

Occupational Health and Safety Baseline risk assessment template										
Business/Operating unit: Komati Power Station-Auxillary Engineering and Maintenance								Next Review Date (every 2 years):	Template identifier:	
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Refer to Occupational Health and Safety Risk assessment procedure 32-520										
List activity	Hazard Identification	Associated risk	Risk type	What are the possible consequences?	Existing Controls				Control Owner	Legal and Other Requirements
List specific activities to be performed taking into consideration the equipment to be used, the personnel involved in the task.	Anything with potential to cause of harm. Note: A hazard can pose more than one risk.	A chance that injury, ill health or damage could occur as a result of uncontrolled hazard.	Safety or health	Consider the worse case scenario without controls?	Include: - <u>Preventative Controls</u> (controls implemented to eliminate hazards or reduce the likelihood of the risk occurring), and - <u>Reactive Controls</u> (controls implemented to reduce the immediate impact of the risk occurring) Elimination Substitution Engineering controls Administrative controls Personal protective equipment (PPE)	Consequence	Likelihood	Risk Priority Rating	RCE Risk Control Effectiveness	Person allocated the responsibility for implementing the agreed controls
Service provider Commuting to work (Daily) -Routine Activity	Vehicle usage on public Road (face with poor road conditions; trucks)	Possibility for involving in motor vehicle accident with third party	Safety	Fatal injuries	Awareness of the hazard; Competent operators with clean bill of health to operate Employer vehicle; strict application and conformance to Fatigue management procedure; Vehicle Safety Procedure; Only road worthy vehicle to be utilised; Vehicle maintenance program in place; Pre and post trip vehicle inspection procedure	6	C	I	Mostly effective	Employer or Site Manager
				Serious injuries (Broken limbs or damaged spinal cord)		4	C	II	Mostly effective	
Physical Vehicle inspection -Routine Activity	Exposure to hazardous chemical Agents (Diesel fumes/Petrol)	Possible inhalation of fuel fumes while conducting inspection particularly within confine space such close garage	Health	Possible Lung Cancer	Awareness and Training; Vehicles to be inspected in the open space to allow natural air flow to dilute particulates; Vehicle maintenance programs to be adhered to	4	C	II	Fully effective	Site manager or Supervisor

	Rolling over of the vehicle while conducting inspection	Vehicle running over or caught between the vehicle and hard surface	Safety	Could result in fatal injuries	Awareness and training; Competent driver ; wheel movement choke block usage; Road worthy vehicles	5	B	II	Fully effective	Site manager or Supervisor	OHS Act; GS REgs, GA Regs;COID Act,NRT Act;Inquest Act; ISO 45001:2018
				serious injuries (Fractures)		3	C	II	Mostly effective	Site manager or Supervisor	OHS Act; GS REgs, GA Regs;COID Act,NRT Act; HCA Regs;ISO 45001:2018
Driving in unfavourable weather conditions (Wet, Mist/fog/heavy rain)-Non Routine activities (depending on season of the year)	Vehicle usage on poor road conditions	Possibility of either involving in lone accident or with other vehicles	Safety	Fatal injuries	Awareness of the hazard; Competent operators with clean bill of health to operate Employer vehicle; strict application and conformance to Fatigue management procedure; Vehicle Safety Procedure; Only road worthy vehicle to be utilised; Vehicle maintenance program in place; Pre and post trip vehicle inspection procedure; No Employer vehicle is allowed to operate in unfavourable conditions (Heavy rain/misty/fog conditions)	5	C	II	Mostly effective	Site manager or Supervisor	OHS Act; GARs, GARs;COID Act,NRT Act; AARTO Act; Inquest Act;RAF Act;ISO 45001:2018
				Injuries (amputations or disabling injuries)		4	C	II	Mostly effective	Site manager or Supervisor	OHS Act; GARs, GARs;COID Act,NRT Act; AARTO Act; RAF Act;ISO 45001:2018
		Knocking down pedestrian(s)		Fatal Injuries		5	B	II	Mostly effective	Site manager or Supervisor	OHS Act; GARs, GARs;COID Act,NRT Act; AARTO Act; Inquest Act;RAF Act;ISO 45001:2018
Conducting meetings, including morning briefs of any sort of meeting- Routine onsite	Poor Indoor air quality due number of personal in office/meeting space with possible exposure to biological agent	possibly exposed to viruses (SARS-COV-2)	Health	Fatality	Awareness and training; Prophylaxis (Vaccination); Personal Hygiene-washing hands or sanitising; avoiding large number meetings; wearing of respirator(s); Wellness program, Make use either of Mechanical ventilation (HVAC System) or natural ventilation(Opening of windows and doors); Combination of Air-conditioning system and natural ventilation; Limitation to meeting time frame (as short as possible)	5	B	II	Mostly effective	Site manager or Supervisor	
				COVID-19		3	C	II	Mostly effective	Site manager or Supervisor	
				Psychological impact		3	C	II	Mostly effective	Site manager or Supervisor	
				Long term COVID-19		3	C	II	Mostly effective	Site manager or Supervisor	

		Possibly exposed to Tuberculosis bacterium	Health	Tuberculosis (TB)		3	C	II	Mostly effective	Site manager or Supervisor	OHS Act; GARs, GARs;COID Act,HBA Regs; DoEL Code of Practice: Managing COVID-19 virus at workplace; ISO 45001:2018; WE Regs;F Regs;ASHRAE guidelines
	Poor illumination level	Exposed to proof lighting level	Health	Eye strains or myopia	Awareness of the hazard; Lighting maintenance in place; Defect system for out of service conditions	4	C	II	Mostly effective	Site manager or Supervisor	OHS Act; GARs, GARs;COID Act; ISO 45001:2018;WE Regs; SANS 10400-A; SANS 10114
	Poor Indoor Air quality due to possible VOC's	Exposure to indoor air contaminants	Health	Irritation to chronic obstructive pulmonary diseases	Awareness and training in respect to the hazard; Make use either of Mechanical ventilation (HVAC System) or natural ventilation(Opening of windows and doors); Combination of Air-conditioning system and natural ventilation; Limitation to meeting time frame (as short as possible)	3	C	II	Mostly effective	Site manager or Supervisor	OHS Act; GARs, GARs;COID Act,HBA Regs; ISO 45001:2018; WE Regs;ASHRAE guidelines
	Exposed to ergonomics risk -Working space not Ergonomically designed	Possible Ergonomics risks due to work space setting with bad posture	Health	Musculoskeletal impact-muscle strains	Awareness and training about the risk; Correct posture to maintain while seating and standing; Ergonomically designed chairs, workspace design to be ergonomically friendly ; Prohibition on long standing	3	C	II	Mostly effective	Site manager or Supervisor	OHS Act; GARs, GARs;COID Act,E Regs; ISO 45001:2018; F Regs; EW Regs; SANS 10440-A;SANS 10114;ASHRAE Guidelines
		Possible prolong standing	Health	Cardiovascular health related conditions		4	C	II	Mostly effective	Site manager or Supervisor	
		Exposure to Occupational stress either due to workload, ventilation, lighting, indoor air quality	Health	Ergonomics related stress		2	C	III	Mostly effective	Site manager or Supervisor	
Compressors Servicing and maintenance work onsite (Komati Power Station)-Routine Maintenance and non-Routine Servicing		Equipment falling onto employees lower body part	Safety	Injuries (contusion)	Training and Awareness; Buddy system when loading or Off-loading; Wearing of toe steel safety Boots	3	C	II	Mostly effective	Site manager or Supervisor	OHS Act; GARs, GARs;COID Act,E Regs; ISO 45001:2018; F Regs; EW Regs
		Ergonomics-Awkward positioning of the body either overreaching when reaching for equipment in the vehicle	Health	Musculoskeletal issues (Back muscle strain)	Ergonomic training and awareness ; Usage buddy system when offloading equipment	3	C	II	Mostly effective	Site manager or Supervisor	OHS Act; GARs, GARs;COID Act,E Regs; ISO 45001:2018;

Off-Loading or Loading equipment into the vehicle or offloading such.	Uneven surface leading to trip and fall	Safety	Muscle strains(ankle or wrist)	Wearing of anti-static safety boots; Application of STAR principles in all activities; Maintenance contract to fix common facilities such as potholes, Training and awareness about the hazard; Signage to indicate possible hazards	3	C	II	Mostly effective	Site manager or Supervisor	OHS Act; GARs, GARs;COID Act,E Regs; ISO 45001:2018; F Regs; SANS 1186
	wet/muddy surface leading slip and fall	Safety	Muscle strains(ankle or wrist)	Wearing of anti-static safety boots; Application of STAR principles in all activities; Maintenance contract to fix common facilities such as potholes, Training and awareness about the hazard; Signage to indicate possible hazards	3	C	II	Mostly effective	Site manager or Supervisor	OHS Act; GARs, GARs;COID Act,E Regs; ISO 45001:2018; F Regs; SANS 1186
Contact with electrical connections	Possible exposure to electricity	Safety	Electrocution-Fatal injuries	Training and Awareness; Usage of Competent Technicians; Eskom Permit to be enforced at all times	5	C	II	Mostly effective	Site manager or Supervisor	OHS Act; GARs, GARs;COID Act;ISO 45001:2018; EI Regs;Inquest Act; Eskom PSR; Inquest Act
		Safety	Third degree burns (Electrical or thermal)		4	C	II	Mostly effective	Site manager or Supervisor	
		Health	Electrical shock(Heart problems)		3	C	II	Mostly effective	Site manager or Supervisor	
Exposure to noise above 85 dB(A) when entering and working within compressor house	Definite Exposure Noise in excess of occupational exposure limit	Health	Noise Induced Hearing Loss	Noise Health impact awareness; Enforcement of high noise reduction rating earplugs or ear muffs; Compressor house zone as a noise zone; advocate of wearing ear plugs and ear-muffs; usage of custom made hearing protection device with high attenuation factor; Inspection for any pipe leakages; Eskom permit to work system; reduction on exposure period	4	D	I	Mostly effective	Managing director and Site Manger	OHS Act; GARs, GARs;COID Act;ISO 45001:2018; NIHL Regs;EW Regs; Eskom PSR; SANS 10083;SANS 1186
		Health	High blood pressure		3	C	II	Mostly effective		
		Health	Schizophrenia		3	C	II	Mostly effective		
Exposure to hazardous Chemical Substances	Possible exposure Dust (Fly Ash)-inhalation	Health	Chronic Obstructive Pulmonary diseases	Training and awareness; Usage of respiratory protection device, wearing of safety goggles; usage of long sleeve coveralls; usage of butyl rubber gloves	4	C	II	Mostly effective	Site manager or Supervisor	OHS Act; GARs, GARs;COID Act;ISO 45001:2018; HCA Regs;EW Regs;
	Possible exposure Dust (Fly Ash)-foreign object into the eyes	Health	Eyes injuries		3	C	II	Mostly effective	Site manager or Supervisor	
	Possible skin contact with hydrocarbons	Health	Contact skin dermatitis		3	C	II	Mostly effective	Site manager or Supervisor	

			▪ ≥ 90% probability.								

Consequence criteria	
Consequence rating	Description
	Health and Safety
1	No injuries or health effects(near misses)
2	First-aid treatment case, and temporary discomfort case
3	Medical treatment case; occupational disease with reversible/non-permanent effect
4	Lost Time Injury. Irreversible health effects/occupational disease with permanent consequence
5	Fatality or life threatening health effects
6	Multiple fatalities

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