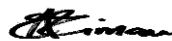
	Occupational Health and Safety Risk Assessment (HIRA) Breakdown, Maintenance & Repair Functions on Sub-Transmission lines- 44-132kV Under dead Work Condition			Template Identifier	240-43921898	Rev	7
				Document Identifier	240-70044602	Rev	1
				Review Date	May 2024		

DATE OF REVIEW	November 2023	DEVELOPED BY NAME	EA Eiman, M Ntshali	SIGNATURE		
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N O	ACTIVITY / PROCESS / OPERATIONS / PRODUCTS/SERVICES	SAFETY & HEALTH HAZARDS including ENVIRONMENTAL ASPECTS	SAFETY & HEALTH RISK including ENVIRONMENTAL IMPACT	RISK RATING BEFORE CONTROLS			CONTROL MEASURES (Eliminate, Substitute, Engineering controls, signage/warning/administrative, PPE)	RISK RATING AFTER CONTROLS		
				LIKELIHOOD	CONSEQUENCE	RISK INDEX		LIKELIHOOD	CONSEQUENCE	RISK INDEX
1	Driving	Not adhering to legislation.	Safety Risk							
		Speeding	Safety Risk							
2	Transporting material, equipment and people on the same vehicle	Vehicle involved in an accident	Safety Risk							
3	Fire prevention	Uncontrolled Fires	Safety Risk							
4	Manual handling	Overexertion, sprains and strains	Safety Risk							
		Incorrect lifting and handling procedures	Safety Risk							
5	Work areas / environment	Snakes, Insects etc	Safety Risk							
		Adverse Weather Conditions	Safety Risk							
		Loose gravel and stone leading to slips, trips and falls	Safety Risk							
		Entrance to work area located on congested street	Safety Risk							
6	Use of hand tools	Defective hand tools	Safety Risk							
		Incorrect tool for the job	Safety Risk							
7	Use of plant and machinery	Exposed moving parts of machinery	Safety Risk							
		Use of untrained operators	Safety Risk							
		Operators not medically fit	Safety Risk							
8	Use portable electrical tools	Defective electrical tool,	Safety Risk							
		Exposed cables and leads	Safety Risk							
		Trailing cables leading to trips and falls	Safety Risk							

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				LIKELIHOOD	CONSEQUENCE	RISK INDEX		LIKELIHOOD	CONSEQUENCE	RISK INDEX
9	Stacking and Storage	Incorrect procedure followed,	Safety Risk							
		Stacks collapsing	Safety Risk							
		Overexertion	Safety Risk							
		Walkways obstructed	Safety Risk							
		Lack of demarcation	Safety Risk							
10	Site establishment and de establishment	Use of lifting equipment	Safety Risk							
		Erecting temporary site offices, amenities and stores	Safety Risk							
		Manual handling	Safety Risk							
11	Off Loading Material	Use of truck mounted crane	Safety Risk							
		Working in close proximity of other existing live electrical circuits	Safety Risk							
		Lack of Work Plan and approval thereof	Safety Risk							
		Lack of / Improper Information, Training, PPE, Air monitoring	Safety Risk							
		Not using an approved panel transporting device or trolley.	Safety Risk							
		Lack of signage	Safety Risk							
		Work area not demarcated	Safety Risk							
12	Excavations	Improper use of hand tools	Safety Risk							
		Trenches collapsing	Safety Risk							
		Open trenches	Safety Risk							
		Underground services	Safety Risk							
13	JACKHAMMER - digging of holes, braking up of rocks or stones, pavements	Flying debris	Safety Risk							
		Diesel fumes and dust	Safety Risk							
		Defective Equipment	Safety Risk							
		Awkward posture	Safety Risk							
		Underground services	Safety Risk							
14	COMPRESSOR (diesel) - supply jackhammer with air	Hot compressor exhaust	Safety Risk							
		Heavy lifting	Safety Risk							
		Diesel fumes	Safety Risk							
		Explosion / or rupture of the compressor - Pipe bursting	Safety Risk							

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15	Generators (petrol)- Providing portable power for drilling and lighting at night / day time	Heavy lifting	Safety Risk							
		Petrol fumes	Safety Risk							
16	Compactors (diesel /petrol) - For compacting sand after laying cables/ planting poles	Vibration	Safety Risk							
		Diesel/Petrol Fumes, Dust	Safety Risk							
		Awkward posture	Safety Risk							
		Flying debris	Safety Risk							
		Heavy lifting	Safety Risk							
		Loading / off- loading of the equipment								
17	Vehicle Mounted cranes (diesel) loading and off- loading, equipment and planting of poles	Use of a vehicle mounted crane and truck	Safety Risk							
		Working in close proximity of other existing live electrical circuits	Safety Risk							
		Diesel fumes	Safety Risk							
		Defective slings and chains	Safety Risk							
18	Electrical/ Hydraulic and battery Drilling machine - drilling holes on wooden poles, steel and concrete walls	Noise	Safety Risk							
		Vibration	Safety Risk							
		Awkward Posture	Safety Risk							
		Using defective electrical drilling machines	Safety Risk							
19	Driving of heavy vehicles (code 14/10/08) for transporting of construction, normal day- to-day material. Pulling of trailer for the excavator /4X 4 LDV - utility vehicle, transporting of people/ material and responding to faults.	Driving on uneven terrain	Safety Risk							
		Long hours driving	Safety Risk							
		Diesel, Petrol and Oil spills	Safety Risk							
		Using Public Roads	Safety Risk							

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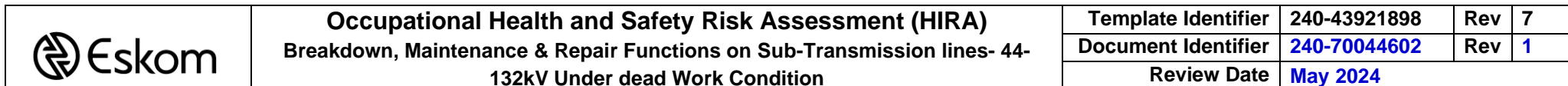
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20	Using of Big Bolt cutters- cutting of conductors/ steel bars,	Heavy equipment	Safety Risk							
		Falling Objects	Safety Risk							
		Cutting loose ends of conductor	Safety Risk							
21	Use of Lifting gear / Kitos/ Turfor	Falling of tools from elevated positions	Safety Risk							
		Heavy equipment.	Safety Risk							
		Equipment under tension/strain	Safety Risk							
		Defective lifting gears	Safety Risk							
		Breaking of conductors, slings and poles under tension.	Safety Risk							
22	Stringing and Tensioning of conductors	Physical material handling	Safety Risk							
		Equipment under tension/strain	Safety Risk							
		Repetitive motion	Safety Risk							
		Crossing Services	Safety Risk							
24	Inspection	Falls on uneven terrain	Safety Risk							
		Criminal activities	Safety Risk							
		Attacks from Wild animals	Safety Risk							
25	Stay Pull Testing (Testing of stay rod installation)	Equipment under tension/strain/Defective equipment	Safety Risk							
26	Install & Earth of CT/VT Junction Box	The use of fastening straps, side cutters and pliers	Safety Risk							
		The use of spanners or adjustable wrenches	Safety Risk							
		Working in close proximity of existing live electrical circuits	Safety Risk							
27	Working at heights	No Fall Protection Plan in place	Safety Risk							
		Not using FAS	Safety Risk							
28	Working with climbing irons	Working at a fall risk position	Safety Risk							
		Working in close proximity of existing live electrical circuits	Safety Risk							

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