

Occupational Health and Safety Baseline risk assessment template												
Business/Operating unit:	Kendal Power Station							Next Review Date (every 2 years):	Template identifier:			
Date: 17-May-23							Authorised by:		Name: Pieter Meiring	Document 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		Consequence	Likelihood	Risk Priority Rating	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?	Includes: - 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)							
Plant walk downs (QC plant check versus drawings)	Noise	Exposure to excessive high noise levels	Health	Noise Induced Hearing Loss	Plant is demarcated as a noise zone. Hazard awareness, medical surveillance, Noise Survey, PPE - hearing protection is provided and used.		4	B	III	Mostly effective	Manager	OHSAct sec 8, 13, Noise Induced Hearing loss Regulations, SANS 10083
	Ash dust	Exposed to excessive ash dust	Health	Respiratory and lung infections	Plant maintenance, Raise defect for Ash leaks Toolbox talk for work in these areas Be vigilant - avoid the area when there is excessive dust, Medical screening		3	A	IV	Mostly effective	Manager	OHSAct sec 13, Hazardous Chemical Agent Regulations, Annexure 1,36
		Exposed to excessive ash dust	Health	Eye irritation	Plant maintenance, Raise defect for Ash leaks Provision of PPE Toolbox talk for work in these areas Be vigilant - avoid the area when there is excessive dust		3	A	IV	Mostly effective	Manager	OHSAct sec 13, Hazardous Chemical Agent Regulations, Annexure 1,36
	Coal dust	Lung infection that could result with silicosis, eye infection, nasal infection, skin infection	Health	Lung infection that could result with silicosis, eye infection, nasal infection, skin infection	Plant maintenance, Raise defects for excessive coal dust Provision of PPE, FFP2 or 3 dust mask Toolbox talk for work in these areas Be vigilant - avoid the area when there is excessive dust		3	A	IV	Mostly effective	Manager	OHSAct sec 13, Regulations for HCS Annexure 1,36
	Chemicals (S, SO <sub>2</sub> , H <sub>2</sub> SO <sub>4</sub> , NaOH, NH <sub>3</sub> , Cl <sub>2</sub> , etc.)	Exposure to excessive chemicals	Health	Respiratory infections that can result in lung diseases, Chemical burns	Provision of PPE Toolbox talk for work in these areas Be vigilant - avoid the area when there is excessive dust Demarcate the area and attach warning signs Raise defects for leaks or dangerous situations Toolbox talk for work in these areas Be vigilant - avoid the area when there are visible leaks		3	A	IV	Mostly effective	Manager	OHSAct. Regulations for HCS
	Heat	Excessive sweating, cramps, dehydration, heat exhaustion and heatstroke.	Health	Excessive sweating, cramps, dehydration, heat exhaustion and heatstroke.	Lagging and cladding on pipes. Water is provided for employees to drink and take breaks in the area. Two man rule is applied when on the plant. Employees spent short periods on the plant.		4	A	III	Mostly effective	Manager	OHSAct sec 13, PSR ERW reg2
	Steam and heat	Burns injuries	Safety	Burns injuries	The plant insulated, planned maintenance system. Steam leaks are attended as per defect that were reported. Baricading and notices. PPE, Long sleeved clothing is worn.		5	B	ii	Mostly effective	Manager	OHSAct sec 8, 13, General Safety Regulations, 2B, General Machinery Regulations, Environmental Regulations in workplaces Reg 5, PSR
	Heights	Falling which leads to multiple injuries or fatality	Safety	Falling which leads to multiple injuries or fatality	Provision of PPE and training as and when the need arise		5	B	II	Mostly effective	Manager	OHS Act, General Safety Regulation 56
	Falling objects	Getting struck by objects	Safety	Injuries and/or fatality.	Hazard awareness, planning and coordination of activities, baricading of areas where there is a potential of falling objects. Personal protective equipment is provided, including hard hat		5	B	II	Mostly effective	Manager	OHS act sec 13, Environmental Regulations for workplace reg6, General Safety Regulations 2B
	Moving machinery	Caught between moving machinery	Safety	Injuries and/or fatality.	PSR/ LAR, Machine guards on equipment. Plant maintenance notices and signatures. Hazard awareness. Loose clothing is discouraged while on the plant.		5	B	II	Mostly effective	Manager	OHSAct sec 8, 13, General Safety Regulations, 2B, General Machinery Regulations , Driven Machinery Regulations
Fitting KKS labels on plant	Moving Machinery (mobile plant)	Getting struck by moving vehicles	Safety	Getting struck by moving vehicles resulting in injuries.	Rules of the road (observing and be visible) Be vigilant towards your environment particularly areas where machinery operates		4	B	III	Mostly effective	Manager	OHS Act 8,13, General Safety Regulation 5
	Insufficient lighting	Slips, trips and knocking against structure	Safety	Injuries	Maintenance contract for lighting. Special/Temporary lighting is provided.		4	B	II	Mostly effective	Manager	OHS Act, Environmental Regulations in workplaces Reg 3 , SANS 10114
	Uneven walking surfaces	Slips, trips, falls	Safety	Slips, trips, falls resulting in injury	PPE (Safety Shoes) Toolbox talk Defect hazardous conditions Be vigilant toward your environment particularly walkways		4	B	III	Mostly effective	Manager	OHSAct sec 8, 13, Environmental Regulations in workplaces Reg 6
	Noise	Exposure to excessive/ high noise levels	Health	Noise Induced Hearing Loss	Plant is demarcated as a noise zone. Hazard awareness, medical surveillance, Noise Survey, PPE - hearing protection is provided and used.		4	B	III	Mostly effective	Manager	OHSAct sec 8, 13, Noise Induced Hearing loss Regulations, SANS 10083
	Ash Dust	Respiratory infections and/or eye irritation	Health	Respiratory infections and/or eye irritation	The plant is on a regular planned maintenance. Plant is washed with water to reduce the level of coal dust on the plant. Employees are exposed to dust. FFP2 Dust masks are provided.		4	B	III	Mostly effective	Manager	OHSAct sec 13, Hazardous Chemical Agent Regulations, Annexure 1,36
	Coal dust	Lung infection that could result with silicosis, eye infection, nasal infection, skin infection	Health	Exposure to excessive coal dust because of leaks. Not using correct PPE	Plant maintenance, Raise defects for excessive coal dust Provision of PPE, FFP2 or 3 dust mask Toolbox talk for work in these areas Be vigilant - avoid the area when there is excessive dust		3	A	IV	Mostly effective	Manager	OHSAct. Regulations for HCS
	Chemicals (S, SO <sub>2</sub> , H <sub>2</sub> SO <sub>4</sub> , NaOH, NH <sub>3</sub> , Cl <sub>2</sub> , etc.)	Respiratory infections that can result in lung diseases, Chemical burns	Health	Not using correct PPE (inhalation and skin contact to chemicals)	Provision of PPE Toolbox talk Demarcate the area and attach the warning signs Raise defects for leaks or dangerous situations Toolbox talk for work in these areas Be vigilant - avoid the area when there are visible leaks		3	A	IV	Mostly effective	Manager	OHSAct. Regulations for HCS
	Heat	Heat stress (Dehydration, exhaustion, cramps, heatstroke etc.)	Health	Steam leaks and radiation of heat from the plant, Not taking rest periods inadequate fluid consumption Electricity generating process - causing heat	Drinking of liquids and taking breaks		3	B	IV	Mostly effective	Manager	OHSAct. Regulations for HCS
	Steam and heat	Burns injuries	Safety	Burns injuries	The plant insulated, planned maintenance system. Steam leaks are attended as per defect that were reported. Baricading and notices. PPE, Long sleeved clothing is worn.		5	B	ii	Mostly effective	Manager	OHSAct sec 8, 13, General Safety Regulations, 2B, General Machinery Regulations , Environmental Regulations in workplaces Reg 5, PSR
	Working at heights	Falling	Safety	Injuries or fatality	Provision of PPE and training as and when the need arise		5	B	II	Mostly effective	Manager	OHSAct. ERW3
Performing Office, Computer and administrative activities	Falling objects	Getting struck by objects	Safety	Injuries and/or fatality.	Hazard awareness, planning and coordination of activities, baricading of areas where there is a potential of falling objects. Personal protective equipment is provided, including hard hat		5	B	II	Mostly effective	Manager	OHS act sec 13, Environmental Regulations for workplace reg6, General Safety Regulations 2B
	Moving machinery	Caught between moving machinery	Safety	Injuries and/or fatality.	PSR/ LAR, Machine guards on equipment. Plant maintenance notices and signatures. Hazard awareness. Loose clothing is discouraged while on the plant.		5	B	II	Mostly effective	Manager	OHS Act 8,13, General Safety Regulations, 2B, General Machinery Regulations , Driven Machinery Regulations
	Moving Machinery (mobile plant)	Getting struck by moving vehicles resulting in injuries.	Safety	Injuries and/or fatality.	Rules of the road (observing and be visible) Be vigilant towards your environment particularly areas where machinery operates		5	B	II	Mostly effective	Manager	OHS Act sec 13, General machinery regulations, PSR
	Insufficient lighting	Slips, trips and knocking against structures because of poor visibility that will result in injuries.	Safety	Injuries or fatality	Maintenance contract for lighting. Special/Temporary lighting is provided.		5	B	II	Mostly effective	Manager	OHSAct, Environmental Regulations for workplace S3
	Poor/uneven walking surfaces	Slips, trips, falls	Safety	Injuries	PPE (Safety Shoes) Toolbox talk Defect hazardous conditions Be vigilant toward your environment particularly walkways		4	B	II	Mostly effective	Manager	OHS Act sec 13, Environmental Regulations in workplaces Reg 6
	Sharp edges of the KKS labels	Cuts	Safety	Injuries	Toolbox talk Job observations Pay attention when handling labels especially Chromadec		2	B	IV	Mostly effective	Manager	OHSAct 8, 13, GSR2
	Use of tools (drills, pliers, screwdrivers, silicone gun)	Injuries	Safety	Wrong design of tools. Not using correct PPE Not following procedures	Toolbox talk Job observations Pay attention when handling tools		2	B	IV	Mostly effective	Manager	OHS Act sec 13, Environmental Regulations in workplaces Reg 6
	Adhesives (silicone & Sikaflex)	Allergic skin reaction Allergic or asthma symptoms or breathing difficulty	Health	Not using gloves when handling the chemical. (hands) Using the chemical in unventilated area Not adhering to the instruction of products	Gloves are provided. Toolbox talks are held. Use chemical in a well ventilated area Training i.e., use of product and MSDS		3	B	III	Mostly effective	Manager	OHSAct, HCS Annexure 1,36
	Objects,materials, structure	Tripping and falling, struck against objects, material, structures	Safety	Injuries	Hazard Awareness: Safety Rep inspection, daily cleaning of office and classrooms , Good Housekeeping practices encouraged		3	B	III	Mostly effective	Manager	OHS Act, Environmental Regulations in workplaces Reg 6
	Slippery surfaces	Slips and falls	Safety	Injuries	Some floors are carpeted. Workplace SHE Rep inspection, Hand washing, good house keeping practices/ immediate cleaning of wet floors. Slipping, slipping, slipping warning signs posted.		4	B	III	Mostly effective	Manager	OHS Act, Environmental Regulations in workplaces Reg 6
Driving, travelling to and from work	Ergonomics	Working on the computer for extended period ( physical and cognitive ergonomics)	Health	Musculoskeletal disorder : Muscle strains and strains resulting in back, neck, wrist pains and/or shoulder pains. Mental fatigue. Eye strain. Stress. Anxiety. Absenteeism increase	Adjustable Chairs with armrests and back supports are provided. Awareness on ergonomics. Rest when necessary or take a walk or stretch. New computers are adjustable for lighting requirements.Ergonomics surveys & Medical surveillance,		3	B	III	Mostly effective	Manager	OHS Act, Environmental Regulations in workplaces, Ergonomics regulations 2019
	Poor illumination	exposure to poorly illuminated work area	Health	Eye strains and headache	The lights are on a maintenance system. Take regular breaks. SHE Rep inspections		3	B	III	Mostly effective	Manager	OHS Act, Environmental Regulations in workplaces Reg 3 , SANS 10114
	Poor indoor air quality	Unfavourable low and high temperatures	Health	Shivering, cold and flu. Sweating and drowsiness. Headaches, drowsiness, blocked noses.	Air conditioning system provided and maintained. Hazard Awareness, SHE Rep inspections		3	B	II	Mostly effective	Manager	OHS Act, Environmental Regulations in workplaces Reg 5
	Electrical cords.	Tripping and falling over loose lying cords, Electric shock	Safety	Tripping and falls that could result in injuries. electrocution due to electrical contact.	Channel cables away from walkways. Conduct regular safety inspections. Provide awareness and training signs are posted. Load defect to report and request maintenance / repairs for any defective cables.		3	B	III	Mostly effective	Manager	OHS Act, Environmental Regulations in workplaces Reg 6, electrical machinery regulations
	Electrical appliances like photo copy machines, shredder, microwave and others.	Contact with faulty unearthing equipment, open wires and connections, use of defective equipment	Safety	Electrocution that will result in burns	Planned Maintenance system. Safety inspections, hazards awareness training, Signs and posters display. Reporting and defect system		3	B	III	Mostly effective	Manager	OHS Act, Environmental Regulations in workplaces Reg 6, electrical machinery regulations
	Paper	Cuts from sharp edges of the paper	Safety	Cuts/injuries	Hazard awareness		2	B	IV	Mostly effective	Manager	OHS Act, Environmental Regulations in workplaces Reg 6
Performing engineering services at D&S in plant and office (expectant mothers)	Road conditions curves, road construction, road works, bends, steep heels, rail crossings		Safety	Vehicle accidents which will result in multiple injuries and/or fatalities as well as property damage.	Awareness during SHEQ meetings/ tool box talks/ lessons learned/ road safety campaigns/ Driver risk evaluation/Defensive & advance driving training, Pre instructions, Trip Risk Assessment		6	B	I	Mostly effective	Manager	Road traffic act, OHS Act, Vehicle Safety 240-69946.
	Weather conditions , Mist/Fog/heavy rain		Safety	Vehicle accidents which will result in multiple injuries and/or fatalities as well as property damage.	Awareness during SHEQ meetings/ tool box talks/ lessons learned/ road safety campaigns/ Driver risk evaluation/Defensive & advance driving training, wait up until the weather allows		6	B	I	Mostly effective	Manager	Road traffic act, OHS Act, Vehicle Safety 240-69946.
	Road users, pedestrians and/or stray animals		Safety	Collision that result in accidents with multiple injuries and/or fatalities.	Awareness during SHEQ meetings/ tool box talks/ lessons learned/ road safety campaigns/ Driver risk evaluation/Defensive & advance driving training		6	B	I	Mostly effective	Manager	Road traffic act, OHS Act, Vehicle Safety 240-69946.
	Driving vehicle while tired		Safety	Fatigue that result in accidents. These may result in injuries and/or fatalities.	Awareness during SHEQ meetings/ tool box talks/ lessons learned/ road safety campaigns/ Driver risk evaluation/Defensive & advance driving training		6	B	I	Mostly effective		