation and enforcement, 2. Medical examination 3. SHE Induction 4. Monthly audits 5. Toolbox talks 6. Plant Inspection	2	B	IV	Mostly effective	1. Training on working at heights	Audits Reports Inspections Reports Incidents Reports	Departmental Managers & Employees	SHE Spec Form 14 CR 71g	2025/06/30	In-progress & continuous							
				18.5	Failure of hydraulic systems	Safety	1. Lack of maintenance, 2. Defective Equipment, 3 Lack of training/competency	Employees Visitors	Responsible Functional Managers (accountable) & Employees (responsible)	Daily 9 hrs	1. Fatality	1. Maintenance Schedules, 2. Supervision, 3. Competency 4. Monthly Reports	5	C	II	Mostly effective	Training	Audits Reports Inspections Reports Incidents Reports	Departmental Managers & Employees	SHE Spec Form 62 General Machinery Reg	2025/06/30	In-progress & continuous							
				18.6	Unauthorised/untrained operators	Safety	1. Lack of training, 2. Lack of supervision	Employees Visitors	Responsible Functional Managers (accountable) & Employees (responsible)	Daily 9 hrs	1. Injury,	1. Work at height procedure implementation and enforcement 2. Plant Inspections, 3. Appointment of supervisors	5	B	II	Mostly effective	1. Training on working at heights, 2. Appointment FP Planner	Audits Reports Inspections Reports Incidents Reports	Departmental Managers & Employees	SHE Spec Form 62 General Machinery Reg	2025/06/30	In-progress & continuous							
				18.7	Adverse weather conditions	Safety	1. Excessive rainfall and wind	Employees Visitors	Responsible Functional Managers (accountable) & Employees (responsible)	Daily 9 hrs	1. Injury,	1. Monitoring of weather conditions, 2. Communication	4	B	III	Mostly effective	1. Supervision, 2. Task specific risk assessment, 3. Weather monitoring, 4. Communication	Audits Reports Inspections Reports Incidents Reports	Departmental Managers & Employees	Constr Reg 24	2025/06/30	In-progress & continuous							

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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				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. <b>Note:</b> 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 worst case scenario without controls	Include: - <b>Preventative Controls</b> (controls implemented to eliminate hazards or reduce the likelihood of the risk occurring), and - <b>Reactive Controls</b> (controls implemented to reduce the immediate impact of the risk occurring) <b>Elimination</b> <b>Substitution</b> <b>Engineering controls</b> <b>Administrative controls</b> <b>Personal protective equipment (PPE)</b> <b>NB:</b> The risk shall be evaluated, assessed and rated again once additional controls have been implemented and those controls are effective.	Consequence	Likelihood	Risk Priority Rating	RCE Risk Control Effectiveness	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 legislative and/or Exkom requirements that prescribe 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 for 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)					
Project management and supervision of Lifting Operations	R	19	Lifting Equipment/ Machinery	19.1	Collapse of lifting machinery (cranes)	Safety	1. Overloading of cranes, 2. Hydraulic failure, 3. Poor ground conditions, 4. No rigging plan, 5. Untrained or unauthorised operator, 6. No communication, 7. Misuse and abuse, 8. Uncalibrated safety devices, 9. Adverse weather conditions	Employees Visitors	Responsible Functional Managers (accountable) & Employees (responsible)	Daily 9 hrs	1. Fatalities, 2. Injuries ,	1. Certification and inspection prior to erection. 2. Competent and certified operator , Load testing 3. Geotechnical studies 4. Critical lift procedure implementation and enforcement 5. Crane access and inspection plan implementation and informement 6. Crane coordination procedure implementation and enforcement 7. Monthly audits 8. SHE induction	5	B	II	Mostly effective	1. Competent supervisor to oversee the works, 2. Rigging study, 3. Scheduled maintenance, 4. Training, 5. Calibration of safety devices	Audits Reports Inspections Reports Incidents Reports	Departmental Managers & Employees	OHS Act 83 OF 1993, CR 18, 19, 22 SHE Spec 62	2025/06/30	In-progress & continuous					
				19.2	Overloading Crane	Safety	1. No supervision, 2. No rigging plan, 3. Untrained/unauthorised operator, 4. Incorrect lifting equipment, 5. No maintenance, 6. Uncalibrated safety devices	Employees Visitors	Responsible Functional Managers (accountable) & Employees (responsible)	Daily 9 hrs	1. Fatality, 2. Injuries , 3. Damage to property, 4. Production loss	1. Only trained operators, 2. Rigging study is in place, 3. Monthly audits Load testing 4. Critical lift procedure implementation and enforcement 5. Crane access and inspection plan implementation and informement 6. Crane coordination procedure implementation and enforcement	5	C	II	Mostly effective	Competent crane specialist to oversee the works	Audits Reports Inspections Reports Incidents Reports	Departmental Managers & Employees	OHS Act 83 OF 1993, CR 18, 19, 22 SHE Spec 62 Medupi 200-169237 Crane Access and Inspection Plan Rev 01	2025/08/08	In-progress & continuous					
				19.3	Mechanical Failure	Safety	1. Inadequate/Substandard maintenance (Service; Load testing), 2. Lack of inspections	Employees Visitors	Responsible Functional Managers (accountable) & Employees (responsible)	Daily 9 hrs	1. Fatalities	1. Safety work procedures implementation and enforcement, 2. Maintenance program, 3. Regular inspections 4. Critical lift procedure implementation and enforcement 5. Crane access and inspection plan implementation and informement 6. Crane coordination procedure implementation and enforcement	5	C	II	Mostly effective	1. Lifting Machinery and Equipment Maintenance program, 2. Manufactures operating instructions	Audits Reports Inspections Reports Incidents Reports	Departmental Managers & Employees	OHS Act 83 OF 1993, CR 18, 19, 22 SHE Spec 62	2025/06/30	In-progress & continuous					
				19.4	Dropping of load	Safety	1. Incorrectly assembled, 2. Incompetent riggers, 3. Failure to carry out inspections and testing, 4. Use outside of safe parameters 5. Inadequate Rigging study	Employees Visitors	Responsible Functional Managers (accountable) & Employees (responsible)	Daily 9 hrs	1. Fatalities	1. Competent and certified operators, 2. Adhere to safe working loads , 3. Adequate communication methods, 4. Wind speed monitoring devices, 5. Monthly audits	5	B	II	Mostly effective	1. Lifting Machinery and Equipment Maintenance program, 2. Manufactures operating instructions	Audits Reports Inspections Reports Incidents Reports	Departmental Managers & Employees	OHS Act 83 OF 1993, CR 18, 19, 22 SHE Spec 62	2025/06/30	In-progress & continuous					
				19.5	Failure of lifting equipment/devices	Safety	1. Inadequate purchasing, 2. Failure to maintain and tests, 3. Damage due to incorrect storage, 4. Inadequate/ substandard maintenance 5. No regular inspections	Employees Visitors	Responsible Functional Managers (accountable) & Employees (responsible)	Daily 2 hrs	1. Fatality, 2. Injuries	1. Daily inspection, 2. Periodical testing and certification, 3. Adequate communication methods, 4. Maintenance program 5. Monthly audits 6. Proper storage 7. Lifting regulation inspections compliance	4	C	II	Mostly effective	1. Competent and certified operators, 2. Adhere to safe working load, 3. Lifting machinery and equipment maintenance program, 4. Manufacturer operating instructions.	Audits Reports Inspections Reports Incidents Reports	Departmental Managers & Employees	OHS Act 83 OF 1993, CR 18, 19, 22 SHE Spec 62 Medupi 200-169237 Crane Access and Inspection Plan Rev 01	2025/06/30	In-progress & continuous					
Confined Space Activities	N	20	Hazardous atmosphere and substance	20.1	Asphyxiation (suffocation/lack of oxygen) Body reaction Fire (Combustion)	Safety	1. Poor ventilation 2. Uncontrolled hot works/Release of fumes (Welding fumes, grinding and gas cutting) 3. Hazardous substances chemical reaction 4. Extreme temperature 5. Smoking 6. Static electricity 7. Poor housekeeping (Equipment with high propensity to spark) 8. Chemicals stored incorrectly (gases/liquids) 9. Lack of supervision, 10. Lack of training/awareness (self-conduct in hazardous environment)	Employees Expecting mothers Visitors	Responsible Functional Managers (accountable) & Employees (responsible)	Daily 2 hrs	1. Fatality, 2. Injuries	1. Air quality testing & Continuous Gas Monitoring (Use of calibrated equipment) 2. Rotation of employees (time limit for working inside confine spaces) 3. Ensure area is well ventilated (naturally/artificially) 4. Safety Data Sheet (compliance to safe use of material) 5. Compliance to plant safety regulation 6. Smoking only allowed in designated areas 7. Proper isolation (inspect, test before touch) 8. Maintain good housekeeping 9. Proper storage of chemicals (provision of storage areas - chemicals containers to have SDS affixed). Only authorised personnel to storage areas. 10. Ensure full time supervision (competent supervisor on confined spaces) 11. Training and awareness on confined space 12. Use of task-specific PPE 13. Confine space entry permit 14. Risk assessment & Safe work procedure	5	B	II	Mostly effective	Emergency personnel Trained fire wardens Employees register	Audits Reports Inspections Reports Incidents Reports	Departmental Managers & Employees	SHE Spec Form 68, General Safety Reg 5 Env Reg HCS Reg 5, 6, 10, 12	2025/06/30	In-progress & continuous					
		21	Flooding	21.1	Water/Engulfment/Drowning	Safety	1. Excessive rainfall, leakage, plant fault,	Employees Visitors	Responsible Functional Managers (accountable) & Employees (responsible)	Daily 2 hrs	1. Fatality, 2. Injuries,	1. Inspect and drain water to ensure work is done on dry area 2. Avoid working in underground confined spaces during rainfall times 3. Training/Awareness and communication 4. Risk assessment, Confined space permit	5	A	II	Mostly effective	Provide life buoy & life jacket, Buddy system, Emergency facilities	Audits Reports Inspections Reports Incidents Reports	Departmental Managers & Employees	SHE Spec Form 68, General Safety Reg 5 Env Reg HCS Reg 5, 6, 10, 12	2025/06/30	In-progress & continuous					
		22	Lone work	22.1	1. Failure to rescue personnel (No prompt response in case of emergency)	Safety	1. No one being aware of the employee location 2. Employee injured and not able to reach out for help (being alone)	Employees Visitors	Responsible Functional Managers (accountable) & Employees (responsible)	Daily 2 hrs	1. Injury 2. Fatalities	1. Implementation of buddy system (work in pairs) 2. PPE (torch on hard hat; wearing reflectors)	4	A	III	Mostly effective	Buddy System, Emergency plan activation	Audits Reports Inspections Reports Incidents Reports	Departmental Managers & Employees	SHE Spec Form 68, General Safety Reg 5 Env Reg HCS Reg 5, 6, 10, 12	2025/06/30	In-progress & continuous					
		23	Poor lighting	23.1	1. Poor visibility (increased possibilities of incidents - slip, trips and fall) 2. Eye Strain	Safety	1. Insufficient Lighting in the area	Employees Visitors	Responsible Functional Managers (accountable) & Employees (responsible)	Daily 2 hrs	1. Lost-time Injury	1. Provision of artificial lighting	4	B	III	Mostly effective	Buddy System, Emergency plan activation	Audits Reports Inspections Reports Incidents Reports	Departmental Managers & Employees	SHE Spec Form 68, General Safety Reg 5 Env Reg HCS Reg 5, 6, 10, 12 Construction Reg 26, 29	2025/06/30	In-progress & continuous					
		24	Electrical & mechanical Equipments	24.1	1. Electrocution (coming in contact with bare live wires) 2. Fire 3. Coming in contact with rotary equipment	Safety	1. Use of defective equipment 2. Unguarded moving parts of rotary equipment 3. Inadequate earthing/insulating (e.g. unconfited earthing - SANS 10142)	Employees Visitors	Responsible Functional Managers (accountable) & Employees (responsible)	Daily 2 hrs	1. Injury 2. Fatalities	1. Equipment inspections and maintenance 2. Safe use of equipment (Awareness/Training) 3. Protective guards on moving parts of rotary equipment 4. Compliance to regulations and standards	4	B	III	Mostly effective	Training and awareness	Audits Reports Inspections Reports Incidents Reports	Departmental Managers & Employees	OHS Act 85 and Regs	2025/06/30	In-progress & continuous					
		25	Limited Access, Egress & workspace	25.1	1. Incorrect posture (Ergonomics) 2. Person trapped inside (Not able to come out) 3. Bump into/against	Safety	1. Space not sufficient to practice correct posture 2. Blockage inside the system/area at the other end of exit/entry 3. Limited movement due to restricted area	Employees Visitors	Responsible Functional Managers (accountable) & Employees (responsible)	Daily 2 hrs	1. Lost-time Injury	1. Rotational work (minimise exposure time) 2. Emergency team on standby 3. Regular emergency drills 4. Watchmen to attend the area 5. PPE	4	B	III	Mostly effective	Training and awareness	Audits Reports Inspections Reports Incidents Reports	Departmental Managers & Employees	OHS Act 85 and Regs	2025/06/30	In-progress & continuous					
		26	Temperature extremes	26.1	1. Heat stress/Cold stress 2. De-hydration	Safety	1. Temperature: time-weighted average WBGT determined over one hour exceeds 30 degree or average dry-bulb temperature taken over four hours is less tha 6 degree	Employees Visitors	Responsible Functional Managers (accountable) & Employees (responsible)	Daily 2 hrs	1. Lost-time Injury	1. Temperature monitoring devices (Remove employees when temperature are below/above the allowable) 2. Provide PPE (warm jackets) 3. Provide enough drinking water (stay hydrated) 4. Provision of artificial air conditioning	4	B	III	Mostly effective	Training and awareness	Audits Reports Inspections Reports Incidents Reports	Departmental Managers & Employees	OHS Act 85 and Regs	2025/06/30	In-progress & continuous					



Occupational Health and Safety Baseline risk assessment template																										
Business/Operating unit:	Medupi Power Station Project								Department:	All Departments						Next Review Date (every 2 years):				Template identifier:		240-70044602				
Date: 17-May-24									Prepared by:  Risk Assessment Team in consultation with employees as per the attendance register	Authorised by:  Name: Zandi Shange Designation: General Manager Date:				Signature:								Document Identifier				
																						Revision number	5			
																						Revision date:	30-Apr-27			
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. <b>Note:</b> 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: - <b>Preventative Controls</b> (controls implemented to eliminate hazards or reduce the likelihood of the risk occurring), and - <b>Reactive Controls</b> (controls implemented to reduce the immediate impact of the risk occurring) <b>Elimination</b> <b>Substitution</b> <b>Engineering controls</b> <b>Administrative controls</b> <b>Personal protective equipment (PPE)</b>						<b>RCE</b> Risk Control Effectiveness <b>NB: The risk shall be evaluated, assessed and rated again once additional controls have been implemented and those</b>	How we know if we are succeeding: Include comments on effectiveness. This may include i.e. measurements, inspection, supervision where necessary.	Person allocated the responsibility for implementing the agreed controls (if applicable)	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 (if applicable)	Pending, In Progress, Complete (if applicable)	Where applicable, add IRM system reference number for 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)		
		27	Uneven surfaces, slippery conditions,	27.1	Slip, Trip & Falls	Safety	1. Wet surfaces 2. Unaware of uneven surfaces	Employees Visitors	Responsible Functional Managers (accountable) & Employees (responsible)	Daily 2 hrs	Lost-time Injury	1. Drain water from surfaces 2. Provide walking platforms 3. PPE (waterboots) 2. Raise awareness on uneven surface (signages)			4	C	II	Mostly effective	Personal awareness on surrounding	Audits Reports Inspections Reports Incidents Reports	Departmental Managers & Employees	OHS Act 85 and Regs	2025/06/30	In-progress & continuos		
		28	Noise	28.1	1. Hearing loss	Safety	1. Exposed to noise above 85 dB	Employees, People living with Disabilities & Visitors	Responsible Functional Managers (accountable) & Employees (responsible)	Daily 2 hrs	Lost-time Injury	1. Rotation of employees 2. Provide hearing protective devices 3. Conduct occupational hygiene surveys 4. Awareness on noise exposure			4	B	III	Mostly effective	Training and awareness	Audits Reports Inspections Reports Incidents Reports	Departmental Managers & Employees	OHS Act 85 and Regs	2025/08/30	In-progress & continuos		
		29	Animals	291	1. Animal bites/stings 2. Animal attacking employees	Safety	1. Working close to/near animal habitation 2. Confined spaces left open (or no protective covers/devices)	Employees Visitors	Responsible Functional Managers (accountable) & Employees (responsible)	Daily 2 hrs	Lost-time Injury	1. Training and Awareness 2. Animal monitoring team 3. Ensure Lock-out and tag-out system where applicable (Areas are closed off/covered)			4	B	III	Mostly effective	Training and awareness	Audits Reports Inspections Reports Incidents Reports	Departmental Managers & Employees	OHS Act 85 and Regs	2025/08/21	In-progress & continuos		
Project management and supervision of blasting operations	N	30	Blasting	30.1	Misfiring	Safety	1. Incorrect installation of explosives, 2. Technical malfunction, 3. Incompetent blaster,	Employees Visitors	Responsible Functional Managers (accountable) & Employees (responsible)	Once off (infrequent & adhoc basis)	1. Fatality, 2. Severe injuries,	1. Notification to blasting inspector, 2. Designated area for disposing misfired explosives, 3. Pre and post inspection of blasting area, 4. Blasting Permit			5	B	II	Mostly effective	1. Verification by blaster, 2. Restrict/control access, 3. Recharging of mis-fired magazines		Audits Reports Inspections Reports Incidents Reports	Departmental Managers & Employees	SHE Spec 71, OHS Act 85 of 1993 - Explosives Regulation13 of the OHS Act	2025/06/30	In-progress & continuous	
												1. Restricted access to the area, 2. Blasting permit, 3. Training 4. Communication and signage of blasting date and time 5. Warning sirens, 6. Communication														
												1. Signage around blasting parameters, 2. Supervision, 3. Locking the gate of blasting site/area.														
												Audits Reports Inspections Reports Incidents Reports														
												Departmental Managers & Employees														
												OHS Act 85 and Regs														
												2025/06/30														
In-progress & continuous																										
				30.2	Explosion	Safety	1. Improper access control to magazine, 2. Incorrect issuing of explosives, 3. Untrained personnel, 4. Collision during transportation 5. Open flames	Employees Visitors	Responsible Functional Managers (accountable) & Employees (responsible)	Once off (infrequent & adhoc basis)	1. Multiple fatalities 2. Severe injuries,	1. Restricted access to the area, 2. Blasting permit, 3. Training 4. Communication and signage of blasting date and time 5. Warning sirens, 6. Communication			5	B	I	Mostly effective	1. Signage around blasting parameters, 2. Supervision, 3. Locking the gate of blasting site/area.		Audits Reports Inspections Reports Incidents Reports	Departmental Managers & Employees	SHE Spec 71, OHS Act 85 of 1993 - Explosives Regulation13 of the OHS Act	2025/06/30	In-progress & continuous	
1. Covered blast 2. Proper assessment 3. Use the correct amount of blasting explosives																										
1. Signage around blasting parameters, 2. Supervision, 3. Locking the gate of blasting site/area.																										
Audits Reports Inspections Reports Incidents Reports																										
Departmental Managers & Employees																										
OHS Act 85 and Regs																										
2025/06/30																										
In-progress & continuous																										
				30.3	Flying rocks	Safety	1. Improper assessment 2. Insufficient cover over the rocks 3. Making us of stronger explosives	Employees Visitors	Responsible Functional Managers (accountable) & Employees (responsible)	Once off (infrequent & adhoc basis)	1. Fatality, 2. Severe injuries,	1. Covered blast 2. Proper assessment 3. Use the correct amount of blasting explosives			5	B	II	Mostly effective	1. Signage around blasting parameters, 2. Supervision, 3. Locking the gate of blasting site/area.		Audits Reports Inspections Reports Incidents Reports	Departmental Managers & Employees	SHE Spec 54, 71, OHS Act 88 of 1993 - Explosives Regulation13 of the OHS Act	2025/06/30	In-progress & continuous	
1. Compliance to Legislation and applicable regulations 2. Standards & Procedures, 3. Supervision, Inspections, Competency & training, 4. Planned task observations, 5. Security, 6. Approved explosive magazine,																										
1. Signage around blasting parameters, 2. Supervision, 3. Locking the gate of blasting site/area.																										
Audits Reports Inspections Reports Incidents Reports																										
Departmental Managers & Employees																										
OHS Act 85 and Regs																										
2025/06/30																										
In-progress & continuous																										
				30.4	Improper Storage, Transportation & Handling of Explosives	Safety	1. Incompetent personnel, 2. No or inadequate training, 3. Negligence 4. Uncontrolled storage, 5. Unsecure transportation 6. Non-compliance to explosive regulations	Employees Visitors General public	Responsible Functional Managers (accountable) & Employees (responsible) Supplier Manager	Once off (infrequent & adhoc basis)	1. Fatality, 2. Severe injuries,	1. Compliance to Legislation and applicable regulations 2. Standards & Procedures, 3. Supervision, Inspections, Competency & training, 4. Planned task observations, 5. Security, 6. Approved explosive magazine,			5	B	II	Mostly effective	1. Signage around blasting parameters, 2. Supervision, 3. Locking the gate of blasting site/area. 4. Awareness		Audits Reports Inspections Reports Incidents Reports	Departmental Managers & Employees	SHE Spec 71, OHS Act 85 of 1993 - Explosives Regulation13 of the OHS Act	2025/06/30	In-progress & continuous	
1. Scheduled blasting (Blast to be done when minimum people are on site - Weekends/PLA weekends/early hours of morning) 2. Remove employees from blasting area (only blaster present) 3. Communication to all employees (Notification of planned blast) 4. Provide PPE (Hearing protective devices)																										
1. Signage around blasting parameters, 2. Supervision, 3. Locking the gate of blasting site/area. 4. Awareness																										
Audits Reports Inspections Reports Incidents Reports																										
Departmental Managers & Employees																										
OHS Act 85 and Regs																										
2025/06/30																										
In-progress & continuous																										
				30.5	Noise	Safety	1. Explosion	Employees Visitors General public	Responsible Functional Managers (accountable) & Employees (responsible)	Once off (infrequent & adhoc basis)	Lost-time Injury	1. Scheduled blasting (Blast to be done when minimum people are on site - Weekends/PLA weekends/early hours of morning) 2. Remove employees from blasting area (only blaster present) 3. Communication to all employees (Notification of planned blast) 4. Provide PPE (Hearing protective devices)			4	C	II	Mostly effective	1. Signage around blasting parameters, 2. Supervision, 3. Locking the gate of blasting site/area. 4. Awareness		Audits Reports Inspections Reports Incidents Reports	Departmental Managers & Employees	OHS Act 85 and Regs	2025/06/30	In-progress & continuos	
1. Scheduled blasting (Blast to be done when minimum people are on site - Weekends/PLA weekends/early hours of morning) 2. Remove employees from blasting area (only blaster present) 3. Communication to all employees (Notification of planned blast) 4. Provide PPE (Dust mask)																										
1. Signage around blasting parameters, 2. Supervision, 3. Locking the gate of blasting site/area. 4. Awareness																										
Audits Reports Inspections Reports Incidents Reports																										
Departmental Managers & Employees																										
OHS Act 85 and Regs																										
2025/06/30																										
In-progress & continuos																										
				30.6	Dust from blasted rocks	Safety	1. Explosion	Employees Visitors General public	Responsible Functional Managers (accountable) & Employees (responsible)	Once off (infrequent & adhoc basis)	Lost-time injury	1. Scheduled blasting (Blast to be done when minimum people are on site - Weekends/PLA weekends/early hours of morning) 2. Remove employees from blasting area (only blaster present) 3. Communication to all employees (Notification of planned blast) 4. Provide PPE (Dust mask)			4	C	II	Mostly effective	1. Signage around blasting parameters, 2. Supervision, 3. Locking the gate of blasting site/area. 4. Awareness		Audits Reports Inspections Reports Incidents Reports	Departmental Managers & Employees	OHS Act 85 and Regs	2025/06/30	In-progress & continuos	
1. Scheduled blasting (Blast to be done when minimum people are on site - Weekends/PLA weekends/early hours of morning) 2. Evacuation of people in close proximity of blasting area (minimal people) 3. Communication to all employees (Notification of planned blast) 4. Use the correct amount of blasting explosives 5. Remove Equipment and tools (vehicles and machinery to minimise damage) 6. Use blasting type/explosives with less vibration impact 7. Assessment of adjacent structure (resistance to vibration magnitude of the blast)																										
1. Signage around blasting parameters, 3. Locking the gate of blasting site/area. 4. Awareness																										
Audits Reports Inspections Reports Incidents Reports																										
Departmental Managers & Employees																										
OHS Act 85 and Regs																										
2025/06/30																										
In-progress & continuos																										
				30.7	Vibration	Safety	1. Explosion	Employees Visitors General public	Responsible Functional Managers (accountable) & Employees (responsible)	Once off (infrequent & adhoc basis)	Lost-time Injury	1. Scheduled blasting (Blast to be done when minimum people are on site - Weekends/PLA weekends/early hours of morning) 2. Evacuation of people in close proximity of blasting area (minimal people) 3. Communication to all employees (Notification of planned blast) 4. Use the correct amount of blasting explosives 5. Remove Equipment and tools (vehicles and machinery to minimise damage) 6. Use blasting type/explosives with less vibration impact 7. Assessment of adjacent structure (resistance to vibration magnitude of the blast)			4	C	II	Mostly effective	1. Signage around blasting parameters, 3. Locking the gate of blasting site/area. 4. Awareness		Audits Reports Inspections Reports Incidents Reports	Departmental Managers & Employees	OHS Act 85 and Regs	2025/06/30	In-progress & continuos	
1. Scheduled blasting (Blast to be done when minimum people are on site - Weekends/PLA weekends/early hours of morning) 2. Evacuation of people in close proximity of blasting area (minimal people) 3. Communication to all employees (Notification of planned blast) 4. Use the correct amount of blasting explosives 5. Remove Equipment and tools (vehicles and machinery to minimise damage) 6. Use blasting type/explosives with less vibration impact 7. Assessment of adjacent structure (resistance to vibration magnitude of the blast)																										
1. Signage around blasting parameters, 3. Locking the gate of blasting site/area. 4. Awareness																										
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Departmental Managers & Employees																										
OHS Act 85 and Regs																										
2025/06/30																										
In-progress & continuos																										
Supervision of construction of Buildings, Structures, and Roads	R	31	Excavations	31.1	Collapse of excavation (Engulfment)	Safety	1. Inadequate or no shoring, 2. Failure to do pre-inspection, 3. Inclement weather 4. Vehicles/Mobile Plant driving too close to edge of excavation, 5. Material and spoil stored too close to excavation, 6. Incorrect excavation method, 7. Soil stability	Employees Visitors	Responsible Functional Managers (accountable) & Employees (responsible)	Daily 9 hrs	1. Fatalities, 2. Severe injuries,	1. Excavation permit, 2. Adequate shoring, bracing and battering, 3. Supervision, 4. Excavation plan, 5. Daily inspection, 6. Barricading, 7. Risk Assessment and Safe work procedures 8. Competency and Training			5	B	II	Mostly effective	1. Excavation plan, 2. Excavation wall support, 3. Access control, 4. Access/egress 5. Review of SWP to cater for different seasons		Audits Reports Inspections Reports Incidents Reports	Departmental Managers & Employees	SHE Spec Form 66, 70, OHS Act85- CR 13,	2025/06/30	In-progress & continuous	
												1. Permit to work and lock-out process 2. Scanning for underground services, 3. Ensure availability of updated drawings 4. Risk Assessment and Safe work procedures 5. Excavation permit in place														
												1. Use of updated drawings, 2. Supervision, 3. Service markers, 4 CAT Scan, 5. Excavation permit														
												Audits Reports Inspections Reports Incidents Reports														
				31.2	Contact with underground services (electrocution/water leak-floods)	Safety	1. Failure to Scan for underground services prior excavation 2. Updated drawings not available 3. Deviating from Safe Work procedures (Shortcut) 4. No permit to excavate	Employees Visitors	Responsible Functional Managers (accountable) & Employees (responsible)	Daily 9 hrs	1. Injury 2. Fatality 3. Severe injuries	1. Permit to work and lock-out process 2. Scanning for underground services, 3. Ensure availability of updated drawings 4. Risk Assessment and Safe work procedures 5. Excavation permit in place			5	B	II	Mostly effective	1. Use of updated drawings, 2. Supervision, 3. Service markers, 4 CAT Scan, 5. Excavation permit		Audits Reports Inspections Reports Incidents Reports	Departmental Managers & Employees	OHS Act 85- Electrical Instal Reg 5	2025/06/30	In-progress & continuous	
1. Provision of ramps and ladders for access, 2. Deep Excavation Signages 3. Barricade area to restrict unauthorised personnel 4. Risk Assessment and Safe work procedures																										
1. Supervision, 2. Daily inspection, 3. Training and awareness - DSTI																										
Audits Reports Inspections Reports Incidents Reports																										
				31.3	Unsafe or lack of Access and egress	Safety	1. Failure to provide and maintain suitable means of access and egress (ladders)	Employees Visitors People living with Disabilities	Responsible Functional Managers (accountable) & Employees (responsible)	Daily 9 hrs	1. Fatality, 2. Severe injuries,	1. Provision of ramps and ladders for access, 2. Deep Excavation Signages 3. Barricade area to restrict unauthorised personnel 4. Risk Assessment and Safe work procedures			5	B	II	Mostly effective	1. Supervision, 2. Daily inspection, 3. Training and awareness - DSTI		Audits Reports Inspections Reports Incidents Reports	Departmental Managers & Employees	SHE Spec Form 200-207219 -59-70,	2025/06/30	In-progress & continuous	
1. Solid barricading, 2. Adequate shoring, bracing and battering, 3. Supervision and conducting of daily inspections 4. Excavation permit 5. Risk Assessment and Safe work procedures																										
1. Proper housekeeping around excavation, 2. Supervision, Daily inspection																										
Audits Reports Inspections Reports Incidents Reports																										
				31.4	Ingress of material	Safety	1. Plant and machinery falling into excavation, 2. Inadequate edge protection/sloping 3. Putting material too close to edges, 4. Inadequate daily inspection	Employees Visitors	Responsible Functional Managers (accountable) & Employees (responsible)	Daily 9 hrs	1. Fatalities, 2. Severe injuries,	1. Solid barricading, 2. Adequate shoring, bracing and battering, 3. Supervision and conducting of daily inspections 4. Excavation permit 5. Risk Assessment and Safe work procedures			4	B	III	Mostly effective	1. Proper housekeeping around excavation, 2. Supervision, Daily inspection		Audits Reports Inspections Reports Incidents Reports	Departmental Managers & Employees	OHS Act85- CR 13,	2025/06/30	In-progress & continuous	
1. Batterring and shoring, 2. Pumping of water, 3. Diversion of water, 4. Excavation Permit 5. Daily inspection, 6. Risk Assessment and Safe work procedures																										
1. Supervision, 2. Daily inspection, 3. Water resistant PPE, 4. Pumping of water																										
Audits Reports Inspections Reports Incidents Reports																										
				31.5	Ingress of water	Safety	1. Heavy rains, 2. No berms/channel 3. Water pipelines not isolated	Employees Breastfeeding Mothers Visitors	Responsible Functional Managers (accountable) & Employees (responsible)	Daily 9 hrs	1. Fatality, 2. Severe injuries,	1. Batterring and shoring, 2. Pumping of water, 3. Diversion of water, 4. Excavation Permit 5. Daily inspection, 6. Risk Assessment and Safe work procedures			5	A	II	Mostly effective	1. Supervision, 2. Daily inspection, 3. Water resistant PPE, 4. Pumping of water		Audits Reports Inspections Reports Incidents Reports	Departmental Managers & Employees	SHE Spec Form 200-207219 -59-51-70, CR 26 GSR 13A	2025/06/30	In-progress & continuous	
1. Batterring and shoring, 2. Pumping of water, 3. Diversion of water, 4. Excavation Permit 5. Daily inspection, 6. Risk Assessment and Safe work procedures																										
1. Supervision, 2. Daily inspection, 3. Water resistant PPE, 4. Pumping of water																										
Audits Reports Inspections Reports Incidents Reports																										

Occupational Health and Safety Baseline risk assessment template																												
Business/Operating unit:		Medupi Power Station Project							Department:		All Departments										Next Review Date (every 2 years):				Template identifier:		240-70044602	
Date:		17-May-24							Prepared by:		Risk Assessment Team in consultation with employees as per the attendance register		Authorised by:		Name: Zandi Shange								Document Identifier					
															Designation: General Manager		Signature:						Revision number		5			
															Date:								Revision date:		30-Apr-27			
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	Consequences	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. <b>Note:</b> 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: - <b>Preventative Controls</b> (controls implemented to eliminate hazards or reduce the likelihood of the risk occurring), and - <b>Reactive Controls</b> (controls implemented to reduce the immediate impact of the risk occurring) <b>Elimination</b> <b>Substitution</b> <b>Engineering controls</b> <b>Administrative controls</b> <b>Personal protective equipment (PPE)</b> <b>NB:</b> The risk shall be evaluated, assessed and rated again once additional controls have been implemented and those				<b>RCE</b> Risk Control Effectiveness		Person allocated the responsibility for implementing the agreed controls (if applicable)	Where relevant, list the relevant legislative and/or Ealom requirements that prescribe 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 for 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)						
				31.6	Person(s) falling into	Safety	1. No edge protection/barricading, 2. No safe means of access and egress, 3. Unauthorised entry	Employees People living with Disabilities Visitors	Responsible Functional Managers (accountable) & Employees (responsible)	Daily 9 hrs	1. Fatalities, 2. Severe injuries,	1. Solid barricading, 2. Restricted access, 3. Supervision, 4. Warning Signage 5. Risk Assessment and Safe work procedures 6. Training and Awareness	5	B	II	Mostly effective	1. Supervision, 2. Training and awareness, 3. Warning signs	Audits Reports Inspections Reports Incidents Reports	Departmental Managers & Employees	SHE Spec Form 200-207219 -59- 66 CR 10,	2025/06/30	In-progress & continuous						
				31.7	Plant falling into excavations	Safety	1. No solid protection/barricading, 2. Mobile Plant operating at unsafe speed 3. Mobile plant reversing with no spotter 4. Mobile operator unaware of excavations and Unauthorised entry	Employees People living with Disabilities Visitors	Responsible Functional Managers (accountable) & Employees (responsible)	Daily 9 hrs	1. Fatalities, 2. Severe injuries,	1. Solid barricading 2. Training and awareness on speed limit around excavations (Cautious driving) 3. Provide spotters to assist reversing moving plant 4. Induction prior starting of work 5. Risk assessments and Safe Work Procedures	5	B	II	Mostly effective	1. Supervision 2. Daily inspections (Barricades) 3. Warning signages	Audits Reports Inspections Reports Incidents Reports	Departmental Managers & Employees	OHS Act 85 and Regs	2025/06/30	In-progress & continuous						
			32	Moving Machinery/Mobile Plant	32.1	Personnel or Surrounding services/structures struck by moving plant	Safety	1. Person or services/structure not visible to operators 2. Personnel unaware of surrounding (distraction/use of cellphone) 3. Lack/No man-machine interface controls (No spotters/flagman) 4. Operators under influence of intoxicating substances 5. Inadequate management of operator's medical conditions	Employees People living with Disabilities Visitors	Responsible Functional Managers (accountable) & Employees (responsible)	Daily 9 hrs	1. Fatalities, 2. Severe injuries,	1. Personnel to wear high visibility clothing (e.g. reflective jackets/vests) 2. Personnel to always pay attention to surrounding and current activities 3. Induction and continuous awareness 4. Placement of spotters and flagman 5. Use of breathalyzer at access points and awareness on intoxicating substance 6. Medical surveillance program 7. Identify and protect services/structures (e.g. painting hydrants/barricading comms boxes)	5	B	II	Mostly effective	Training and awareness	Audits Reports Inspections Reports Incidents Reports	Departmental Managers & Employees	OHS Act 85 and Regs	2025/06/30	In-progress & continuous					
	Supervision of concrete works	R	33	1. Spraying sealing compound during concrete works (e.g. Sealing concrete/ curling)	33.1	1. Coming in contact with hazardous chemical agent/substance (sealing compound)	Safety	1. Inadequate PPE, 2. Improper handling of equipment, 3. Poor positioning, 4. Poor house keeping (poor container storage - accidental spillage if not properly closed)	Employees Visitors	Responsible Functional Managers (accountable) & Employees (responsible)	Daily 9 hrs	Injuries	1. Proper PPE as per SDS 2. User training on handling equipment 3. Keep safe working distance from the operation (Supervision) 4. Standard Working Procedure 5. SDS 6. Maintaining good housekeeping (Placing the container at the right place)	4	B	III	Mostly effective	1. Supervision, 2. Training and awareness and PPE	Audits Reports Inspections Reports Incidents Reports	Departmental Managers & Employees	OHS Act 85 -CR 20 CR 12 g,	2025/06/30	In-progress & continuous					
			33	1. Pumping Concrete, concrete pouring pipe/chute,	33.1	1. Concrete splashing from the end hose, and direct contact body parts with wet concrete, 2. Whiplash (struck-by swinging pipe/chute) 3. Pinch-points	Safety	1. Delivery hose damaged, 2. No warning given prior to starting or re-commencing the pour, 3. Air in hose due to a blockage, 4. Failure to secure the pipe/chutes (swinging out of control) 5. Failure to use PPE	Employees Visitors	Responsible Functional Managers (accountable) & Employees (responsible)	Daily 9 hrs	Injuries	1. Inspect and repair damage 2. Communication 3. Inspection and maintenance (cleaning the pipes) 4. Lock-out procedure 5. Adequate manpower to keep pipes under control 6. Appropriate PPE 7. Standard Working Procedure 8. SDS	4	B	III	Mostly effective	PPE to be issued, recorded, monitored and replaced where appropriate Training and awareness	Audits Reports Inspections Reports Incidents Reports	Departmental Managers & Employees	OHS Act 85 -CR 20 CR 12 g,	2025/06/21	In-progress & continuous					
Project management and supervision of form-work and Support work	R	34	Structural Failure/Scaffolding	34.1	Struck by flying objects	Safety	1. Substandard design and erection, 2. Overloading of structure, 3. Structural deflection & Bolting protocols	Employees Visitors People living with Disabilities	Responsible Functional Managers (accountable) & Employees (responsible)	Daily 9 hrs	1. Fatality, 2. Injuries	1. Competent erectors, 2. Inspection of structure, 3. Approved design, 4. Training	5	B	II	Mostly effective	1. Approved building structure approved by relevant authorities.	Audits Reports Inspections Reports Incidents Reports	Departmental Managers & Employees	OHS Act 85 44, CR 11, 12, 16	2025/06/08	In-progress & continuous						
				34.2	Collapse of structure	Safety	1. Substandard design and erection, 2. Overloading of structure, 3. Structural deflection & Bolting protocols 4. Damaged scaffold material 5. Incorrect erection, dismantling or modification 6. Ignorance of inspection tags (Safe/unsafe for use) 7. Defective scaffold material used, 8. Inclement weather	Employees Visitors	Responsible Functional Managers (accountable) & Employees (responsible)	Daily 9 hrs	1. Fatality, 2. Injuries	1. Competent erectors, 2. Inspection of structure and use of correct tags, 3. Approved design, 1. Quality checks on scaffolding material, 2. Defective scaffolding material to be removed, 3. DSTI, 3. Supervision	5	A	II	Mostly effective	1. Approved building structure approved by relevant authorities.	Audits Reports Inspections Reports Incidents Reports	Departmental Managers & Employees	OHS Act 85 and regs	2025/06/30	In-progress & continuous						
				34.3	Pinch-Points	Safety	1. Failure to use correct PPE 2. Stepping on each others hands during descending on ledgers 3. Fingers in loose connections 4. Fingers placed on trap doors	Employees Visitors	Responsible Functional Managers (accountable) & Employees (responsible)	Daily 9 hrs	LTI	1. Use hand gloves handling scaffolding ledgers/material 2. Allow two-three steps between person descending (avoid stepping on each other hands) 3. Avoid putting fingers on loose ends 4. Be cautious of trap doors/out of the way of trap doors	4	B	III	Mostly effective	1. Strict enforcement	Audits Reports Inspections Reports Incidents Reports	Departmental Managers & Employees	OHS Act 85 44, CR 11, 12, 16	2025/06/21	In-progress & continuous						
Movement of Mobile Construction Equipment, Plant and Vehicles	R	35	Mobile Construction Equipment, Plant and Vehicles	35.1	Pedestrian accidents/incidents	Safety	1. Poor planning, 2. Lack of coordination and communication, 3. Poor housekeeping, 4. Poor lighting, 5. Poor road demarcation, 6. Incompetent operator, 7. Inattentive or dangerous driving 8. Inadequate signages 9. Lack of pedestrian crossing 10. No flagman/Not taking flagman's instruction	Employees People living with disabilities Visitors	Responsible Functional Managers (accountable) & Employees (responsible)	Daily 9 hrs	1. Fatality, 2. Injuries	1. Appointment of flagperson to control traffic 2. Traffic management plan 3. Segregation of work areas, 4. Reverse sirens on vehicles, 5. Pedestrian routes, 6. Competent operators 7. Training and Awareness (e.g. use of cellphones/earphones etc...)	6	B	I	Mostly effective	1. Adherence to road road signages, 2. Visibility of construction vehicle, 3. Speed monitoring, 4. SHE awareness campaigns, 5. Driver re-evaluation,	Audits Reports Inspections Reports Incidents Reports	Departmental Managers & Employees	OHS Act 85 of 1993, CR 23 GSR 138, DMR 17 SHE Spec 200-207219 -5949 National Road Traffic Act 93 of 1996	2025/06/30	In-progress & continuous						
				35.2	Vehicle driving into the structure	Safety	1. Unauthorised operator, 2. No clear instructions, 3. Unfamiliar with plant 4. Mechanical failure 5. Under the influence	Employees People living with disabilities Visitors	Responsible Functional Managers (accountable) & Employees (responsible)	Daily 9 hrs	1. Fatality, 2. Injuries	1. Speed limit, 2. Signages, 3. Barricading, 4. Appointment of flagpersons 5. Driver's license / authorization 6. Daily monitoring of substance abuse	5	A	II	Mostly effective	1. Flag person in position, 2. Driver permit, 3. Driver re-evaluation, 4. Coordination	Audits Reports Inspections Reports Incidents Reports	Departmental Managers & Employees	OHS Act 85 of 1993, CR 23 GSR 138, DMR 17 SHE Spec 200-207219 -5949 National Road Traffic Act 93 of 1996	2025/06/21	In-progress & continuous						
				35.3	Construction Vehicles Collision	Safety	1. Failure to implement or adhere to maintenance schedule, 2. Incompetent maintenance personnel, 3. Make shift repairs 4. Speeding 5. Fatigue 6. Poor visibility due to fly-ash cloud 7. Insufficient road signage	Employees People living with disabilities Visitors	Responsible Functional Managers (accountable) & Employees (responsible)	Daily 9 hrs	1. Fatality 2. Severe injuries	1. Flag persons presence, 2. Adherence to road signage, 3. Barricading, 4. Road planning 5. Appointment of flagpersons 6. Driver's license / authorization 7. Fatigue management plan	5	C	II	Mostly effective	1. Reversing alarms, 2. Amber lights, 3. Supervision, 4. Switch on headlights, 5. Adequate road signage, 6. Work interface	Audits Reports Inspections Reports Incidents Reports	Departmental Managers & Employees	OHS Act 85 of 1993, CR 23 GSR 138, DMR 17 SHE Spec 200-207219 -5949 National Road Traffic Act 93 of 1996	2025/06/08	In-progress & continuous						

Occupational Health and Safety Baseline risk assessment template																									
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Date: 17-May-24											Prepared by:  Risk Assessment Team in consultation with employees as per the attendance register	Authorised by:  Name: Zandi Shange Designation: General Manager Date:						Signature:	Document Identifier						
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. <b>Note:</b> 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: - <b>Preventative Controls</b> (controls implemented to eliminate hazards or reduce the likelihood of the risk occurring), and - <b>Reactive Controls</b> (controls implemented to reduce the immediate impact of the risk occurring) <b>Elimination</b> <b>Substitution</b> <b>Engineering controls</b> <b>Administrative controls</b> <b>Personal protective equipment (PPE)</b>  <b>NB:</b> The risk shall be evaluated, assessed and rated again once additional controls have been implemented and those	RCE Risk Control Effectiveness	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 legislative and or Eskom requirements that prescribe 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 for 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)			
				35.4	Deviating from designated routes	Safety	1. Failure to adhere to company instructions 2. Incompetent driver, 3. Fatigue, 4. Adverse weather conditions, 5. Substance abuse, 6. Taking short cuts 7. Mechanical failure	Employees People living with disabilities Visitors	Responsible Functional Managers (accountable) & Employees (responsible)	Daily 9 hrs	1. Fatality	1. Flag persons presence, 2. Demarcated roads and signage, 3. Training, 4. Clear instructions 5. Roadworthy certificate	5	A	II	Mostly effective	2. Roads to be maintained, 3. Brief on any road changes.	Audits Reports Inspections Reports Incidents Reports	Departmental Managers & Employees	SHE Spec 49 National Road Traffic Act 93 of 1996 CR 23	2025/06/08	In-progress & continuous			
				35.5	Mechanical Failure/ poor maintenance	Safety	1. Skipping services 2. Theft of plant and vehicles, 3. Plant and vehicles left unattended 4. Poor quality spares used 5. Incompetent mechanics	Employees People living with disabilities Visitors	Responsible Functional Managers (accountable) & Employees (responsible)	Daily 9 hrs	1. Fatality 2. Injuries	1. Periodical maintenance and servicing of vehicles, 2. Daily inspections 3. Competent and Certified mechanics 4. Use of original quality spares	5	B	II	Mostly effective	1. Audits and inspections 2. Awareness and Training	Audits Reports Inspections Reports Incidents Reports	Departmental Managers & Employees	SHE Spec 49 National Road Traffic Act 93 of 1996 CR 23	2025/06/30	In-progress & continuous			
				35.6	Off-site vehicle accident	Safety	1. Failure to evaluate driver competency, 2. Failure to adequately monitor and supervise 3. Speeding 4. Failer to adhere to road signs 5. Adverse weather conditions 6. Fatigue 7. Substance abuse 8. Mechanical failure	Employees General public People living with disabilities Visitors	Responsible Functional Managers (accountable) & Employees (responsible)	Daily 9 hrs	1. Fatalities 2. Severe injuries	1. Daily vehicle checklist, 2. Permission to leave site, 3. Headlights on, 4. Roadworthy certificates, 5. Driver's licence or Eskom driver's permits, 5. Approved vehicles for construction site, 7. Medical fitness certificate	5	C	II	Mostly effective	1. Taining and awareness on arrive alive, 2. Adherence to road signage/s and rules, 3. Adherence to life saving rule No 3 (buckle up) and rule No 4 (Be sober)	Audits Reports Inspections Reports Incidents Reports	Departmental Managers & Employees	SHE Spec 49 National Road Traffic Act 93 of 1996 CR 23	2025/08/21	In-progress & continuous			
				35.7	Unauthorised use	Safety	1. Poor or lack of maintanance, 2. No road signage, 3. Poor planning of fleet management 4. Non adherence to site rules	Employees People living with disabilities Visitors	Responsible Functional Managers (accountable) & Employees (responsible)	Daily 9 hrs	1. Fatalities 2. Severe injuries	1. Procedures, in place 2. Fleet management 3. Access control at the gate	5	C	II	Mostly effective	1. Driver permits, 2. Key control, 3. Drivers to sign log books	Audits Reports Inspections Reports Incidents Reports	Departmental Managers & Employees	SHE Spec 49 National Road Traffic Act 93 of 1996 OHS Act 85 of 1993, CR 23 GSR 13B,	2025/08/08	In-progress & continuous			
				35.8	Driver incompetency	Safety	1. Burst/ Leaking oil/hydraulic/fuel pipes, Electric circuits, 2. Overheating braking systems 3. Failure to evaluate drivers competency	Employees People living with disabilities Visitors	Responsible Functional Managers (accountable) & Employees (responsible)	Daily 9 hrs	1. Fatalities 2. Severe injuries	1. Driver permit system, 2. National valid driver's licence 3. Relevant training 4. Risk profile evaluations	6	B	I	Mostly effective	1. Driver competency evaluation	Audits Reports Inspections Reports Incidents Reports	Departmental Managers & Employees	SHE Spec 49 National Road Traffic Act 93 of 1996 OHS Act 85 of 1993, CR 23 GSR 13B,	2025/06/30	In-progress & continuous			
				35.9	Poor road conditions	Safety	1. Poor Road maintanance 2. Incorrect loading methods, 3. Unsecured load, 4. Using incorrect equipment for loading 5. Aging of road 6. Substandard road design	Employees People living with disabilities Visitors	Responsible Functional Managers (accountable) & Employees (responsible)	Daily 9 hrs	1. Severe injuries 2. Fatalities	1. Regular maintenance 2. Proper routes planning 3. Road inspections 4. Approved designs	4	B	III	Mostly effective	1. Avoiding roads with poor conditions	Audits Reports Inspections Reports Incidents Reports	Departmental Managers & Employees	SHE Spec 49 National Road Traffic Act 93 of 1996 OHS Act 85 of 1993, CR 23 GSR 13B,	2025/06/30	In-progress & continuous			
				35.1	Fire	Safety	1. Burst/ Leaking oil/hydraulic/fuel pipes, Electric circuits, 2. Overheating braking systems 3. Poor mantanance 4. Poor quality spaces/parts	Employees People living with disabilities Visitors	Responsible Functional Managers (accountable) & Employees (responsible)	Daily 9 hrs	1. Severe injuries 2. Fatalities	1. Regular maintenance 2. Reporting of any defects 3. Use os original parts for repairs	5	B	II	Mostly effective	1. Safe work procedure, 2. Maintenance program 3. Inspections	Audits Reports Inspections Reports Incidents Reports	Departmental Managers & Employees	OHS Act 85 of 1993, CR 23 GSR 13B,	2025/08/21	In-progress & continuous			
				35.11	Falling objects	Safety	1. Overloading, 2. Incorrect loading methods, 3. Unsecured load, 4. Using incorrect equipment for loading 5. Defected vehicle appliance	Employees People living with disabilities Visitors	Responsible Functional Managers (accountable) & Employees (responsible)	Daily 9 hrs	1. Fatality 2. Severe injuries	1. Follow the correct loading procedure, 2. Competent persons, 3. Proper planning 4. Ensure loads are secured all times 5. Using the correct equipment 6. Plant inspection and maintenance	5	B	II	Mostly effective	1. Training programmes and operator evaluation.	Audits Reports Inspections Reports Incidents Reports	Departmental Managers & Employees	OHS Act 85 of 1993, CR 23 GSR 13B,	2025/08/08	In-progress & continuous			
				35.12	Medically unfit Operators/Drivers	Safety	1. Failure to evaluate Drivers/Operators fitness level/status and/or operators not disclosing their underlying condition	Employees People living with disabilities Visitors	Responsible Functional Managers (accountable) & Employees (responsible)	Daily 9 hrs	1. Fatality 2. Severe injuries	1. Medical surveillance program 2. Declaration of medical condition status by employees 3. Medical Awareness	5	B	II	Mostly effective	1. Training programmes and operator evaluation.	Audits Reports Inspections Reports Incidents Reports	Departmental Managers & Employees	OHS Act 85 of 1993, CR 23 GSR 13B,	2025/08/08	In-progress & continuous			
Project management and supervision of electrical works	R	36	Electricity	36.1	Electrocution	Safety	1. Failure to implement or adhere to procedure, 2. Failure to install suitable curcuit breakers, 3. Incompetent operators, 4. Lack of training 5. Switching on/off 6. Lack of communication 7. Lack of warning signs 8. Contact with bare conductors during racking out circuit breakers 9. Failure to isolate and earth during replacing fuses	Employees People living with disabilities Visitors	Responsible Functional Managers (accountable) & Employees (responsible)	Daily 9 hrs	1. Lost-time Injuries	1. Life saving rules (not) conformance, 2. Permit to work and lock out system to be adhered to at all times. 3. Lock out procedure 4. Proper communication between different parties working in one system (contractors, Client) 5. Warning signages 6. Appropriate PPE 7. Compliance to earthing requirements	4	B	III	Mostly effective	1. Competent supervision, 2. Appropriate signage,	Audits Reports Inspections Reports Plant Task Observations Incidents Reports	Departmental Managers & Employees	OHS Act 85, CR 24, GSR 9, Explosive Reg, Electrical Reg SHE Spec 67,	2025/08/30	In-progress & continuous			
				36.2	Flash over Arc Flash	Safety	1. Short circuit (electrical fault) 2. Contact with live electrical conductors	Employees Visitors	Responsible Functional Managers (accountable) & Employees (responsible)	Daily 9 hrs	1. Fatality	1. Permit to work, 2. RA and Safe work procedure, 3. Suitable training 4. Compliance to life-saving rule no. 1	5	B	II	Mostly effective	1. Competent and authorised person to work in area. 2. Appropriate PPE (Arc flash suits) 3. Scanning for underground service 4. Test before touch (Life-saving rule 1) - Treat all cables as live 5. Permit to work 6. Communication between interface with others	Audits Reports Inspections Reports Plant Task Observations Incidents Reports	Departmental Managers & Employees	OHS Act 85, SHE Spec 67, CR 24, GSR 9, Explosive Reg, Electrical Reg	2025/08/21	In-progress & continuous			
				36.4	Damaged cables	Safety	1. Falling objects, 2. Moving plant, 3. Sharp objects	Employees People living with disabilities Visitors	Responsible Functional Managers (accountable) & Employees (responsible)	Daily 9 hrs	1. Lost-time Injuries	1. Bury cables, 2. Placements of cable covers, 3. Barricading	4	B	III	Mostly effective	1. Restrict access to area of work, 2. Warning signs	Audits Reports Inspections Reports Plant Task Observations Incidents Reports	Departmental Managers & Employees	OHS Act 85, SHE Spec 67, CR 24, GSR 9, Explosive Reg, Electrical Reg	2025/08/08	In-progress & continuous			
				36.5	Exposed energised conductors	Safety	1. Miscommunication within the electrical team, 2. Testing	Employees Visitors	Responsible Functional Managers (accountable) & Employees (responsible)	Daily 9 hrs	1. Lost-time Injuries	1. Live conductors insulated, 2. Earthing done before works commences, 3. Permit to work and lock-out systems, 4. Appropriate PPE, 5. Proper communication between different groups/parties working in one system	5	B	II	Mostly effective	1. Signage, 2. No unauthorised entry, 3. First aid treatment and procedure for electrical shock, 4. PSR and HV requirements adhered to 5. Awareness training	Audits Reports Inspections Reports Plant Task Observations Incidents Reports	Departmental Managers & Employees	OHS Act 85, SHE Spec 67, CR 24, GSR 9, Explosive Reg, Electrical Reg	2025/08/30	In-progress & continuous			
				36.6	Testing of live connected cables to panel boards	Safety	1. Unauthorised personnel working on the live system	Employees Visitors	Responsible Functional Managers (accountable) & Employees (responsible)	Daily 9 hrs	1. Lost-time Injuries	1. Authorisation confirmation prior conducting works 2. Supervision of trainees 3. Compliance to Plant Safety regulation 4. Adherence to SANS 10142	4	B	III	Mostly effective	1. Discipline on non-conformance permit system 2. Adherence to PSR requirements and HV regulations	Audits Reports Inspections Reports Plant Task Observations Incidents Reports	Departmental Managers & Employees	OHS Act 85, CR 24, SHE Spec 67, GSR 9 (3 a), Electrical Reg SANS 10086-1	2025/08/21	In-progress & continuous			

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																		Revision date:	30-Apr-27				
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. <b>Note:</b> 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: - <b>Preventative Controls</b> (controls implemented to eliminate hazards or reduce the likelihood of the risk occurring), and - <b>Reactive Controls</b> (controls implemented to reduce the immediate impact of the risk occurring) <b>Elimination</b> <b>Substitution</b> <b>Engineering controls</b> <b>Administrative controls</b> <b>Personal protective equipment (PPE)</b> <b>NB:</b> The risk shall be evaluated, assessed and rated again once additional controls have been implemented and those				RCE Risk Control Effectiveness	How we know if we are succeeding. Include comments on effectiveness. This may include i.e. measurements, inspection, supervision where necessary.	Person allocated the responsibility for implementing the agreed controls (if applicable)	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 (if applicable)	Pending, In Progress, Complete (if applicable)	Where applicable, add IRM system reference number for 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)	
				36.7	Fire	Safety	1. Overloading of cable wires 2. Electrical faults, 3. Lightning 4. Coal dust 5. Uncontrolled fire breaks next to electrical equipment 6. Non adherence to safety clearance distances working under overhead powerlines	Employees Visitors	Responsible Functional Managers (accountable) & Employees (responsible)	Daily 9 hrs	1. Fatalities	1. Permit to work, 2. Restricted Access, 3. Isolation and earthing, 4. Competent authorised person to work, 5. Emergency team and fire personnel on standby 6. Adherence to safety clearance distance (warning signages) 5. Supervision	5	B	II	Mostly effective	1. Competent supervision, 2. Appropriate signage,	Audits Reports Inspections Reports Plant Task Observations Incidents Reports	Departmental Managers & Employees	OHS Act 85, CR 24, SHE Spec 67, GSR 9 (3 a), Electrical Reg SANS 10086-1	2025/08/21	In-progress & continuous	
Project management and supervision of hot work activities - Welding, Grinding and Cutting	R	37	Hot works Sparks	37.1	Fire/Explosion	Safety	1. Lack of procedural controls, 2. Poor housekeeping, 3. Failure to provide correct fitting for equipments, 4. Failure to plan 5. Incompetent personnel	Employees Visitors	Responsible Functional Managers (accountable) & Employees (responsible)	Daily 9 hrs	1. Fatalities 2. Serious Injuries 3. Property Damage	1. Welding screens, 2. Fire extinguisher, 3. Fire Blankets, 4. Fire watcher, 5. PPE 6.Hot works permits	5	B	II	Mostly effective	1. Emergency response plan 2. Competence supervision 3. Fire extinguishers	Audits Reports Inspections Reports Plant Task Observations Incidents Reports BBSOVFL	Departmental Managers & Employees	OHS Act 85, GSR 9 a -b SHE spec Form 200-207219 -5959	2025/08/08	In-progress & continuous	
		38	Defective Equipment	38.1	Burns/Cuts/Laceration/Eletroucation	Safety	1. Poor maintenance, 2. Lack of inspection 3.Lack of Supervision	Employees Visitors	Responsible Functional Managers (accountable) & Employees (responsible)	Daily 9 hrs	1. Lost-time Injuries/Amputation,	1. Safe work procedure implementation and enforcement, 2. Supervision 3. Implement maintenance and inspection plan	4	B	III	Mostly effective	1. Preuse inspections, 2. Maintenance procedures	Audits Reports Inspections Reports Plant Task Observations Incidents Reports	Departmental Managers & Employees	OHS Act 85, GSR 9 c SHE spec Form 200-207219 -5959	2025/08/30	In-progress & continuous	
		39	Soldering, Flame cutting, grinding & Welding	39.1	Flying hot sparks, contact with flames/ hot substances, contact with welding slag	Safety	1. Lack of procedural controls, 2. Poor housekeeping, 3. Failure to provide correct fitting for equipments, 4. Failure to plan 5. Incompetent personnel 6. Failure to use correct PPE 7. Incorrect posture while welding	Employees Visitors	Responsible Functional Managers (accountable) & Employees (responsible)	Daily 9 hrs	1. Lost-time Injuries/Amputation,	1. Welding screens, welding aprons 2. Fire extinguisher (and correct use thereof) 3. Fire Blankets, 4. Fire watcher, 5. PPE 6. Hot works permits	4	B	III	Mostly effective	Training and Awareness	Audits Reports Inspections Reports Plant Task Observations Incidents Reports	Departmental Managers & Employees	OHS Act 85 and regs	2025/08/08	In-progress & continuous	
Use of compressed Air/ Argon Gas Cylinders	R	40	Compressed Gas Cylinder	40.1	Gas Leak/Explosion	Safety	1. Failure to inspect (Soap Test - checking leaks using foams) 2. Improper storage, handling and transportation 3. Incorrect connections	Employees Expecting mothers	Responsible Functional Managers (accountable) & Employees (responsible)	Daily 9 hrs	1. Fatalities, 2. Injuries	1. Leakage test done. 2. MSDS to be in place. 3. Proper storage and handling of gas cylinders as per MSDS.	5	B	II	Mostly effective	1. Pre use inspection, 2. Proper storage	Audits Reports Inspections Reports Plant Task Observations Incidents Reports	Departmental Managers & Employees	SHE spec Form 200-207219 - 55 CR 21, Pressure Equipment Reg 6.9,10,11,12,13	2025/08/08	In-progress & continuous	
				40.2	Gas inhalation	Safety	1. Incorrect storage (Unsecured, Poorly tightened), 2. Poor ventilation 3. Failure to use PPE	Employees Visitors Expecting mothers	Responsible Functional Managers (accountable) & Employees (responsible)	Daily 9 hrs	1. Fatalities, 2. Injuries	1. Secured, Head on top and standing vertically 2. SDS 3. Warning signages 4. Proper PPE (Masks) 5. Proper ventilation	5	B	II	Mostly effective	Training and Awareness	Audits Reports Inspections Reports Plant Task Observations Incidents Reports	Departmental Managers & Employees	SHE spec Form 200-207219- 52 Hazardous Chem Agents Reg.	2025/08/30	In-progress & continuous	
Use of Hazardous Chemical Substances	R	41	Hazardous Chemical Substances (refer to the Health Risk Assessment Report for the nature of chemicals)	41.1	Fire/Explosions	Safety	1. Improper handling, 2. Incorrect storage conditions, 3. Open flames, 4. Lack of knowledge	Employees Visitors	Responsible Functional Managers (accountable) & Employees (responsible)	Daily 9hrs	1. Fatality 2. Injuries	1. Proper chemical storage 2. Proper chemical labelling and marking 3. SDS's and Inventory list 4. Natural ventilation	5	C	II	Mostly effective	1. Safe work procedure, 2. Training and awareness, 3. Proper signages, 4. Proper Storage, 5. Fire control systems	Audits Reports Inspections Reports Plant Task Observations Incidents Reports	Departmental Managers & Employees	SHE spec Form 200-207219- 52 Hazardous Chem Agents Reg.	2025/08/21	In-progress & continuous	
		41.2	Burns & Splatter	Safety	1. Improper handling, 2. Lack of knowledge	Employees Visitors	Responsible Functional Managers (accountable) & Employees (responsible)	Daily 9hrs	1. Injuries,	1. Proper chemical storage 2. Proper chemical labelling and marking 3. SDS's 4. Natural ventilation 5. PPE	4	A	III	Mostly effective	1. Training and awareness, 2. Proper handling, 3. Provision and use of correct PPE	Audits Reports Inspections Reports Plant Task Observations Incidents Reports	Departmental Managers & Employees	SHE spec Form 200-207219- 52 Hazardous Chem Agents Reg.	2025/08/08	In-progress & continuous			
Pedestrains walking onsite Waking on site	R	42	Pedestrains	42.1	Struck by vehicles	Safety	1. Failure to demarcate routes, 2. Failure to maintain demarcated routes, 3. Failure to communicate, 4. Failure to enforce compliance 5. Not using pedestrian crossings	Employees People living with disability Visitors	Responsible Functional Managers (accountable) & Employees (responsible)	Daily 9hrs	1. Lost-time Injuries	1. Reflective clothing, 2. Designated walk-ways, 3. Demarcation of pedestrian routes, 4. Maintenance of pedestrian routes 5. Training and awareness (Be vigilant and make eye contact with drivers)	4	C	II	Mostly effective	1. PPE Requirements, 2. Awareness Campaigns, 3. Traffic Management Plan 4. Warning Systems installed in vehicles	Audits Reports Inspections Reports Incidents Reports	Departmental Managers & Employees	OHS Act 85 of 1993, GAR 8, SHE spec Form 200-207219 - 23- 27	2025/08/30	In-progress & continuous	
		42.2	Slip, Trip and Falls	Safety	1. Not paying attention when walking 2. Provision of unsuitable foot wear, 3. Poor housekeeping standard, 4. Inadequate lighting 5. Uneven Surfaces/walkways 6. Obstructed walkways 7. Slippery surfaces	Employees People living with disability Visitors	Responsible Functional Managers (accountable) & Employees (responsible)	Daily 9hrs	1. Lost-time Injuries	1. Good house keeping practices, 2. Personell to be vigilant while working 3. Training and awareness 4. Provide sufficient lighting 5. Warning signages	4	C	II	Mostly effective	1. Segregated walk-ways, 2. Signage 3. Inspections 4. Proper PPE (safety boots)	Audits Reports Inspections Reports Incidents Reports	Departmental Managers & Employees	OHS Act 85 of 1993, GAR, GSR 2, SHE spec Form 200-207219 - 23- 27 CR 27, ENV Reg 6,	2025/08/21	In-progress & continuous			
				42.3	Adjacent Works	Safety	1. Failure to provide safe route, 2. Failure to monitor, 3. Failure to communicate	Employees People living with disability Visitors	Responsible Functional Managers (accountable) & Employees (responsible)	Daily 9hrs	1. Lost-time Injuries	1. Barricading of work areas, 2. Road monitoring plan	4	A	III	Mostly effective	1. Access control, 2. Signage 3. Proper PPE (safety boots)	Audits Reports Inspections Reports Incidents Reports	Departmental Managers & Employees	OHS Act and regs	2025/08/08	In-progress & continuous	
				42.4	Struck by falling objects	Safety	1. Poor housekeeping, 2. Failure to secure material at height,	Employees People living with disability Visitors	Responsible Functional Managers (accountable) & Employees (responsible)	Daily 9hrs	1. Lost-time Injuries	1. Good house keeping practices, 2. Safety Zones 3. Intergration	4	B	III	Mostly effective	1. Proper housekeeping, 2. Awareness	Audits Reports Inspections Reports Incidents Reports	Departmental Managers & Employees	OHS Act and regs	2025/08/08	In-progress & continuous	
		43	Gratings/Walkways (Unsecure and uneven gratings)	43.1	Trip & fall	Safety	1. Poor design, 2. No inspection or reporting of defective gratings, 3. At risk behaviour (Not observing while walking), 4. No warning signages/lack of barricading	Employees Visitors People living with Disabilities	Responsible Functional Managers (accountable) & Employees (responsible)	Daily 9hrs	Lost time injuries	1. Maintenance plan 2. Inspect, report and repair defects 3.Training Programme, 4. Communication and awareness, 5. Warning signages and barricading	4	C	II	Mostly effective	1. Risk Assessment and SWP 2. Proper PPE	Audits Reports Inspections Reports Incidents Reports	Departmental Managers & Employees	SHE Spec 50, GSR Environ Reg for workplaces (d-f)	2025/08/21	In-progress & continuous	
		44	Dust accumulating /pilling on every structure/ stairs	44.1	Inhalation of Silica dust/Ash dust	Health	Poor design, No closing plan service in place Outage activities	Employees Visitors	GM, Construction manger, Departmental mangers	Daily 9hrs	1. Lost time injuries 2.Injuries 3. Occupational Health disease	1. Cleaning of Unit Boiler after each Outage 2. Standard wearing of dust mask by employees 3. Inspect, report and repair defects 4. Conduct dust survey	3	D	II	Mostly ineffective	1. Induction 2. Awareness 3. Limit exposure time	Inspections reports Surveys reports	GE Consturction Manager Responsible Manager	Hazardous Chemical Agents Regulation CR 11 ENV Reg 6.d	2024/05/31	In-progress & continuous	
				44.2	Physical contact/ Touching dust	Health	Poor design, No clearing plan service in place Outage activities	Employees Visitors	GM, Construction manger, Departmental mangers	Daily 9hrs	1. Lost time injuries 2.Injuries 3. Occupational Health disease	1. Issuing of Hand gloves to employees 2. Standard wearing of dust muss by employees 3. Inspect, report and repair defects 4. Conduct dust survey	3	D	II	Mostly ineffective	1. Induction 2. Awareness 3. Limit exposure time	Inspections reports Surveys reports	GE Construction Manager Responsible Manager	Hazardous Chemical Agents Regulation CR 11 ENV Reg 6.d	2024/06/01	In-progress & continuous	
Housekeeping	R	45	Poor housekeeping	45.1	Slip, Trip and Falls	Safety	1. Material laying on the ground/floor/surfaces 2. Unused material/equipment not removed from the work area 3. Failure to implement and maintain good housekeeping practices, 4. Lack of knowledge on good housekeeping practices/standard 5. Uncleaned spillages on the floor/surfaces (liquids)	Employees Expectant Females People living with disability Visitors	Responsible Functional Managers (accountable) & Employees (responsible)	Daily 9hrs	1. Lost-time Injuries,	1. Implement and maintain Good housekeeping practices/procedure, 2. Always keep floor clear of material and Removal of unused materials/equipment from work areas 3. Awareness and training on housekeeping practices/standard 4. Proper stacking and storage of unused material 5. Cleaning of spillages on floor (maintaining floor/surfaces dry at all times)	4	C	II	Mostly effective	Training and Awareness	Audits Reports Inspections Reports Incidents Reports	Departmental Managers & Employees	OHS Act 85 of 1993, GSR 2B, SHE spec Form 200-207219 - 50, 64 CR 27, ENV Reg 6,	2025/08/08	In-progress & continuous	



Occupational Health and Safety Baseline risk assessment template																											
Business/Operating unit:	Medupi Power Station Project								Department:	All Departments												Next Review Date (every 2 years):		Template identifier:	240-70044602		
Date:	17-May-24								Prepared by:	Risk Assessment Team in consultation with employees as per the attendance register					Authorised by:							Name: Zandi Shange			Signature:	Document Identifier	
																						Designation: General Manager				Revision number	5
																						Date:				Revision date:	30-Apr-27
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					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. <b>Note:</b> 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 worst case scenario without controls	Include: - <b>Preventative Controls</b> (controls implemented to eliminate hazards or reduce the likelihood of the risk occurring), and - <b>Reactive Controls</b> (controls implemented to reduce the immediate impact of the risk occurring) <b>Elimination</b> <b>Substitution</b> <b>Engineering controls</b> <b>Administrative controls</b> <b>Personal protective equipment (PPE)</b> <b>NB:</b> The risk shall be evaluated, assessed and rated again once additional controls have been implemented and those	Consequence	Likelihood	Risk Priority Rating	RCE Risk Control Effectiveness	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 legislative and/or Eskom requirements that prescribe 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 for 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)					
				45.2	Fire	Safety	1. Accumulation of combustible material, 2. Unsafe acts by individual	Employees Expectant Females People living with disability Visitors	Responsible Functional Managers (accountable) & Employees (responsible)	Daily 9hrs	Fatality	1. Implement and maintain Good house keeping practices/procedure, 2. Provide fire extinguishers around offices and work areas 3. Smoking only at designated area	5	B	II	Mostly effective	Training and Awareness	Audits Reports Inspections Reports Incidents Reports	Departmental Managers & Employees	OHS Act and regs	2025/08/30	In-progress & continuous					
				45.3	Falling objects	Safety	1. Improper stacking, 2. Material not cleared from work areas/ 3. keeping material closer to edges 4. Bringing material in excess of required quantities	Employees Expectant Females People living with disability Visitors	Responsible Functional Managers (accountable) & Employees (responsible)	Daily 9hrs	1. Lost-time Injuries,	1. Good housekeeping practices/procedure, 2. Keep only required quantities 3. Awareness and training on housekeeping practices/standard	4	C	II	Mostly effective	Training and Awareness	Audits Reports Inspections Reports Incidents Reports	Departmental Managers & Employees	OHS Act and regs	2025/08/21	In-progress & continuous					
				45.4	Obstructed emergency routes/walkways	Safety	1. Vehicles/Mobile plant parked at undesignated parking areas 2. Stripping of equipment for repairs (Material left at walkways/routes) 3. Storage areas not allocated 4. Poor office furnitures layout (positioning office furniture on emergency routes)	Employees Expectant Females People living with disability Visitors	Responsible Functional Managers (accountable) & Employees (responsible)	Daily 9hrs	1. Lost-time Injuries,	1. Good house keeping practices/procedure, 2. Keep emergency routes clear by proper planning and office layout design 3. Awareness and Training on emergency exit routes 4. Allocation of storage areas (material/equipments stored only in designated storage areas)	4	C	II	Mostly effective	Training and Awareness	Audits Reports Inspections Reports Incidents Reports	Departmental Managers & Employees	OHS Act and regs	2025/08/08	In-progress & continuous					
Manual handling	R	46	Sharp Edges	46.1	Cuts	Safety	1. Protruding sharp objects, 2. Sharp edges not protected, 3. Unsafe tools, 4. Failure to use PPE 5. Unsafe handling of materials/equipments	Employees People living with disability Visitors	Responsible Functional Managers (accountable) & Employees (responsible)	Daily 9hrs	1. Lost-time Injuries,	1. PPE, 2. Training and awareness, 3. Guarding/covering of sharp edges 4. Use correct tools for the job	3	B	III	Mostly effective	1. Removal of sharp edges when it is reasonable practical.	Audits Reports Inspections Reports Incidents Reports	Departmental Managers & Employees	OHS Act 85 of 1993, CR 28; DMR 18, Eskom Standard 39-98	2025/08/30	In-progress & continuous					
		47	Heavy materials	47.1	Muscle and Bones strains (Hands and spinal)	Safety	1. Poor practise of materials handling 2. Untrained personnel 3. No safe works procedure	Employees Expectant Females People living with disability Visitors	Responsible Functional Managers (accountable) & Employees (responsible)	Daily 9hrs	1. Lost-time Injuries,	1. Apply correct lifting techniques 2. Method statements and Risk assessment 3. Seek assistant when lifting heavy objects 4. Training and awareness	4	B	III	Mostly effective	1. Plans works for moving equipments	Audits Reports Inspections Reports Incidents Reports	Departmental Managers & Employees	OHS Act 85 of 1993, CR 28; DMR 18, Eskom Standard 39-98	2025/08/21	In-progress & continuous					
				47.1	Body parts crushed by material	Safety	1. Dropping of materials/objects onto body parts (lifting heavy material/objects alone)	Employees Visitors	Responsible Functional Managers (accountable) & Employees (responsible)	Daily 9 hrs	1. Lost-time Injuries,	1. Always seek assistant when lifting heavy objects/material 2. Apply correct lifting techniques	4	B	III	Mostly effective	Training and Awareness	Audits Reports Inspections Reports Incidents Reports	Departmental Managers & Employees	OHS Act 85 of 1993, CR 28; DMR 18, Eskom Standard 39-98	2025/08/08	In-progress & continuous					
		48	Ergonomics	48.1	Awkward body postures	Safety	1. Limited/Restricted spaces in the area	Employees Visitors	Responsible Functional Managers (accountable) & Employees (responsible)	Daily 9 hrs	1. Lost-time Injuries,	1. Practice correct lifting techniques	4	B	III	Mostly effective	1. Training and awareness	Audits Reports Inspections Reports Incidents Reports	Departmental Managers & Employees	OHS Act 85 of 1993 and regs	2025/08/08	In-progress & continuous					
Use of tools and Equipment (Electrical and Hydraulic Power Tools)	R	49	Unguarded moving parts & rotating parts	49.1	Cuts	Safety	1. Body parts coming in contact with moving/rotating parts) 2. At risk behaviour (moving/walking closer to unguarded/moving parts) 3. No guards (Guards not replaced during repairs/maintenance) 4. Untrained personnel, 5. Improper handling 6. Lack of isolation/lock-out not done	Employees Visitors	Responsible Functional Managers (accountable) & Employees (responsible)	Daily 9hrs	1. Fatalities 2. Lost-time Injuries,	1. Always move away from rotating/moving parts 2. Barricading of areas with unguarded moving/rotating parts 3. Ensure replacement of guards after repairs/maintenances activities 4. Training Programs on use of tools/equipment, 5. Maintenance and Pre-use inspections 6. Warning Signs, 7. Supervision, 8. Proper handling of tools and equipment 9. Proper Isolation or lock-out procedures	4	B	III	Mostly effective	1. Maintenance 2. Communication and awareness	Audits Reports Inspections Reports Incidents Reports	Departmental Managers & Employees	OHS Act 85 of 1993, GMR 3 SHE Spec 57	2025/08/30	In-progress & continuous					
				49.2	Entanglement/caught by rotating or moving parts/equipments	Safety	1. Loose clothing caught by unguarded moving/rotating parts, 2. Poor supervision, 3. Inattention to task (lack of attention when working closer rotating or moving parts/equipments)	Employees Visitors	Responsible Functional Managers (accountable) & Employees (responsible)	Daily 9 hrs	1. Fatalities 2. Lost-time Injuries,	1. Supervision, 2. Training programmes, 3. Warning Signs, 4. Correct PPE usage	5	B	II	Mostly effective	1. Maintenance 2. Communication and awareness	Audits Reports Inspections Reports Incidents Reports	Departmental Managers & Employees	OHS Act 85 of 1993, GMR 3 SHE Spec 57	2025/08/21	In-progress & continuous					
		50	Unauthorised use	50.1		Safety	1. Untrained personnel, 2. No supervision, 3. Poor planning, 4. No lock-out system	Employees Visitors	Responsible Functional Managers (accountable) & Employees (responsible)	Daily 9hrs	1. Lost-time Injuries,	1. Supervision, 2. Training programmes, 3. Warning Signs, 4. Planning for tasks in advance 5. Lock-out system in place	4	B	III	Mostly effective	1. Risk Assessment and SWP 2. Communication and awareness	Audits Reports Inspections Reports Incidents Reports	Departmental Managers & Employees	OHS Act 85 of 1993 sec 8 (f) SHE Spec 57	2025/08/30	In-progress & continuous					
		51	Incorrect storage (grinder wheels/disc)	51.1	Cuts	Safety	1. Untrained personnel, 2. No supervision, 3. No storage procedure 4. Failure to use correct PPE	Employees Visitors	Responsible Functional Managers (accountable) & Employees (responsible)	Daily 9hrs	1. Lost-time Injuries,	1. Supervision, 2. Training programmes, 3. Develop and implement storage procedure 4. Use correct PPE (e.g. appropriate hand gloves etc....	4	B	III	Mostly effective	1. Risk Assessment and SWP 2. Communication and awareness, 3. Tools register	Audits Reports Inspections Reports Incidents Reports	Departmental Managers & Employees	OHS Act 85 of 1993.GSR 9(a) HCS Reg 10 (f)	2025/08/21	In-progress & continuous					
		52	Use of incorrect tools (Grinder disc)	52.1	Laceration	Safety	1. Untrained personnel, 2. No supervision, 3. At risk behaviour, 4. Correct grinding disks not used/available 5. Inadequate tools/equipment inspections	Employees Visitors	Responsible Functional Managers (accountable) & Employees (responsible)	Daily 9hrs	1. Lost-time Injuries,	1. Supervision, 2. Training programmes on safe use of tools/equipment, 3. Warning Signs, 4. Provision of correct tools, 5. Pre-use inspections 6. Conduct Daily Site Task Instruction before start with activity	4	B	III	Mostly effective	1. Risk Assessment and SWP 2. Communication and awareness, 3. Tools register 4. Pre-use inspection	Audits Reports Inspections Reports Incidents Reports	Departmental Managers & Employees	OHS Act 85 of 1993 sec 8 (f), GSR 9 (a)	2025/08/08	In-progress & continuous					
Performing commissioning activities	R	53	Interface between construction and commissioning	53.1	Plant and human interface, Automated stop/start of plant	Safety	1. Unrestricted access of personnel 2. Fiddling with plant/equipment	Employees Visitors	Responsible Functional Managers (accountable) & Employees (responsible)	Daily 9hrs	1. Lost-time Injuries,	1. Post visible warning signs 2. Control of access to commissioned plant	4	B	III	Mostly effective	Maintenance of warning signs	Audits Reports Inspections Reports Incidents Reports	Departmental Managers & Employees	Plant Safety Reg 36-681 OSH Act (CR 24; Eskom Standard 240-62196227	2025/08/30	In-progress & continuous					
				53.2	Loose materials lying around	Safety	1.Poor housekeeping practices 2. Deviations to stacking and storage practices	Employees Visitors	Responsible Functional Managers (accountable) & Employees (responsible)	Daily 9hrs	Lost-time Injuries	1. Good housekeeping 2. Regular inspections	4	B	III	Mostly effective	1. Enforcement of good housekeeping 2. Site inspection	Audits Reports Inspections Reports Incidents Reports	Departmental Managers & Employees	CR 28 CR 27 Env Reg 6 (1)	2025/08/21	In-progress & continuous					
				53.3	Unclear emergency escape routes	Safety	1. Inadequate signage 2. Signs are obscured due to ash coverage	Employees Visitors	Responsible Functional Managers (accountable) & Employees (responsible)	Daily 9hrs	1. Fatality 2. Lost-time Injuries	1. Adequate signage to be put in place 2. Inspections and maintenance of signages 3. High pressure washing of obscured signages	5	B	II	Mostly effective	Signage and training	Audits Reports Inspections Reports Incidents Reports	Departmental Managers & Employees	OHS Act and Regs	2025/08/08	In-progress & continuous					
				53.4	Inadequate lock-out systems	Safety	1. Inadequate permit system 2. Non-compliance to permit requirements	Employees Visitors	Responsible Functional Managers (accountable) & Employees (responsible)	Daily 9hrs	1. Fatalities 2. Lost-time Injuries,	1. Maintain a proper lock-out system 2. Training in permit requirements( Plant Safety Regulations)	5	B	II	Mostly effective	Training and lock-out system	Audits Reports Inspections Reports Incidents Reports	Departmental Managers & Employees	Plant Safety Reg 36-681 OSH Act, CR 24; Eskom Standard 240-62196227	2025/08/08	In-progress & continuous					
				53.5	Plant and equipment failure	Safety	1. Incompetent operator 2. Poorly maintained plant/equipment	Employees Visitors	Responsible Functional Managers (accountable) & Employees (responsible)	Daily 9hrs	Fatality	1. Training and skill development 2. Regular maintenance on operating procedures	5	B	II	Mostly effective	Training and procedures	Audits Reports Inspections Reports Incidents Reports	Departmental Managers & Employees	Plant Safety Reg 36-681 OSH Act, CR 24; Eskom Standard 240-62196227	2025/08/30	In-progress & continuous					



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Date:	17-May-24								Prepared by:	Risk Assessment Team in consultation with employees as per the attendance register						Authorised by:				Name: Zandi Shange		Signature:	Document Identifier	Revision number	30-Apr-27
																				Designation: General Manager					
																				Date:					
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 by the personnel involved in the task.	Indicate R or N 1. Routine activities and situations create hazards through day-to-day operations and normal work activities; 2. Non-routine activities and situations are occasional or unplanned;	#	Anything with potential to cause of harm. Note: A hazard can pose more than one risk.	#	A chance that injury, ill health or damage could occur as a result of uncontrolled hazard.	Safety or health	What causes the risk to come into effect?	Who is exposed to the hazard i.e. visitors, members of the public, etc.	Who is accountable for making sure the controls and monitors are: - in place, - implemented, - regularly reviewed for effectiveness.	The frequency and duration the person/group is exposed to the hazard e.g. Daily for 3 hrs.	Consider the worse case scenario without controls	Include: - Preventative Controls (controls implemented to eliminate hazards or reduce the likelihood of the risk occurring), and - Reactive Controls (controls implemented to reduce the immediate impact of the risk occurring) Elimination Substitution Engineering controls Administrative controls Personal protective equipment (PPE) NB: The risk shall be evaluated, assessed and rated again once additional controls have been implemented and those				RCE Risk Control Effectiveness 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) NB: The risk shall be evaluated, assessed and rated again once additional controls have been implemented and those	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 legislative and/or Eskom requirements that prescribe 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 for 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)			
				53.6	Poor lighting	Safety	1. Defective lighting 2. Lack of permanent lighting installation	Employees Visitors	Responsible Functional Managers (accountable) & Employees (responsible)	Daily 9hrs	1. Fatalities 2. Lost-time Injuries,	1. Regular inspections and maintenance of lights 2. Provision of temporary lighting	4	B	III	Mostly effective	Training and procedures	Audits Reports Inspections Reports Incidents Reports	Departmental Managers & Employees	Env Reg 5	2025/08/21	In-progress & continuous			
		54	Unauthorised access,	54.1	1. Unauthorised person unaware of risks in the area 2. Authorised personnel unaware of the presence of unauthorised person (starting/switching-on equipment that can injure the unauthorised person) 3. Electrocuton due to coming in contact with energised equipments	Safety	1. Unrestricted access of personnel 2. Unavailability of warning signs 3. Inadequate lock-out systems	Employees Visitors	Responsible Functional Managers (accountable) & Employees (responsible)	Daily 9 hrs	1. Fatalities 2. Lost-time Injuries,	1. Restrict access for the area 2. Display visible warning signs 3. Awareness 4. Training on lock out systems	5	B	II	Mostly effective	Awareness and training on restricted areas	Audits Reports Inspections Reports Incidents Reports	Departmental Managers & Employees	Plant Safety Reg 36-681 OSH Act, CR 24; Eskom Standard 240-621962Z7	2025/08/08	In-progress & continuous			
Working in or close to Live Plant and Equipment	R	55	Energized Plant and Equipment	55.1	1. Unauthorised access to energized plant and equipment resulting in electric shock/spark 2. Electrocuton due to contact with live plant	Safety	1. No permit to work system in place 2. Lack of communication on safety cleared plant 3. Lack of warning signage to prohibit entry	Employees Visitors	Responsible Functional Managers (accountable) & Employees (responsible)	Daily 9hrs	1. Fatality 2 Lost-time Injuries,	1. Permit to work system. 2. Original Equipment Manufacture(OEM) Guidelines 3. Awareness( Induction)	6	B	I	Mostly effective	Awareness and training on restricted areas	Audit Reports Inspections Reports Incidents Reports	Departmental Managers & Employees	OHS Act 85 of 1993 Electrical Installation Regulations CR 24 c, d SHE Spec 67	2025/08/08	In-progress & continuous			
		56	Miscommunication on testing processes	56.1	Poor communication during commissioning and testing processes	Safety	1. Lack of knowledge on hazards present, 2. Production pressure, 3. Accelerated program of completion 4. Language barrier 5. Noisy areas	Employees Visitors	Responsible Functional Managers (accountable) & Employees (responsible)	Daily 9hrs	1. Lost-time Injuries, 2. Fatality	1. Permit to work system. 2. OEM Guidelines 3. Work planning and schedule 4. Use of common business language 5. Use of correct PPE( hearing protection)	5	B	II	Mostly effective	Radio communication Permit to work	Audits Reports Inspections Reports Incidents Reports	Departmental Managers & Employees	OHS Act 85 of 1993 Electrical Installation Regulations CR 24 c, d SHE Spec 67	2025/08/30	In-progress & continuous			
		57	Use vacuum trucks at Dust Handling Plant	57.1	Exposure to ash during ash removal from dust handling plant,	Safety	1. Not wearing correct PPE 2. Windy condition 3. Loose connection on suction pipes	Employees Visitors	Responsible Functional Managers (accountable) & Employees (responsible)	Daily 9hrs	1. Lost time injuries	1. Dust suppression and continuous road cleaning 2. Use of correct PPE( e.g. dust masks) and disposable overalls 3. Regular inspections and maintenance	6	B	I	Mostly effective	driver competency, respirators to be issued and used	Audits Reports Inspections Reports Incidents Reports	Departmental Managers & Employees	OHS Act 85 of 1993 Electrical Installation Regulations CR 24 c, d SHE Spec 67	2025/08/21	In-progress & continuous			
Working close to overhead power lines	R	58	Overhead power lines	58.1	No height restriction goal posts	Safety	1. Poor planning and design 3. Lack of inspections, 4. Loads exceeding maximum height restriction 5. Risk Assessment not conducted 6. Lack of warning signages	Employees Visitors	Responsible Functional Managers (accountable) & Employees (responsible)	Daily 9hrs	1. Lost-time Injuries,	1. RA & SWP, 2. Supervision, 3. Training Programme, 4. Conducting regular visual inspections, 5. Assessment of height restrictions prior loading 6. Solid height restriction barriers 7. Maintenance of of height restriction signages	4	C	II	Mostly effective	1. Communication and awareness, 2. Site overhead lines designed layout	Audits Reports Inspections Reports Incidents Reports	Departmental Managers & Employees	SANS 10280 Gen Machinery Reg 2 (5) SHE spec Form 200-207219 33	2025/08/08	In-progress & continuous			
		59	Cranetrucks booms/buckets not lowered (Working with machinery close to/under overheadlines)	59.1	Contact with overhead powerlines	Safety	1. At risk behaviour, 2. Risk assessment not conducted or discussed with plant operator's 3. Lack of supervision, Haste and ignorance, 4. Mechanical failure (Plant/Machine maintenance and inspection) 5. Lack of warning signages 6. lack of traffic control management 7. No Permit to work 8. Incompetent operators	Employees Visitors	Responsible Functional Managers (accountable) & Employees (responsible)	Daily 9hrs	1. Lost-time Injuries,	1. RA & SWP, 2. Supervision, 3. Training Programme, 4. Regular maintenance and servicing of plant, 5. Conduct daily site task instruction (DSTI) before starting any activity, 6. Traffic control management 7. Height restriction signage 8. Permit to work system 9. Competent operators	4	B	III	Mostly effective	1. Communication and awareness, 2. Conduct pre-start daily inspections on all plant and machinery 3. Training Programme,	Audits Reports Inspections Reports Incidents Reports	Departmental Managers & Employees	SANS 10280 Gen Machinery Reg 2 (5) SHE spec Form 200-207219 33	2025/08/30	In-progress & continuous			
Transportation	N	60	Overloading	60.1	Vehicle accidents	Safety	1. Failure to brake at stops/intersection due to heavy load carried pushing vehicle forward 2. Non-adherence to regulated capacity/seats limit (ignorant driver/limited transport)	Employees Visitors	Responsible Functional Managers (accountable) & Employees (responsible)	Daily 9 hrs	1. Fatalities 2. Lost-time Injuries,	1. Vehicles to only load within the regulated capacity (Driver to ensure vehicle is not overloaded) 2. Provide enough transport 3. Awareness on loading capacity	5	B	II	Mostly effective	Compliance to road traffic rules	Audits Reports Inspections Reports Incidents Reports	Departmental Managers & Employees	OHS Act and regs	2025/08/08	In-progress & continuous			
		61	Unsafe driving and unfit drivers	61.1	Vehicle accidents	Safety	1. Non-adherence to road traffic rules 2. Driving under influence 3. Distractions (cellphone/texting/make-ups) 4. No medical surveillance programme 5. Lack of concentration (fatigue/stress) 6. Speeding	Employees Visitors	Responsible Functional Managers (accountable) & Employees (responsible)	Daily 9 hrs	1. Fatalities 2. Lost-time Injuries,	1. Obey Road traffic rules 2. Road Safety Awareness 3. Be Sober 4. Induction Training 5. Medical Surveillance programme 6. Speed monitoring interventions	5	B	II	Mostly effective	Compliance to road traffic rules	Audits Reports Inspections Reports Incidents Reports	Departmental Managers & Employees	OHS Act and regs	2025/08/08	In-progress & continuous			
		62	Unroadworthy vehicles	62.1	Vehicle accidents	Safety	1. Failure to adhere to maintenance schedule 2. Failure to do roadworthy testing (expired licence disc)	Employees Visitors	Responsible Functional Managers (accountable) & Employees (responsible)	Daily 9 hrs	1. Fatalities 2. Lost-time Injuries,	1. Inspections, Servicing and maintenance records 2. Valid licence disc checks 3. Traffic Roadblocks	5	B	II	Mostly effective	Compliance to road traffic rules	Audits Reports Inspections Reports Incidents Reports	Departmental Managers & Employees	OHS Act and regs	2025/08/30	In-progress & continuous			
		63	Sunglare	63.1	Poor visibility (unable to see oncoming or surrounding while reversing)	Safety	1. Reflection of the sun on the windscreen	Employees Visitors	Responsible Functional Managers (accountable) & Employees (responsible)	Daily 9 hrs	1. Fatalities 2. Lost-time Injuries,	1. Use of sun visor or sun glasses (tinted safety glasses)	5	A	II	Mostly effective	Training and awareness	Audits Reports Inspections Reports Incidents Reports	Departmental Managers & Employees	OHS Act and regs	2025/08/21	In-progress & continuous			
Outage (Mechanical, Electrical, Civil and C&I works)	R	64	Incompetent Contractors	64.1	Increased incident rate	Safety	1. Non-compliance to site requirements 2. Non-compliance to Safe work procedure and Risk assessments	Employees Visitors	Authorise Responsible Person (RP) Responsible managers Responsible supervisor	Daily 24hrs	Lost time injuries	1. Issuing SHE requirements and Evaluation of safety files for compliance 2. Induction Training 3. Continuous monitoring and inspection (compliance check)	2	D	II	Mostly effective	Supervision Encourage continous housekeeping on every shift	Site inspection report Incident report	Departmental Managers & Employees	Plant Safety Reg OHS Act 5 of 1993 and its Regulations Eskom Outage procedure	2025/08/08	In-progress & continuous			
		65	New Employees (Unfamiliar with the site/plant)	65.1	Poor Safety behaviour practices (safety culture)	Safety	1. Inadequate induction training 2. Poor visible leadership 3. Poor attitude	Employees Visitors	Authorise Responsible Person (RP) Responsible managers Responsible supervisor	Daily 24hrs	Lost time injuries	1. Induction Training (set enough time for indution when bringing new employees) 2. Scheduled visible-felt leadership walk-about 3. Awareness and Training (safety culture)	5	B	II	Mostly effective	Supervision- RP and Supervisor to ensure that there is sufficient lighting before allowing the workers entering the boiler	Site inspection report Incident report	Departmental Managers & Employees	Plant Safety Reg OHS Act 5 of 1993 and its Regulations Eskom Outage procedure	2025/08/30	In-progress & continuous			
		66	Time Pressure	66.1	Increased incident rate	Safety	1. Fatigue from working long hours	Employees Visitors	Authorise Responsible Person (RP) Responsible managers Responsible supervisor	Daily 24hrs	Lost time injuries	1. Normal working hours (regulated hours - compliance to basic condition of employment act) 2. Introduce shift 3. Awareness on resting period	5	B	II	Mostly effective	Only trained and competent personnel to be allowed to use the portable grinder or drill.	Site inspection report Incident report	Departmental Managers & Employees	Plant Safety Reg OHS Act 5 of 1993 and its Regulations Eskom Outage procedure	2025/08/21	In-progress & continuous			

Occupational Health and Safety Baseline risk assessment template																							
Business/Operating unit:	Medupi Power Station Project									Department:	All Departments					Next Review Date (every 2 years):					Template identifier:	240-70044602	
Date:	17-May-24									Prepared by:	Risk Assessment Team in consultation with employees as per the attendance register		Authorised by:		Name: Zandi Shange					Signature:	Document Identifier		
													Designation: General Manager					Revision number	5				
													Date:										
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			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. <b>Note:</b> 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: - <b>Preventative Controls</b> (controls implemented to eliminate hazards or reduce the likelihood of the risk occurring), and - <b>Reactive Controls</b> (controls implemented to reduce the immediate impact of the risk occurring) <b>Elimination</b> <b>Substitution</b> <b>Engineering controls</b> <b>Administrative controls</b> <b>Personal protective equipment (PPE)</b> <b>NB:</b> The risk shall be evaluated, assessed and rated again once additional controls have been implemented and those	Consequence	Likelihood	Risk Priority Rating	RCE Risk Control Effectiveness <b>Preventative Controls</b> (controls implemented to eliminate hazards or reduce the likelihood of the risk occurring), and <b>Reactive Controls</b> (controls implemented to reduce the immediate impact of the risk occurring) <b>Elimination</b> <b>Substitution</b> <b>Engineering controls</b> <b>Administrative controls</b> <b>Personal protective equipment (PPE)</b> <b>NB:</b> The risk shall be evaluated, assessed and rated again once additional controls have been implemented and those	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 legislative and/or Eskom requirements that prescribe 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 for 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)	
Cleaning and ironing		67	Hazardous chemical Agent	67.1	1. Direct and indirect contact with human beings	Safety	1. Improper handling and storage 2. Lack of SDS training 3. Failure to label containers properly 4. Failure to wear correct PPE 5. Inadequate ventilation	Employees Visitors	Facility Manager	Daily	1. Lost-time Injuries 2. Medical 3. First Aid	1. SDS 2. Safe work procedures 3. Sufficient ventilation 4. Proper labelling 5. Safe storage and handling	4	B	III	Mostly effective	1. PPE usage (gloves wears rubber aprons) 2. Induction 3. Awareness	Inspections Auditing	Departmental Managers & employees	Hazarous chemical Agent Regulation	2025/08/08	In-progress & continuos	
				67.2	2. Slip and falls as a result chemical spillages	Safety	1. Wet surfaces 2. No warning signages on wet floors 3. Not paying attention/unaware of surrounding	Employees Visitors	Facility Manager	Daily	1. Lost-time Injuries 2. Medical 3. First Aid	1. Placing warning signs on wet floors 2. Prompt cleaning after a spillage 3. Paying attention and be aware of the surrounding when walking	4	C	II	Mostly effective	1. PPE usage (gloves wears rubber aprons) 2. Induction 3. Awareness	Inspections Auditing	Departmental Managers & employees	Hazarous chemical Agent Regulation	2025/08/30	In-progress & continuos	
				67.3	3. Disorientation due to fumes inhalation	Safety	1. Over-exposure (time-period) 2. Incorrect PPE 3. Poor ventilation	Employees Visitors	Facility Manager	Daily	1. Lost-time Injuries 2. Medical 3. First Aid	1. Sufficient Ventilation 2. Use of mask 3. Sufficient allocation of resources 4. Provide First Aid Treatment	3	B	III	Mostly effective	1. PPE usage (gloves wears rubber aprons) 2. Induction 3. Awareness	Inspections Auditing	Departmental Managers & employees	Hazarous chemical Agent Regulation	2025/08/21	In-progress & continuos	
		68	Iron	68.1	Burns, Scald	Safety	1. Coming into contact with hot-iron 2. High pressure release of heat (steam) 3. Unsafe handling 4. Incompetency	Employees Visitors Recipients	Facility Manager	Daily	1. Lost-time Injuries 2. Medical 3. First Aid 4. Property damage	1. Safe handling of iron 2. Applying safe work procedure 3. Awareness and Training	4	B	III	Mostly effective	1. PPE usage (gloves wears rubber aprons) 2. Induction 3. Awareness	Inspections Auditing BBSO	Departmental Managers & employees	General Safety Regulations	2025/08/08	In-progress & continuos	
		69	Washing Machine, Irons and Tumble Dryers	69.1	Defective equipments	Safety	1. Inadequate inspection, maintenance and replacement 2. Misuse of equipment	Employees Visitors Recipients	Facility Manager	Daily	1. Lost-time Injuries 2. Medical 3. First Aid 4. Property damage	1. Regular inspection, maintenance and replacement 2. Awareness and Training (proper use of equipment)	4	C	II	Mostly effective	1. PPE usage (gloves wears rubber aprons) 2. Induction 3. Awareness	Inspections Auditing BBSO	Departmental Managers & employees	Driven Machinery	2025/08/08	In-progress & continuos	
Housing (Accommodation Facility)		70	Sanitation	70.1	Outbreak of diseases	Safety	1. Improper cleaning 2. Poor maintenance of sewer system 3. Unsafe drinking water	Employees Visitors Residents	Facility Manager	Daily	1. Lost-time Injuries 2. Medical 3. First Aid	1. Cleaning contract in place 2. Cleaning plan schedule available 3. Health awareness 4. Use of proper cleaning chemicals (Disinfectants) 5. Training for cleaning 6. Report and fixing of defects (Maintenance contractor in place) 7. Water samples	4	C	II	Mostly effective	1. Induction 2. Awareness 3. PPE	Inspections Audits	Departmental Managers & employees	Facilities Regulation	2025/08/21	In-progress & continuos	
		71	Fire	71.1	Property damage & Injuries	Safety	1. Cooking and smoking in undesignated areas 2. Overloading of plugs, 3. Overgrown vegetation (grass etc..)	Employees Visitors	Facility Manager	Daily	1. Lost-time Injuries 2. Medical 3. First Aid 4. Property damage	1. Awareness and training 2. Fire Extinguisher 3. No cooking in rooms and smoking allowed in designated areas 4. Gardening contractor responsible for vegetation	4	C	II	Mostly effective	1. Induction	Inspections Audits	Departmental Managers & Employees	Facilities Regulation	2025/08/08	In-progress & continuos	
		72	Animals (Snakes/baboons/Spiders)	72.1	Animal bites and animals attacks	Safety	1. Interacting with animals (baboons/monkeys) 2. Animals looking/accessing food 3. Staying/living close to/ near animal habitation 4. Rooms left open	Employees Visitors	Responsible Functional Managers (accountable) & Employees (responsible)	Daily	1. Lost-time Injuries 2. Medical 3. First Aid	1. Animal monitoring 2. Maintenance team (contractor in place) 3. Awareness and Training (rooms to be always closed)	4	A	III	Mostly effective	1. Personal awareness on surrounding	Inspections Audits	Departmental Managers & Employees	Facilities Regulation	2025/08/08	In-progress & continuos	
Working Hybrid		73	Working space/Area	73.1	1. Crime /Theft( laptops, valuables)	Safety	1. Poor security 2. Intruders 3. Criminals	Employee	Employee	Daily	1. Lost-time Injuries 2. Medical 3. First Aid 4. Property damage	1. Awareness on security measures 2. Hybrid policies and procedure	3	C	II	Mostly effective	1. Awareness 2. Inspection	Security check ups	Employee	Enviromental Regulation	2025/08/21	In-progress & continuos	
		74	Work station( Ergonomics)	74.1	1. Body harm( muscle or eye strain)	Safety	1. Use of improper desks and chairs that are not ergonomically design 2. Working from the unsafe space (bed) 3. Prolonged seating on desks	Employee	Employee	Daily	1. Lost-time Injuries 2. Medical 3. First Aid 4. Occupational Health disease	1. Ergonomic awareness 2. Hybrid policies and procedure	4	B	III	Mostly effective	1. Awareness	Medical surveillance reports	Employee	Enviromental Regulation	2025/08/08	In-progress & continuos	
		75	Emergencies	75.1	1. Fire and electrical	Safety	1. Electrical faults, 2. Overloading of plugs, 3. Heating appliances	Employee	Employee	Daily	1. Lost-time Injuries 2. Medical 3. First Aid 4. Occupational Health disease	1. Familiarise yourself with emergency exit route 2. Have emergency contact numbers readily and easily accesable 3. Fire extinguishing tools available 4. Awareness on safe use of electrical appliances	4	C	II	Mostly effective	1. Awareness	Employee reporting communication (email)	Employee	Enviromental Regulation	2025/08/08	In-progress & continuos	
INTERGRATION		76	Different Contractors working in the same space/areas (interfacing)	76.1	Exposure to risks from other Contractors	Safety	1. Failure to consider other contractors activities during risk assessment 2. Poor communication between two/more parties working in one area 3. Poor Planning and misunderstanding of scope (scope boundaries) 4. Failure to adhere to permit to work and lock-out process	Contractors and employees	Outage Manager	Daily	1. Fatalities 2. Lost-time Injuries,	1. Start up meetings 2. Integration meetings 3. Interval interactions within different teams 4. Adhoc task and risks communications within area 5. Joint risk assessment by all parties involved 6. Proper planning and clarifying each Contractor scope (setting boundaries for different scope of work for each party) 7. Controlled access (sign-off register) 8. Comply with permit to work and lock-out system	5	C	II	Mostly effective	1. Signage popsting 2. Awareness training 3. PSR procedure requirement	Audits Reports Inspections Reports Incidents Reports	Outage Manager	Plant Safety Reg OHS Act 5 of 1993 and its Regulations Eskom Outage procedure	2025/08/21	In-progress & continuos	
Kitchen facilities		77	Non-compliance with Hygiene standards	77.1	Outbreak of diseases	Safety	1. Contaminated food/Poor food quality 2. Unhygienic condition in the facility during food preparation 3. Improper cleaning 4. Poor maintenance of waste drainage system (e.g., fat-trap system etc..) 5. Poor personal hygiene practices 6. Cooking with unclean water 7. Cleaning activities using disinfectants	Employees Visitors	Responsible Functional Managers (accountable) & Employees (responsible)	Daily	1. Fatalities 2. Lost-time Injuries,	1. Conduct hygiene surveys 2. Report and fixing of defects (Maintenance contractor in place) 3. Food sampling testing 4. Cleaning plan schedule available 5. Health and Hygiene awareness 6. Use of proper cleaning chemicals (Disinfectants) 7. Training for cleaning 8. Compliance with local legislation on food premises 9. Proper PPE for cooking employees 10. Medical surveillance program 11. Availability of first aid response	5	B	II	Mostly effective	Training and awareness on hygiene	Audits Reports Inspections Reports Incidents Reports	Departmental Managers & Employees	OHS Act and Regulations	2025/08/08	In-progress & continuos	
		78	Cooking stoves (Electrical)	78.1	Fire & Burns	Safety	1. Poor maintenance of equipment 2. Unsafe handling of cooking equipment 3. Improper use of flammable material 4. loose clothing coming into contact with high temperature (hot stove) 5. Body parts coming in contact with hot elements (stove/pots) 6. Lack of serviced fire equipment 7. Exposure to high pressure steam	Employees Visitors	Responsible Functional Managers (accountable) & Employees (responsible)	Daily	1. Fatalities 2. Lost-time Injuries,	1. Provide serviced fire equipment 2. Maintenance of cooking equipment (report and repair of defects) 3. Proper handling of cooking equipment 4. Use of proper PPE 5. Training and awareness 6. Emergency preparedness plan 7. Proper storage of material and equipment	5	B	II	Mostly effective	1. RA and Safe work procedure	Audits Reports Inspections Reports Incidents Reports	Departmental Managers & Employees	OHS Act and Regulations	2025/08/30	In-progress & continuos	

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Date:	17-May-24								Prepared by:	Risk Assessment Team in consultation with employees as per the attendance register						Authorised by:				Name: Zandi Shange				Signature:				Document Identifier			
																				Designation: General Manager								Revision number		5	
																				Date:								Revision date:		30-Apr-27	
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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. <b>Note:</b> 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: - <b>Preventative Controls</b> (controls implemented to eliminate hazards or reduce the likelihood of the risk occurring), and - <b>Reactive Controls</b> (controls implemented to reduce the immediate impact of the risk occurring) <b>Elimination</b> <b>Substitution</b> <b>Engineering controls</b> <b>Administrative controls</b> <b>Personal protective equipment (PPE)</b> <b>NB:</b> The risk shall be evaluated, assessed and rated again once additional controls have been implemented and those controls are effective.	Consequence	Likelihood	Risk Priority Rating	<b>RCE</b> Risk Control Effectiveness	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 legislative and/or Eskom requirements that prescribe 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 for 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)									
Demobilisation due to project completion	R	79	Demobilisation	79.1	Increased incidents	Safety	1. Lack of mental alertness/focus (lack of focus/ Not paying attention on the activity at hand) 2. Demoralised employees 3. Poor planning on demob strategy 4. Poor communication of demob plans	Employees Visitors	Responsible Functional Managers (accountable) & Employees (responsible)	As and When	Lost time injuries	1. Demob plan and strategy in place 2. Demob plan communicated with employees in advance 3. Close supervision at all times 4. Offer counselling and Psychological support to demoralised employees 5. Training programmes to equip employees with skills for after demob	4	B	III	Mostly effective	1. Communication and awareness, 2. Risk Assessment and SWP 3. Training on financial management	Audits Reports Inspections Reports Incidents Reports	Departmental Managers & Employees	OHS Act 85 of 1993 sec 13 & 26 Basic Conditions of employment Act; The Constitution of the Republic of South Africa	2025/08/08	In-progress & continuous									
Site De-establishment	R	80	Electrical points not de-energized before disconnecting supply points (Lock-out permit etc)	80.1	Employees can come into contact with live electrical points	Safety	1. No site de-establishment plan in place 2. Poor communication 3. No lock out system applied	Employees Visitors	Responsible Functional Managers (accountable) & Employees (responsible)	Daily 9hrs	Lost time injuries	1. Site de-establishment plan in place 2. SHE specification requirements 3. Compliance to electrical handling 4. Compliance to site procedures 5. Implementation of SOP's 6. Task execution by a qualified electrician	5	C	II	Mostly effective	1. Risk Assessment and SWP	Audits Reports Inspections Reports Incidents Reports	Departmental Managers & Employees	OHS Act 85 OF 1993 GSR 1-4 Haz Chem Sub 10-15 Env Reg for Workplaces	2025/08/21	In-progress & continuous									
		81	Unsafe methods utilized for the loading and offloading of office buildings, parkhomes for removal from current site to a new site	81.1	Mobile office buildings can slew out of control or strike observers standing close-by	Safety	1. No procedures in place 2. Incompetent personnel executing the task 3. Improper slings used 4. Rigging plan not used 5. Haste	Employees Visitors	Responsible Functional Managers (accountable) & Employees (responsible)	Daily 9hrs	Lost time injuries	1. Appropriate slings used 2. Lifting study procedure in place 3. Barricading the area 4. Supervision 5. Training 6. Compliance to Legislation 7. Method statements, 8. SHE specification	5	C	II	Mostly effective	1. Risk Assessment and SWP	Audits Reports Inspections Reports Incidents Reports	Departmental Managers & Employees	OHS Act 85 OF 1993 GSR 1-4 Haz Chem Sub 10-15 Env Reg for Workplaces	2025/08/08	In-progress & continuous									
Outbreak of the Coronavirus (COVID-19)	N	82	Outbreak of the coronavirus	82.1	(a) Human to Human transmission (Spread of disease)	Health	1. Inhaling infected droplets 2. Contacting the affected surface (Contaminated by the virus) 3. Failure to keep social distance 4. Touching face (nose, mouth, eyes) with unwashed hands (Hands possible came in contact with the virus) 5. Immunocompromised body system 6. Poor Personal Hygiene Practices 7. Non-compliance to Covid-19 rules and regulations (Legal/Eskom) 8. Failure to provide required resources/equipment (sanitisers, disinfectants, masks, hand wash soap etc.)	Employees Visitors Expectant mothers	DR Penny Mkalipe	On Outbreak and emerging variants	Multiple fatalities	1. Self-assessment and personal screening (If not feeling well, consult a doctor) 2. Regular cleaning of surfaces/equipment/facilities 3. Maintain Social distance where possible/applicable 4. Provision of resources/equipment (protective) 5. Continuous awareness through information sharing (Ongoing awareness on personal hygiene including regular washing of hands with soap and water) 6. Hybrid model of work implementation (All employees classified as vulnerable are restricted to work from home. Procedure 240-155326818 to be followed) 7. Implementation of Eskom Standard Operating Procedure. 8. Practice good personal Hygiene at all times (Soap and water for washing hands/sanitisers for disinfecting surfaces) 9. Use online platforms for meetings to reduce physical contacts (MS Teams, Zoom, etc.) 10. Encourage Vaccination 11. Implement hygiene measure during breathalysing (Use of straws, changing wipes regularly)	6	E	I	Mostly effective	1. Develop a exposure screening questionnaire 2. Planned Screening through body temperat ure screening 3. In the event that a case suspected there will be referrals as per Department of Health Standard Operating Procedure 4. Utilisation of the current Eskom staff such as (Security, Occupational Health and Safety) 5. Continuous awareness through information sharing 6. All Eskom travelling and in contact with Expatriates to contact the medical center prior to travelling 7. Development of Eskom Standard Operating Procedure.	Audits Reports Inspections Reports Incidents Reports	DR Penny Mkalipe	Occupational health and safety measures in workplace (COVID 19 (C19 OHS), Disaster Management Regulation Workplace Protective measures to be taken during the COVID 19 outbreak for GCD workplaces 240-155318598	2025/08/30	Ongoing as this is currently an Outbreak									
Outage (Mechanical, Electrical , Civil and C&I works)	R	83	High temperature inside the boiler	83.1	Sweating, dizziness	Health	1. Inadequate ventilation.	Employees Contractor employees, Visitors,	Authorise Responsible Person (RP) Responsible managers Responsible supervisor Occupational Hygienist	Daily 24hrs	Lost time injuries	1. Adequate ventilation Gas test inside the boiler 2. Environment test inside the boiler .	5	B	II	Mostly effective	RP to request the gas and environment test before allowing workers entering the boiler	Site inspection report Incident report	Departmental Managers & Employees	OHS Act 85 of 1993 and its Regulations Occupational Hygiene Programm 200-93129	2025/08/08	In-progress & continuous									
		84	Coming into contact with hot surface	84.1	Burns, bruises, spains, fractures	Health	1. No permit or Isolation of the specific plant	Employees Contractor employees, Visitors,	Authorise Responsible Person (RP) Responsible managers Responsible supervisor Occupational Hygienist	Daily 24hrs	Lost time injuries	1. Permit to work system. 2. Ensure that correct plant has being isolated	4	A	III	Mostly effective	RP and Supervisor/Team leader to ensure that correct plant has being isolated	Site inspection report Incident report	Departmental Managers & Employees	OHS Act 85 of 1993 and its Regulations Occupational Hygiene Programm 200-93129	2025/08/08	In-progress & continuous									
		85	Direct eye contact with arc welding	85.1	Loss of eye vision	Health	1. Employee does not have the correct welding PPE	Employees Visitors	Authorise Responsible Person (RP) Responsible managers Responsible supervisor Occupational Hygienist	Daily 24hrs	Lost time injuries	1. Correct welding or cutting PPE to be worn (Welding helmet, gloves, and apron)	4	B	III	Mostly effective	The boilermaker or welder to have the correct welding PPE before starting with the works	Site inspection report Incident report	Departmental Managers & Employees	OHS Act 85 of 1993 and its Regulations Occupational Hygiene Programm 200-93129	2025/08/30	In-progress & continuous									
		86	Inadequate ablution facilities	86.1	1. Contact with human excreats 2. Unhygienic/ unpleasant inhalation of waste excretes	Health	1. Shortage of allocated facilities 2. Poor servicing of the facilities 3. Human excreats spills to lower levels 4. Use of undesignated areas	Employees Visitors	Outage Manager Responsible Managers	Daily 24hrs	Medical conditions	1. Efficient continous services 2. Servicing schedule 3. Proper planning to accommodate increase in manpower	3	D	II	Mostly ineffective	Induction Toolbox talks	Daily inspections Reporting in startup meetings	Outage Manager	OHS Act 85 of 1993 and its Regulations CR 30 b Facilities Reg 2	2025/08/31	In-progress & continuous									
Project management and supervision of welding activities	N	87	Fumes and gases generated during welding activities	87.1	Acute or Chronic Respiratory tract diseases	Health	1. Failure to implement or adhere to procedure. 2. Failure to install suitable curcuit breakers, 3. Incompetent operators, 4. Lack of training	Employees Visitors	Responsible Functional Managers (accountable) & Employees (responsible) Occupational Hygienist	Daily 3 hrs	Metal Fume Fever LTI	1. Training & awareness, 2. Occupational Health & Hygiene Inspection/survey.	4	B	III	Mostly effective	Supervision, Training & Awareness, Risk assessment, Hazardous Chemical Substances assessment, Engineering Controls and Respiratory Protection Equipment, Medical examination	Audits Reports Inspections Reports Incidents Reports	Departmental Managers & employees	OHS Act 85 of 1993 and its Regulations Occupational Hygiene Programm 200-93129	2025/08/21	In-progress & continuous									
Project management & supervision of welding activities in confined spaces, with insufficient ventilation	N	88	Excessive fumes and gases generated during the welding activities	88.1	Acute or Chronic Respiratory tract diseases	Health	1. Failure to implement or adhere to procedure. 2. Failure to install suitable curcuit breakers, 3. Incompetent operators, 4. Lack of training	Employees Visitors	Occupationa Health Practitioner Occupational Hygienist Responsible Functional Managers (accountable) & Employees (responsible)	Daily 3 hrs	Chemical Asphyxiation Metal Fume Fever Medical treatment and Dizziness	1. Training & awareness, 2. Occupational Health & Hygiene Inspection/survey.	4	B	III	Mostly effective	Legislation Supervision Training & Awareness Health Risk Assessment, Occupational Hygiene Inspections Hazardous chemical substances assessment, Engineering controls and Respiratory Protection Equipment, Medical Surveillance,	Audits Reports Inspections Reports Incidents Reports	Departmental Managers & employees	OHS Act 85 of 1993 and its Regulations Occupational Hygiene Programme 200-93129	2025/08/08	In-progress & continuous									



Occupational Health and Safety Baseline risk assessment template																													
Business/Operating unit:	Medupi Power Station Project							Department:	All Departments						Next Review Date (every 2 years):				Template identifier:	240-70044602									
Date:	17-May-24							Prepared by:	Risk Assessment Team in consultation with employees as per the attendance register					Authorised by:				Name: Zandi Shange				Signature:				Document Identifier			
																		Designation: General Manager								Revision number		5	
																		Date:								Revision date:		30-Apr-27	
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. <b>Note:</b> 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: - <b>Preventative Controls</b> (controls implemented to eliminate hazards or reduce the likelihood of the risk occurring), and - <b>Reactive Controls</b> (controls implemented to reduce the immediate impact of the risk occurring) <b>Elimination</b> <b>Substitution</b> <b>Engineering controls</b> <b>Administrative controls</b> <b>Personal protective equipment (PPE)</b> <b>NB:</b> The risk shall be evaluated, assessed and rated again once additional controls have been implemented and those				<b>RCE</b> Risk Control Effectiveness	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 legislative and/or Eskom requirements that prescribe 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 for 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)							
Project management and supervision of grinding and Steel cutting activities	N	89	Grinding steel, Cutting and Hammering leading to noise exposure	89.1	Exposure to excessive Noise ≥ 85 dB (A)	Health	1. Failure to implement or adhere to procedure. 2. Failure to install suitable curcuit breakers, 3. Incompetent operators, 4. Lack of training	Employees Visitors	Occ Health Practitioner Occupational Hygienist Responsible Functional Managers (accountable) & Employees (responsible)	Daily 5 hrs	Noise Induced Hearing Loss	1. Training & awareness, 2. Occupational Health & Hygiene Inspection/survey..	4	C	II	Mostly effective	Legislation Supervision Training & Awareness Health Risk Assessment, Occupational Hygiene Inspections, Noise assessment and Hearing Conservation Programme.	Audits Reports Inspections Reports Incidents Reports	Departmental Managers & employees	OHS Act 85, GSR 93M SHE spec 200-207219 sec 59	2025/08/21	In-progress & continuous							
Working in Areas with restricted movement and awkward posture	R	89	Manual Handling, Incorrect bending, Repetitive motions, Lifting of heavy materials	89.1	Musculoskeletal disorders (MSDs)	Health	1. Failure to implement or adhere to procedure. 2. Failure to install suitable curcuit breakers, 3. Incompetent operators, 4. Lack of training	Employees Employees with disabilities	Occupationa Health Practitioner Responsible Functional Managers (accountable) & Employees (responsible)	Daily 3 hrs	Medical Treatment Injury and LTI	1. Training & awareness, 2. Occupational Health & Hygiene . 3. Inspection/survey..	3	B	III	Mostly effective	Legislation Supervision Training and Awareness Risk assessment Occupational hygiene inspections and Ergonomic assessments	Audits Reports Inspections Reports Incidents Reports	Departmental Managers & employees	OHS Act 85 OF 1993 GSR 2 CR 6 & 7 Ergonomic Regulation	2025/08/08	In-progress & continuous							
Use of handed over equipments	R	90	Defective/Excessive usage of Lifting equipments (Hoist, Lifts, Winch, overhead cranes)sharing equipments	90	1. Panic due to passenger lift Malfunctioning 2. Free flow/ Uncontrolled movements of Lifting devices 3. Malfunctioning 4. Mechanical failure		1. Poor maintenance monitoring 2. Taking responsibility 3. Liability 4. Wear and tear	Employees Visitors	Gx & GC GE Construction manager Responsible discipline Manager	Daily 3 hrs	Property damage Injuries	1. Controlled remotes 2. Maintenance and service plan 3. Planned monitoring meeting 4. Statutory compliance 5. Communication 6. Increase of Crane inspections	4	D	I	Mostly ineffective	Awareness Planned inspections Displaying usage signs	Audits Inspection reports	Gx GM and GC GM	OHS Act 85 of 1993 Sec10 Driven Machinery Reg 18 Lift Esca and Passengers Conveyor Reg	2025/06/31	In-progress & continuous							
Workspace	R	91	Sharing of offices by Gc and Gx	91	1. Indecisive appointment of Cabins SHE representatives		1. Unavailability of Representative on statutory requirement compliance 2.	Employees Visitors	Gx & GC GE Construction manager Responsible discipline Manager	Daily 9 hrs	Unattended injuries	1. Coverage by neighbouring Cabins SHE Representative	2	B	IV	Mostly effective	Display names of ther cabin SHE persons Reporting to the	SHE Rep inspection reports Meetings	Gx GM and GC GM	OHS Act 85 OF 1993 Env Reg for Workplaces Facilities Regulations 4 (h) Hazardous Chem Subs Regulations 8 Lead Regulation 9	2025/06/31	In-progress & continuous							
Repair/breakdown works	N		One BU requesting another BU o repair defects		1. Incidents not investigated timeously 2. Non compliance to PSR	Safety	1. No written agreements between two divisions 2. Lack of accountability 3. No maintenance contracts 4. Unclear roles & responsibilities	Employees Visitors	Gx & GC GE Construction manager Responsible discipline Manager	Daily 9 hrs	Injuries	Agreement to be in writing	3	D	II	Mostly effective	Communication	Inspections Meetings	Gx GM and GC GM	OHS Act 85 OF 1993 32-95 Incident management procedure	2025/06/30	In-progress & continuous							
Office Environment: Administrative work; Office Furniture/Equipment; Work Ergonomics	R	91	Poor Ventilation	91.1	Acute respiratory Disease, Fatigue, Headaches, Irritation of the eyes, and Nasal congestion	Health	1. Failure to implement or adhere to procedure. 2. Failure to install suitable curcuit breakers, 3. Incompetent operators, 4. Lack of training	Employees Visitors Employees with disabilities	Occ Health Practitioner Occupational Hygienist Responsible Functional Managers (accountable) & Employees (responsible)	Daily 9 hrs	Medical Treatment and Increased absenteeism Building Sick Syndrome	1. Training & awareness, 2. Occupational Health & Hygiene Inspection/survey..	3	C	II	Mostly effective	Legislation standards Supervision, Training & awareness, Natural ventilation, Indoor air quality assessment and Occupational Hygiene Survey and Gas Monitoring Maintenance of air conditioners	Audits Reports Inspections Reports Incidents Reports	Departmental Managers & employees	OHS Act 85 OF 1993 Env Reg for Workplaces Facilities Regulations 4 (h) Hazardous Chem Subs Regulations 8 Lead Regulation 9 Asbestos Regulations 8 CR 6 (F) Regulation for Haz Biological Agents 15, 16 GSR 4 sec 3	2025/08/21	In-progress & continuous							
		92	Poor work design, poor lighting and increased visual demand might expose the employees to ergonomics	92.1	Eye strain Headache Back ache	Health	1. Failure to implement or adhere to procedure. 2. Failure to install suitable curcuit breakers, 3. Incompetent operators, 4. Lack of training	Employees	Occupational Hygienist Occ Health Practitioner Responsible Functional Managers (accountable) & Employees (responsible)	Daily 9 hrs	Irreversible health effects with permanent consequences	1. Training & awareness	4	B	III	Mostly effective	Legislation Training & awareness Air conditioning system, Extraction ventilation system, Occupational Health & Hygiene Inspection.	Audits Reports Inspections Reports Incidents Reports	Departmental Managers & employees	OHS Act 85 OF 1993 GSR 2 CR 6 & 7 Ergonomic Regulation 2019	2025/08/08	In-progress & continuous							
		93	Poor Ergonomics	93.1	Musculoskeletal disorders (MSDs) or back pains	Health	1. Improperly adjusted workstations and chairs. 2. Frequent lifting. 3. Poor posture. 4. Awkward movements, especially if they are repetitive. 5. Using too much force, especially if it's done frequently	Employees	Occupational Hygienist Occ Health Practitioner Responsible Functional Managers (accountable) & Employees (responsible)	Daily 9 hrs	Occupational disease with reversible effects	1. Training & awareness, 2. Occupational Health & Hygiene Inspection/survey.. 3. Medical Surveillance	3	C	II	Fully effective	Legislation, (Occupational Health and Safety Act (85 1993) Ergonomics Regulations, 2019) Training and Awareness, Risk assessment, Ergonomic assessment and Occupational hygiene inspection.	Audits Reports Inspections Reports Incidents Reports	Departmental Managers & employees	OHS Act 85 OF 1993 GSR 2 CR 6 & 7 Ergonomic Regulation	2025/08/30	In-progress & continuous							
		94	Air Conditioners	94.1	Colds or Fever	Health	1. Heat & Coldness, 2. Dirty filters of the air conditioners	Employees	Occupational Hygienist Responsible Functional Managers (accountable) & Employees (responsible)	Daily 5 hrs	Occupational disease	1. Constant checks, 2. Adjust air conditioners whenever the weather conditions change. 3. Maintenance of the air conditioners.	2	B	IV	Mostly effective	1. Heat & Cold stress monitoring	Audits Reports Inspections Reports Incidents Reports	Departmental Managers & employees	OHS Act 85 OF 1993	2025/08/21	In-progress & continuous							
		95	Laptop	95.1	Vision Problems. Repetitive Stress Injuries. Headaches	Health	1. Brightness. 2. Long exposure to the laptop	Employees	Occupational Hygienist Responsible Functional Managers (accountable) & Employees (responsible)	Daily 9 hrs	Occupational disease with irreversible effects	1. Training & awareness, 2. Occupational Health & Hygiene Inspection/survey..	3	C	II	Fully effective	1. Eskom employee assistance program . 2. Equipment calibration program implimented	Audits Reports Inspections Reports Incidents Reports	Departmental Managers & employees	OHS Act 85 OF 1993 Ergonomic Regulation	2025/08/08	In-progress & continuous							
		96	Smoking in undesignated areas	96.1	1. Exposing non-smokers to secondary smoke	Safety	1. Ignorance of following the rules (Behavioural issue) 2. Insufficient designated smoking areas	Employees Expectant Females People living with Disabilities Visitors	Responsible Functional Managers (accountable) & Employees (responsible)	Daily 9 hrs	Health issues Property damage	1. Designated smoking areas provided	1	C	III	Mostly effective	Training and awareness on smoking	Audits Reports Inspections Reports Incidents Reports	Departmental Managers & Employees		2025/08/21	In-progress & continuous							
Substance abuse	R	97	Intoxicated employees (operators)	96.1	Poor judgment which may lead to injuries Mental instability	Health	1. Poor judgement	Employees Expectant Females Breastfeeding Mothers People living with Disabilities Visitors	Occ Health Practitioner Responsible Functional Managers (accountable) & Employees (responsible)	Daily 9 hrs	Lost-time Injury	1. Training of personnel on proper use, 2. Security access control procedure in place 3. Random alcohol testing 4. SHE induction 5. Eskom life-saving rule 6. Awareness on substance abuse 7. Eskom employee assistance program . 8. Equipment calibration program implimented	4	B	III	Mostly effective	1. Eskom employee assistance program . 2. Equipment calibration program implimented	Inspections Reports	Departmental Managers & Employees	OHS Act 85 of 1993 General Safety Reg 2	2025/08/30	In-progress & continuous							
Project management and supervision of drilling and blasting at Concrete Mixing Plants and concrete works	N	98	Crystalline Silica Exposure	98.1	Devlopoment of Acute or Chronic Silicosis	Health	1. Failure to implement or adhere to procedure. 2. Failure to install suitable curcuit breakers, 3. Incompetent operators, 4. Lack of training	Employees Visitors	Occ Health Practitioner Responsible Functional Managers (accountable) & Employees (responsible)	Daily 3 hrs	Silicosis	1. Training & awareness, 2. Occupational Health & Hygiene Inspection/survey..	5	C	II	Mostly effective	1.Legislation, 2. Training & awareness, 3. Risk assessment, 4.Crystalline silica dust surveys, Dust suppression, and Enclosed Cabins for plant/equipment	Audits Reports Inspections Reports Incidents Reports	Departmental Managers & employees	OHS Act 85 of 1993 and its Regulations Occupational Hygiene Programmm 200-53129	2025/08/08	In-progress & continuous							

Occupational Health and Safety Baseline risk assessment template																										
Business/Operating unit:		Medupi Power Station Project							Department:		All Departments								Next Review Date (every 2 years):				Template identifier:		240-70044602	
Date:		17-May-24							Prepared by:		Risk Assessment Team in consultation with employees as per the attendance register			Authorised by:			Name: Zandi Shange			Signature:			Document Identifier			
																	Designation: General Manager						Revision number		5	
																	Date:						Revision date:		30-Apr-27	
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				RCE Risk Control Effectiveness	Additional Controls or Tasks Aimed at Improving Existing Controls	Monitoring Mechanisms	Control Owner	Legal and Other Requirements	Target Date	Current Status	Integrated Risk Management (IRM) reference number			
List specific activities to be performed taking into consideration the equipment to be used, the personnel involved in the task.	Indicate R or N 1. Routine activities and situations create hazards through day-to-day operations and normal work activities; 2. Non-routine activities and situations are occasional or unplanned;	#	Anything with potential to cause of harm. <b>Note:</b> 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: - <b>Preventative Controls</b> (controls implemented to eliminate hazards or reduce the likelihood of the risk occurring), and - <b>Reactive Controls</b> (controls implemented to reduce the immediate impact of the risk occurring) <b>Elimination</b> <b>Substitution</b> <b>Engineering controls</b> <b>Administrative controls</b> <b>Personal protective equipment (PPE)</b>  <b>NB:</b> The risk shall be evaluated, assessed and rated again once additional controls have been implemented and those	Consequences	Likelihood	Risk Priority Rating			Person allocated the responsibility for implementing the agreed controls (if applicable)	Where relevant, list the relevant legislative and/or Ealom requirements that prescribe 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 for 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)				
Project management and supervision of blasting operations	N	99	Blasting	99.1	Exposure to Hazardous gasses, fumes and dust	Health	1. Not wearing proper respiratory equipment, 2. Poor ventilation, 3. None adherence to re-entry times, 4.Blasting notification not communicated	Employees Visitors	Occupational Hygienist Responsible Functional Managers (accountable) & Employees (responsible)	Once off (infrequent & adhoc basis)	1. Fatality, 2. Severe injuries,	1. Legislation, 2. Standards & Procedures, 3. Supervision, 4. Engineering controls, 5. PPE, 6. Medical screening,	5	B	II	Mostly effective	1. Signage around blasting parameters, 2. Standards & Procedures, 3. Supervision, 4. Engineering controls, 5. PPE, 6. Medical screening, 3.Locking the gate of blasting site/area. 4. Awareness	Audits Reports Inspections Reports Incidents Reports	Departmental Managers & Employees	Medupi SHE Spec 71 OHS Act 85 of 1993 Explosives Regulation13 of the OHS Act Occupational Hygiene Programm 200-93129	2025/08/30	In-progress & continuos				
Construction activities in poorly lit areas (Cable tunnels, confined spaces, Substations and Corridors	N	100	Working in areas with subliminal illumination levels	100.1	Eye strain	Health	1. Failure to implement or adhere to procedure, 2. Failure to install suitable curcuit breakers, 3. Incompetent operators, 4. Lack of training	Employees	Occupational Hygienist Responsible Functional Managers (accountable) & Employees (responsible)	Daily 3 hrs	Medical Treatment & Increased absenteeism	1. Training & awareness, 2. Occupational Health & Hygiene Inspection/survey.	3	C	II	Mostly effective	Legislation, Training & awareness, Risk assessment, Occupational hygiene inspections and assessments, Day & Emergency lights.	Audits Reports Inspections Reports Incidents Reports	Departmental Managers & employees	OHS Act 85 OF 1993 GSR 2 CR 6 & 7 Env Reg 3 & 4	2025/08/08	In-progress & continuos				
Maintenance of Air conditioning Units	N	101	Poorly maintained ventilation systems and stagnant water	101.1	Hazardous Biological Adents: Legionella	Health	1. Failure to implement or adhere to procedure, 2. Failure to install suitable curcuit breakers, 3. Incompetent operators, 4. Lack of training	Employees	Occupational Hygienist Responsible Functional Managers (accountable) & Employees (responsible)	Daily 3 hrs	Irreversible health effects with permanent consequences	1. Training & awareness, 2. Occupational Health & Hygiene Inspection/survey.	4	C	II	Mostly effective	Legislation Training & awareness Risk assessment, Air conditioning system & Extraction ventilation system maintenance and Occupational hygiene inspections	Audits Reports Inspections Reports Incidents Reports	Departmental Managers & employees	Env Reg 2,4 & 5 CR 26	2025/08/30	In-progress & continuos				
Confined spaces work and Tunnels and substation works	R	102	Poor Ventilation	102.1	Hazardous Biological Adents: Legionella	Health	1. Failure to implement or adhere to procedure, 2. Failure to install suitable curcuit breakers, 3. Incompetent operators, 4. Lack of training	Employees	Occupational Hygienist Responsible Functional Managers (accountable) & Employees (responsible)	Daily 3 hrs	Occupational disease with reversible effects	1. Training & awareness, 2. Occupational Health & Hygiene Inspection/survey.	3	C	II	Mostly effective	Legislation Training & awareness Risk assessment, Air conditioning system & Extraction ventilation system maintenance and Occupational hygiene inspections	Audits Reports Inspections Reports Incidents Reports	Departmental Managers & employees	Env Reg 4, 5 Gen Safety Reg 5	2025/08/08	In-progress & continuos				
Driving/Operation of Plant/Equipment and Manual Handling	R	103	Poor ergonomically designed work station	103.1	Musculoskeletal Disorders (MSDs)	Health	1. Failure to implement or adhere to procedure, 2. Failure to install suitable curcuit breakers, 3. Incompetent operators, 4. Lack of training	Employees Employees with disabilities	Occupational Hygienist Responsible Functional Managers (accountable) & Employees (responsible)	Daily 3 hrs	Occupational disease with reversible effects	1. Training & awareness, 2. Occupational Health & Hygiene Inspection/survey.	3	C	II	Mostly effective	Legislation, Training & Awareness, Risk assessment, Ergonomic assessment and Occupational hygiene inspection.	Audits Reports Inspections Reports Incidents Reports	Departmental Managers & employees	OHS Act 85 OF 1993 GSR 2 CR 6 & 7 Ergonomic Regulation 2019	2025/08/30	In-progress & continuos				
Outdoor Manual Construction Activities: Temperature Extremes	N	104	Performing work outdoors under extreme environmental conditions	104.1	Heat Stress; Cold Stress	Health	1. Failure to implement or adhere to procedure, 2. Failure to install suitable curcuit breakers, 3. Incompetent operators, 4. Lack of training	Employees Visitors	Occupational Hygienist Occ Health Practitioner Responsible Functional Managers (accountable) & Employees (responsible)	Daily 3 hrs	Occupational disease with reversible effects	1. Training & awareness, 2. Occupational Health & Hygiene Inspection/survey.	3	C	II	Mostly effective	legislation, Training & Awareness, Risk assessment, Occupational hygiene inspection and surveys (Thermal stress assessment)	Audits Reports Inspections Reports Incidents Reports	Departmental Managers & employees	OHS Act 85 1993, Env Reg 2 Gen Safety Reg.	2025/08/08	In-progress & continuos				
				104.2	Ultra Violet Radiation Exposure	Health	1. Failure to implement or adhere to procedure, 2. Failure to install suitable curcuit breakers, 3. Incompetent operators, 4. Lack of training	Employees Expectant employees Breast feeding mothers	Occupational Hygienist Radiation Officer Responsible Functional Managers (accountable) & Employees (responsible)	Daily 3hrs	Occupational disease with reversible effects	1. Training & awareness, 2. Occupational Health & Hygiene Inspection/survey.	3	C	II	Mostly effective	legislation, Training & Awareness, Risk assessment, Occupational hygiene inspection and surveys	Audits Reports Inspections Reports Incidents Reports	Departmental Managers & employees	OHS Act 85 1993, Env Reg 2 Gen Safety Reg.	2025/08/08	In-progress & continuos				
Project management and supervision of cement works: mixing and cement breakage activities	N	105	Skin and eyes irritation	105.1	Skin Dermatitis and Temporary Blindness	Health	1. Failure to implement or adhere to procedure, 2. Failure to install suitable curcuit breakers, 3. Incompetent operators, 4. Lack of training	Employees	Occupational Hygienist Responsible Functional Managers (accountable) & Employees (responsible)	Daily 3 hrs	Occupational disease with reversible effects	1. Training & awareness, 2. Occupational Health & Hygiene Inspection/survey.	3	C	II	Mostly effective	Training & awareness Monthly inspection, and Legislation.	Audits Reports Inspections Reports Incidents Reports	Departmental Managers & employees	Medupi SHE Spec 71 CR 14, OHS Act 85 of 1993 Hazardous Biological Agent Reg Env Reg 6	2025/08/21	In-progress & continuos				
Driving, Grinding, Jack Hammering and Hand Drilling	R	106	Segmental and Whole Body Vibration	106.1	Vibration White Finger (VWF), Hand Arm Vibration Syndrome (HAVS) and Whole Body Vibration	Health	1. Failure to implement or adhere to procedure, 2. Failure to install suitable curcuit breakers, 3. Incompetent operators, 4. Lack of training	Employees	Occupational Hygienist Responsible Functional Managers (accountable) & Employees (responsible)	Daily 3hrs	Occupational disease with reversible effects	1. Training & awareness, 2. Occupational Health & Hygiene Inspection/survey.	3	C	II	Mostly effective	Training and awareness Risk assessment Occupational hygiene inspection Maintenance of equipment	Audits Reports Inspections Reports Incidents Reports	Departmental Managers & employees	OHS Act 85 of 1993 and its Regulations Occupational Hygiene Programm 200-93129	2025/08/08	In-progress & continuos				
Project management and supervision of X-ray activities	R	107	Exposure to radiation during testing of material and surface by radioactive material	107.1	Over-exposure to radiation that might lead to development of cancers of the body parts	Health	1. Failure to implement or adhere to procedure, 2. Failure to install suitable curcuit breakers, 3. Incompetent operators, 4. Lack of training	Employees Expectant employees Breast feeding mothers Visitors	Radiation Officer Responsible Functional Managers (accountable) & Employees (responsible)	Day 3hrs	Occupational Disease with reversible effects	1. Training & awareness, 2. Occupational Health & Hygiene Inspection/survey.	4	C	II	Mostly effective	Safe work procedures Training & awareness, Legislation and standards, Barricading Supervision.	Audits Reports Inspections Reports Incidents Reports	Departmental Managers & employees	Medupi SHE Spec 69 OHS Act 85 of 1993 and Regs Code of practice for Industrial Radiology IRCP91- 1 200-20131 Industrial Radiography Procedure Rev	2025/08/21	In-progress & continuos				
Quality assurance testing using Radioactive Isotopes	N	108	Ionising radiclion sources used to check integrity and strength of welded steel.	108.1	Mutation Cancer Death Damage to internal Organs Infertility Leukaemia and Burns	Health	1. Failure to implement or adhere to procedure, 2. Failure to install suitable curcuit breakers, 3. Incompetent operators, 4. Lack of training	Employees Expectant employees Breast feeding mothers Visitors	Responsible Functional Managers (accountable) & Employees (responsible)	Daily 3hrs	Fatality	1. Training & awareness, 2. Occupational Health & Hygiene Inspection/survey.	5	C	II	Mostly effective	Training & awareness, risk assessment, Legislation and standards, Barricading Supervision.	Audits Reports Inspections Reports Incidents Reports	Departmental Managers & employees	Medupi SHE Spec 69 OHS Act 85 of 1993 and Regs Code of practice for Industrial Radiology IRCP91- 1 200-20131 Industrial Radiography Procedure	2025/08/08	In-progress & continuos				
Project management and supervision of steel and strucure painting and maintenance	R	109	Volatile Organic Compounds liberated from the paint during the painting activities	109.1	Acute of Chronic Respiratory disease Irritation of the skin and eyes Dizziness/Fainting	Health	1. Failure to implement or adhere to procedure, 2. Failure to install suitable curcuit breakers, 3. Incompetent operators, 4. Lack of training	Employees	Responsible Functional Managers (accountable) & Employees (responsible)	Daily 3 hrs	Occupational disease with reversible effects	1. Training & awareness, 2. Occupational Health & Hygiene Inspection/survey.	3	C	II	Mostly effective	Legislation, Training & awareness, Risk assessment, Occupational hygiene inspections and assessments.	Audits Reports Inspections Reports Incidents Reports	Departmental Managers & employees	OHS Act 85 of 1993, Medupi SHE Spec 52, Hazardous Chem substances	2025/08/21	In-progress & continuos				
Emergency Treatment of injured employees, First aid treatment and day to day Medical Treatment	N	110	Injured employees who are carriers of diseases and contact with body fluids	110.1	Hazardous Biological Agents: Hepatitis A, B and C	Health	1. Failure to implement or adhere to procedure, 2. Failure to install suitable curcuit breakers, 3. Incompetent operators, 4. Lack of training	Employees	Occupational Health Practitioner Responsible Functional Managers (accountable) & Employees (responsible)	Daily 2 hrs	Irreversible health effects with permanent consequences	1. Training & awareness, 2. Occupational Health & Hygiene Inspection/survey.	4	C	II	Mostly effective	Training and awareness, risk assessment, Extraction ventilation air conditioning system, Temperature monitoring, Disinfection & Hand sanitisers	Audits Reports Inspections Reports Incidents Reports	Departmental Managers & employees	OHS Act 85 of 1993 and its Regulations Occupational Hygiene Programm 200-93129 Hazardous Biological Agents Reg	2025/08/08	In-progress & continuos				

Occupational Health and Safety Baseline risk assessment template																											
Business/Operating unit:		Medupi Power Station Project							Department:		All Departments									Next Review Date (every 2 years):				Template identifier:		240-70044602	
Date:		17-May-24							Prepared by:		Risk Assessment Team in consultation with employees as per the attendance register		Authorised by:		Name: Zandi Shange		Signature:				Document Identifier						
													Designation: General Manager		Revision number						5						
													Date:		Revision date:						30-Apr-27						
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			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. <b>Note:</b> 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: - <b>Preventative Controls</b> (controls implemented to eliminate hazards or reduce the likelihood of the risk occurring), and - <b>Reactive Controls</b> (controls implemented to reduce the immediate impact of the risk occurring) <b>Elimination</b> <b>Substitution</b> <b>Engineering controls</b> <b>Administrative controls</b> <b>Personal protective equipment (PPE)</b> <b>NB:</b> The risk shall be evaluated, assessed and rated again once additional controls have been implemented and those	Consequences	Likelihood			<b>RCE</b> Risk Control Effectiveness	- 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) <b>Elimination</b> <b>Substitution</b> <b>Engineering controls</b> <b>Administrative controls</b> <b>Personal protective equipment (PPE)</b> <b>NB:</b> The risk shall be evaluated, assessed and rated again once additional controls have been implemented and those	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 legislative and or Ealom requirements that prescribe 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 for 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)			
		111	Injured employees that are infected with blood borne microorganisms	111.1	Human Immuno Virus (HIV) & Acquired Immuno Deficiency Syndrome (AIDS)	Health	1. Failure to implement or adhere to procedure. 2. Failure to install suitable curcuit breakers, 3. Incompetent operators, 4. Lack of training	Employees Visitors	Occupational Health Practitioner Responsible Functional Managers (accountable) & Employees (responsible)r	Daily 2 hrs	Irreversible health effects with permanent consequences	1. Training & awareness, 2. Occupational Health & Hygiene Inspection.	4	C	II	Mostly effective	Training and awareness, risk assessment, Extraction ventilation air conditioning system, Temperature monitoring, Disinfection & Hand sanitisers	Audits Reports Inspections Reports Incidents Reports	Departmental Managers & employees	OHS Act 85 of 1993 and its Regulations Occupational Hygiene Programm -200-93129 Hazardous Biological Agents Reg	2025/08/30	In-progress & continuos					
		112	Injured employees that are carriers of air borne microorganisms	112.1	Mycobacterium tuberculosis	Health	1. Failure to implement or adhere to procedure. 2. Failure to install suitable curcuit breakers, 3. Incompetent operators, 4. Lack of training	Employees Visitors	Occupational Health Practitioner Responsible Functional Managers (accountable) & Employees (responsible)r	Daily 2 hrs	Irreversible health effects with permanent consequences	1. Training & awareness, 2. Occupational Health & Hygiene Inspection.	4	C	II	Mostly effective	Training and awareness, risk assessment, Extraction ventilation air conditioning system, Temperature monitoring, Disinfection & Hand sanitisers	Audits Reports Inspections Reports Incidents Reports	Departmental Managers & employees	OHS Act 85 of 1993 and its Regulations Occupational Hygiene Programm -200-93129 Hazardous Biological Agents Reg	2025/08/21	In-progress & continuos					
Kitchen facilities		113	Handling and preparation of food	113.1	Transmission (flies, lice, fleas, cockroaches, or rodents) leading to bacterial or parasitic infections of various organs, toxic effects, and various diseases.	Health	1. Poor Hygiene measures	Employees Reciepients	Facility Manager	Daily	1. Fatalities 2. Lost-time Injuries 3. Medical 4. First Aid 5. Multiple fatalities	1. Cleaning tasks are conducted on a regular basis following a fixed schedule, clean after preparation of food, 2. Disinfectants and detergents are used to clean surfaces and equipment. 3. Surfaces of the Food Preparation Areas' material are made of stainless steel thus allowing for easy cleaning	6	B	I	Mostly effective	1. Awareness 2. Proper labelling 4. Signs were not displayed to remind employees to clean thoroughly	Audits Reports Inspections Reports Swab samples are conducted on a quarterly basis	Departmental Managers & employees	Hazardous Biological Agent	2025/08/08	In-progress & continuos					
		114	Pest infestation	114.1	Direct and indirect contact with human beings	Health	1. Poor Hygiene measures	Employees Visitors Reciepients	Facility Manager	Daily	1. Fatalities 2. Lost-time Injuries 3. Medical 4. First Aid	1. Cleaning tasks are conducted on a regular basis following a fixed schedule and use os cleaning disinfected 2. Cleaning awareness 3. Risk assessment 4. Insect-control lamps were provided to reduce the number of vector-carrying agents. 5. Rodent bait stations were placed in strategic locations outside of the Food Preparation Area. 6. Pest bait stations specifically for cockroaches must be stationed in corner areas of the kitchen floors to trap cockroaches.	3	C	II	Mostly effective	1. Awareness 2. Proper labelling 3. Proper PPE	Audits Reports Inspections Reports	Departmental Managers & employees	Hazurdours Biological Agent Regulation	2025/08/30	In-progress & continuos					
		115	Hazordous Biological Agent	115.1	Direct and indirect contact with human beings	Health	1. Poor Storage and handling 2. Poor personal hygiene	Employees Visitors Reciepients	Facility Manager	Daily	1. Fatalities 2. Lost-time Injuries 3. Medical 4. First Aid	1. Safe work procedures 2. Vaccination 3. Awareness 4. Personal hygiene	4	B	III	Mostly effective	1. PPE usage (gloves wears rubber aprons) 2. Induction 3. Awareness	Audits Reports Inspections Reports	Departmental Managers & employees	Hazurdours Biological Agent Regulation	2025/08/21	In-progress & continuos					
Housing		116	Sanitation	116.1	Insufficient /Defective Sanitation	Health	1. Lack of provision of facilities 2. Poor Hygiene measures	Employees Visitors Residents	Facility Manager	Daily	Lost -time injuries Medical First Aid	1. Provision of sufficient abluition facilities 2. Scheduled cleaning available 3. Health awareness 4. Maintenance contract in place 5. Ventilation 6. Surveys done	3	C	II	Mostly effective	1. Induction 2. Awareness	Inspections Audits	Departmental Managers & employees	Facilities Regulation	2025/08/08	In-progress & continuos					
Working at Hybrid		117	Environmental health Hazards	117.1	Poor Lighting	Health	1. Insufficient light from broken and not replaced 2. Using the light bulb with low Lux	Employee	Employee	Daily	1. Lost-time Injuries 2. Medical 3. First Aid 4. Occupational Health disease	1. Sufficient lighting 2. Light bulbs maintanance	2	C	III	Mostly effective	1. Awareness	Audits Reports Inspections Reports	Employee	Enviromental Regulation	2025/08/30	In-progress & continuos					
				117.2	Poor Ventilation	Health	1. Poor circulation of air flow either naturally or mechanical	Employee	Employee	Daily	1. Lost-time Injuries 2. Medical 3. First Aid 4. Occupational Health disease	1. Sufficient thermal room temperature 2. Door openings to allow indoor air flow	2	C	III	Mostly effective	1. Awareness	Audits Reports Inspections Reports	Employee	Enviromental Regulation	2025/08/21	In-progress & continuos					
				117.3	Nonsense noise	Health	1. High noice from sound system from in house or neighbours	Employee	Employee	Daily	1. Lost-time Injuries 2. Medical 3. First Aid 4. Occupational Health disease	1. Keep noice levels low	2	C	III	Mostly effective	1. Awareness	Audits Reports Inspections Reports	Employee	Enviromental Regulation	2025/08/08	In-progress & continuos					
		118	Distraction/ Disturbance	118.1	Other household and family members	Health	1. Social issues 2. Surrounding campansioanate in the house 3. Family responsibilities	Employee	Employee	Daily	1. Lost-time Injuries 2. Medical 3. First Aid 4. Occupational Health disease	1. Keeping your work space closed 2. Nofly other occupance that you are working 3. Ignore the house activities	3	B	III	Mostly effective	1. Awareness	Audits Reports Inspections Reports	Employee	Occ Health and Safety Act 85 of 1993	2025/08/08	In-progress & continuos					