

**Occupational Health and Safety Baseline risk assessment template**

<b>Business/Operating unit:</b>	<b>Kendal Power Station Ducting Maintenance Contract</b>	<b>Next Review Date (every 2 years):</b>	<b>Template identifier:</b>
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			Designation: Outage Controller	<b>Revision number:</b>	<b>1</b>
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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
Inspections and Repairs of Ductings during Planned and unplanned outages	Noise	Exposure to excessive noise	Health	Noise induced hearing loss	Communication (hazard awareness), Medical surveillance program, Training: General Safety, Personal protective (hearing),	Client/ Contractor	OHSA s8(2)(d), GMR 3, NIHL Reg 3-13, SANS 10083, procedure 32-136
	Dust	Exposure to excessive Ash dust	Health	Nasal irritation, Occupational disease, Respiratory disease	Plant maintenance, Communication (hazard awareness), Noise surveys, dust suppression, medical surveillance, Training: General Safety, PPE including respiratory protection	Client/ Contractor	OHS Act s13, OHSA s8(2)(b,c,d,e), GSR 2, procedure 32-136
	Dust	Exposure to excessive coal dust	Health	Nasal irritation, Occupational disease, Respiratory disease, silicosis	Risk Assessment, Plant maintenance, Communication (hazard awareness), dust suppression, Dust surveys, medical surveillance, Training: General Safety, PPE including respiratory protection	Client/ Contractor	OHS Act s13, OHSA s8(2)(b,c,d,e), GSR 2, procedure 32-136
	Dust	Exposure to insulation dust	Health	Nasal irritation, skin irritation	Risk assessment and hazard awareness. Contractor to keep clear area where insulation is being removed by insulation contractor. PPE	Client/ Contractor	OHS Act s13, OHSA s8(2)(b,c,d,e), GSR 2, procedure 32-136
	Illumination	Exposure to poorly illuminated areas / area with no light	safety/Health	slip trip and fall Injuries, eye strain	Risk Assessment, Plant maintenance, illumination survey, Communication (hazard awareness), use of portable lights for the ductings, PPE	Client/ Contractor	ERW, OHSA s8(2)(b,c,d,e), OHSA s13, procedure 32-136

	Heavy equipment and machinery such welding machines, 9 inch grinders, VRN plates and mild steel plates for patches and structural pipes	Employees handling heavy equipment and may have incorrect posture while handling equipment	Safety	back injuries, foot and hand injuries	Risk assessment, Use of well-maintained and suitable lifting equipment (certified) to eliminate the use lifting by hands where possible and must be done by competent personnel. Use of trolley to transport heavy equipment to and from worksite. Pre task risk assessment, lifting in teams when lifting by hands, Communication (hazard awareness), Medical surveillance program, Training: General Safety, Personal protective	Client/ Contractor	OHSA s8(2)(b,c,d,e),procedure 32-136
	Lifting machine and lifting tackle (slings, Chain block, welded lifting lug)	Lifting machines falling, equipment can fail resulting in the falling loads also whiplash from lifting tackle	Safety	head and body Injuries, Fatality, equipment damage	Use of suitable and certified lifting equipment, inspection before use, competent operator, Rigging study/ risk assessment. Lifting lug to be installed and inspected by competent person. Notices and signage, Barricading of work area to prevent unauthorised access. PPE	Client/ Contractor	OHS Act OHSA s8(2)(b,c,d,e), DMR 18
	Wet or slippery floor conditions	Exposure to wet / muddy areas in the plant slips and fall	safety	injury, contusion	Cleaning of plant. Communication (hazard awareness),Guarding/barriers/rails, Training: General Safety,PPE, signage	Client/ Contractor	OHSA s8(2)(b,d,e,f), ERW 6,SANS 10400, GRS 2,procedure 32-136
	Portable electrical tools (Grinders, drilling machines etc)	electrical contact or and fire resulting from Incorrect use of tools, use of defective tools, tools not insulated	Safety	Electrical Shock, Burns Injuries	Risk Assessment, Tools use by competent personnel, Use of electrical tools with dead man switch, Portable electrical tools maintenance and inspection, Communication (hazard awareness), Signage and notices, PPE	Client/ Contractor	OHSA s8(2)(b,d,e), EMR 10, GR 2
	Hazardous substances (oil, grease, lubricant and cleaning agents)	exposure from leaking or handling of lubricants and cleaning agents.	Health	Occupational diseases, eye injuries, skin irritation.	Communication (hazard awareness), medical surveillance, MSDS training, PPE	Client/ Contractor	HCSR (2-15),OHSA s8(2)(b,c,d,e),OHSA s13, PSR,procedure 32-136
	Stairs and gratings	Ascending and Descending Stairs, tripping and falling through defective gratings	Safety	injuries, Fractures	Plant maintenance and defect reporting, Communication (hazard awareness three point contact), notices and signage, Guarding/barriers/rails, PPE	Client/ Contractor	OHS Act s13,OHSA s8(2)(b,c,d,e,f),GSR 2,procedure 32-136
	Heat, hot surfaces	exposure to heat & hot surfaces in the Ductings	safety / health	Thermal Burns, injuries, heat stroke	Permit to Work and Risk assessment, Communication (hazard awareness), Guarding/barriers/rails, notices and signage, Consumption of liquid, job rotation, rest breaks, PPE.	Client/ Contractor	OHS Act s13,ERW,GSR 2,OHSA s8(2)(b,c,d,e,f), Eskom PSR
	Uneven surfaces, gratings, trenches	slip trip and fall, falling into the trench	Safety	Fracture, injuries, fatality	Plant maintenance and cleaning, Communication (hazard awareness),Guarding/barriers/rails, Training: General Safety, signage and notices, PPE,	Client/ Contractor	OHS Act s13,OHSA s8(2)(b,c,d,e,f),GMR 3, DMR 2,GSR 2,ERW 6
	Moving vehicles and machinery in the plant and around	Colliding or struck by moving vehicles and machinery	safety	Serious injuries, Fatality	Traffic safety, Communication (hazard awareness), general safety training, Guarding/barriers/rail, signage	Client/ Contractor	Road Traffic act, OHS Act s13,OHSA s8(2)(b,c,d,e,f), GSR 2

	Emergencies	Employees exposed to emergency situation, such as fire, medical emergency etc	Safety	injuries, Fatalities	Emergency prepadness plan, Communication (hazard awareness) , EPP safety training ,	Client/ Contractor	OHS Act s13,OHSA s8(2)(b,c,d,e,f), ERW ,Kendal EP Plan *1015702, SHE specification
	Scaffolding platform and material	Falling from heights, scaffolding platform collapsing.	Safety	injuries, Fatality	Fall protection plan and safe work procedures, Work at height training, Scaffolding erected by competent contractor and inspected , Fall protection equipment , Risk assessment	Client/ Contractor	OHSA s8(2)(b,c,d,e,f) OHS act sec 13 , CR 10, 32-418
	Ladders	Falling from fixed ladder	Safety	injuries, Fatality	Risk assessment , maintenance and inspection, medical fitness, hazard awareness and communication, PPE, safety shoes	Client/ Contractor	OHSA s8(2)(b,c,d,e,f) OHS act sec 13 , GSR 13 CR 10, 32-418
	Falling objects	Struck by falling object/ material.	Safety	injuries, Fatality	Risk assessment of work surroundings, Planning and communication with parties working within the same area. Safety awareness, PPE including Helmet and safety boots	Client/ Contractor	OHS Act s13,OHSA s8(2)(b,c,d,e,f) , ERW 6
	Welding sparks	Exposure to welding sparks , fire	Safety	Arc eye/eye injuries, Burn injuries	Permit to Work and Hot Work permit, Competent personnel/ welders, Risk assessment, fire screens, PPE including welding helmets, respirators aprons, skullcaps, boots and fire resistant overalls amongst others.	Client/ Contractor	OHSA s8(2)(b,c,d,e), OHSA s13, GSR 2, GSR 9, Eskom PSR ,Hot work permit system
	Welding fumes and smoke	Inhalation of welding fumes	Health	Nasal irritation, Respiratory infection with flu like symptoms	Permit to Work and Hot Work permit ,Competent personnel/ welders, Taking breaks in between welding works, PPE including Suitable respirator, Helmet and safety boots	Client/ Contractor	OHSA s8(2)(b,c,d,e), OHSA s13, GSR 2 ,GSR 9,Eskom PSR ,Hot work permit system
	Welding Gases and equipment	Fire and explosion	Safety	Injuries , Fatality	Contractor safe work procedures, Safe handling, maintenance and inspection of gas bottles, maintenance of welding equipment, Risk assessment, MSDS	Client/ Contractor	OHSA s8(2)(b,c,d,e), OHSA s13, GSR 2 to 4,Eskom Plant safety regulations
	Confine Space	Exposure to confined work space inside the Ductings may present oxygen deficiency, high temperature conditions	Health /Safety	Injuries, Heat stroke, fatality	Permit to work system, Risk assessment, Contractor safe work procedures, Competent personnel, extraction or ventilation systems, Medical surveillance program, emergency preparedness, Supervision, PPE	Client/ Contractor	OHSA s8(2)(b,c,d,e), OHSA s13, GSR 2 to 5,Eskom Plant safety regulations
	Plant and machinery	Contact with moving equipment , plant in operation, struck by flying object or machinery component	safety	Injuries, damage to equipment or plant	Permit to work system, Eskom maintenance work instruction to be followed ,contractor safe work procedures, pre task risk assessment, work performed by competent personnel, constant communication during test run or commissioning , PPE	Client/ Contractor	OHSA s8(2)(b,c,d,e), OHSA s13, GSR 2, DMR 18,GMR3, 4 Eskom Plant safety regulations
Travelling from and to site	Night time driving	Poor visibility, fatigue, poor road surfaces including potholes	Safety	Vehicle accidents which will result in multiple injuries and/or fatalities as well as property damage.	Medical fitness,Awareness during SHEQ meetings/ tool box talks/ lessons learned/ road safety campaigns/ Driver risk evaluation/Defensive & advance driving training , fatigue management/ rest periods/ route risk assessment	Client/ Contractor	Road traffic act, OHS Act. Vehicle Safety 240-69946.

	Weather conditions , Mist/Fog/heavy rain	Poor visibility and loss of control to the vehicle	Safety	Vehicle accidents which will result in multiple injuries and/or fatalities as well as property damage.	Medical fitness, Awareness during SHEQ meetings/ tool box talks/ lessons learned/ road safety campaigns/ Driver risk evaluation/Defensive & advance driving training, wait up until the mist is clear. Use alternative routes. Route risk assessment	Client/ Contractor	Road traffic act, OHS Act. Vehicle Safety 240-69946.
	Road users, pedestrians and/or stray animals	Struck by, struck against incidents, Loss of control of the vehicles. Driver is negligent or not trained.	Safety	Collision that result in accidents with multiple injuries and/or fatalities.	Medical fitness, Awareness during SHEQ meetings/ tool box talks/ lessons learned/ road safety campaigns/ Driver risk evaluation/Defensive & advance driving training ,route risk assessment	Client/ Contractor	Road traffic act, OHS Act. Vehicle Safety 240-69946.
	Road conditions, potholes, curves, road construction, road works, bends, steep heels, rail crossings	Loss of control of the vehicle. Not observant of the surroundings. Unfamiliar with the road. Speeding	Safety	Vehicle accidents which will result in multiple injuries and/or fatalities as well as property damage.	Medical fitness, Awareness during SHEQ meetings/ tool box talks/ lessons learned/ road safety campaigns/ Driver risk evaluation/Defensive & advance driving training. Pre inspections, Trip Risk Assessment	Client/ Contractor	Road traffic act, OHS Act. Vehicle Safety 240-69946.
Inspections and Repairs of Ductings during Planned and unplanned outages and travelling	COVID 19	Contracting COVID. Contact with persons that may be infected with the virus	Health	psychological impact,COVID Illness, death	COVID Risk assessment and COVID management procedures. Shift rotations where necessary, Social distancing when performing the activities, COVID 19 awareness and training hand hygiene, sanitizers, Incident management procedures. Record keeping register for all visitors. PPE including appropriate masks, hand gloves.	Client/ Contractor	OHS Act sec 8,13, Disaster Management Act, 2022 (Act No.57 of 2002), COVID 19 Regulations. Procedure 32-95