



health

Department:
Health
PROVINCE OF KWAZULU-NATAL

Baseline Risk Assessment: Bruntville CHC: Generator Replacement. Please note this is a baseline risk assessment not a detailed risk assessment of all anticipated activities on site and not in order of activities of the project. The Principal contractor will be required to compile a detailed risk assessment for the project.

Notes:

- Please take note that the area where the Generator will be installed is in close proximity to the following:-
 - Perimeter fencing;
 - Overhead power lines;
 - Back side of the plant room exposing windows; measures to protect the windows and to prevent dust entering the plant room must be prepared prior to commencement of works;
 - Air-conditioning split unit;
 - Cloths- hanging line;
 - Underground cables.
- Should there be a need for crane; the contractor must make arrangements and prepare a method statement as this area is constricted.

Main Activity	Sub activities	Hazards	Risks	Category			Control Measures	Responsible person
				Safety	Health	Environmental		
Site establishment	Vegetation clearing (Manual)	Snakes Insects Poisonous vegetation Extreme weather conditions	Snake bites Insect bites Skin rashes. Death Heat & cold	Injuries	Skin infections Dust inhalation	Land pollution	Proper Risk assessment Method statements Adequate supervision Training	Contractor
	Vegetation clearing (mechanical)	Snakes Insects Poisonous vegetation Extreme weather conditions	Snake bites Insect bites Skin rashes. Death Heat & cold Dust	Injuries	Skin infections Dust inhalation	Land pollution	Proper Risk assessment Method statements Adequate supervision Training	Contractor

		Noise Dust Vibration Moving vehicles						
	Site office positioning	Manual handling Struck against material Struck by material Sharp edges Tripping Hidden services	Muscular strains Hand injuries Cuts; abrasions Bruises Fractures electrocution	Injuries Fractures			Supervision HIRA Method statement Training proper barricading PPE Service detection	Contractor
	Electrical connection to the site office	Electricity Sharp edges Poor working postures	Electrocution; death Cuts Muscular pains	Injuries Electrocution			Supervision HIRA Method statement	Contractor

							Training PPE	
	Water connection to site office	Sharp edges Extreme weather conditions Physical exertion Poor working posture	Cuts Heat stroke Muscle strains Back strains	Injuries Body strains			Supervision HIRA Method statement Training PPE	Contractor
Removal of current Generator	Cables disconnection	Cables	Live electricity	Electric shock/burns			HIRA Lock out systems Supervision Training PPE	Contractor
		Hand tools	Injuries	Hand injuries			HIRA Lock out systems	Contractor

							Supervision Training PPE	
		Bending and awkward postures	Musculoskeletal disorders		Back aches Muscle pains		HIRA Ergonomics awareness Supervision PPE	Contractor
	Dismantling of generator set	Large equipment	Injuries	Hand injuries		Inert waste	HIRA Supervision Tools inspection PPE Lifting techniques Rigging procedures where applicable	Contractor

							Training Waste management procedure	
				Bodily harm			HIRA Supervision Material Handling procedures Housekeeping practices PPE Training Rigging Procedures	Contractor
				Strike by			HIRA Supervision Material	Contractor

							Handling procedures Housekeeping practices PPE Training Rigging Procedures	
				Strike against			HIRA Supervision Material Handling procedures Housekeeping practices PPE Training Rigging	Contractor

							Procedures	
			Noise		Noise induced hearing loss		HIRA Training Supervision PPE	Contractor
			Dust		Respiratory diseases		HIRA Training Supervision PPE	Contractor
		Hand tools	Injuries	Hand tools			HIRA Training Supervision Hand tool	Contractor

							inspections PPE	
		Weather extremes	Cold/Heat		Cold hands		HIRA Supervision Training PPE	Contractor
					Heat rash/heat stress		HIRA Supervision Training PPE	Contractor
	Electric cable stripping	Cables	Live electricity	Electric shock	Electric burns		HIRA Supervision Training Lock out procedures	Contractor

	Removal of generator pieces/material	Large equipment	Manual handling		Musculoskeletal disorders	Inert waste	HIRA Supervision Training Manual handling awareness Ergonomics awareness Medical fitness	Contractor
			Mechanical handling	Hand and body injuries			HIRA Supervision Training Manual handling awareness Ergonomics awareness Lifting techniques/SOP	Contractor

Removal of current diesel tank	Pipe work disconnection	Pipes and tools	Manual handling	Hand injuries			HIRA Supervision SOP Training PPE	Contractor
		Diesel	Spillages			Ground; water and air pollution	HIRA Supervision Spillage kits availability Training PPE	Contractor
			Inhalation		Respiratory illnesses		HIRA Supervision Spillage kits availability Training PPE	Contractor

			Skin contact		Skin rash		HIRA Supervision Spillage kits availability Training PPE	Contractor
Demolition of current tank & generator plinth	Dismantling/ breaking up of concrete	Concrete Breaking up	Flying concrete pieces	Eye and body injuries			HIRA Supervision Training PPE	Contractor
			Dust		Respiratory irritation		HIRA Supervision Training Dust suppressing measures PPE	Contractor

			Noise		Noise induced hearing loss		HIRA Supervision Training PPE	Contractor
			Awkward postures		Musculoskeletal disorders		HIRA Supervision Training PPE	Contractor
			Electric tools	Electric shock	Electric burns		HIRA Supervision Training PPE	Contractor
			Vibration		Vibration induced white finger/ Vibration syndrome Muscular-		HIRA Supervision Training PPE	Contractor

					skeletal disorders			
			Weather extremes				HIRA Supervision Training PPE	Contractor
Plinth construction	Excavation	Manual digging	Hand tools	Hand injuries			HIRA Supervision Training Tool inspections PPE	Contractor
				Dust		Respiratory irritation	HIRA Supervision Training Dust suppression	Contractor

							<p>methods</p> <p>Excavation management procedures</p> <p>PPE</p>	
				Bending and repetitive motions		Musculoskeletal disorders	<p>HIRA</p> <p>Supervision</p> <p>Training</p> <p>Ergonomics awareness</p> <p>PPE</p>	Contractor
			Weather extremes	Cold/Hot temperature		<p>Heat rash</p> <p>Heat stroke</p> <p>Cold hands</p>	<p>HIRA</p> <p>Supervision</p> <p>Availability of portable water</p> <p>Training</p> <p>PPE</p>	Contractor

	Concrete laying	Cement	Inhalation and skin contact		Respiratory irritation			Contractor
					Skin irritation/skin rash		HIRA Supervision MSDS awareness Training PPE	Contractor
Installation of new diesel tank	Tank installation	Mechanical lifting/ rigging	Strike by Strike against Large piece of equipment	Injuries Property damages			HIRA Supervision Lifting/rigging SOP Competency for rigging activities Medical fitness Work area clearance Flagman	Contractor

	Pipe installation	Hand tools	Injuries	Hand and body injuries			HIRA SOP Supervision	Contractor
		Awkward postures	Bending		Back aches		HIRA Supervision Proper PPE Medical fitness Method statement Lifting and manual handling procedures	Contractor
		Weather extremes	Extremes exposure to heat/cold		Heat stress heat rash heat stroke cold hands		HIRA PPE Supervision Medical fitness Provision of portable water	Contractor
Diesel tank fuelling	Filling up of the tank	Hazardous chemical substance	Inhalation of diesel		Respiratory irritation Dizziness		HIRA Supervision MSDS	Contractor

							Training PPE	
			Skin contact		Skin irritation		HIRA Supervision MSDS Training PPE	Contractor
			Diesel spillage			Environmental pollution	HIRA Supervision Training Spill kit availability PPE	Contractor
New gen set installation	Placemet of new genset	Large equipment	Mechanical lifting And rigging	Injuries/ deaths			HIRA Supervision Competent driven machinery appointments	Contractor

							Housekeeping Flag man/woman PPE	
	Electric installation	Electricity	Contact with live electricity		Electric shock Electric burns		HIRA Supervision Lock out procedures Training PPE	Contractor
Wall painting	Wall preparation	Dust	Inhalation		Respiratory irritation Respiratory illnesses		HIRA Supervision PPE	Contractor
		Working at heights	Falls from heights	Injuries/ fractures			HIRA Fall protection plan Training & competence Medical fitness Supervision	Contractor

	Door replacement	Manual handling	Injuries	Hand injuries			HIRA Supervision Training PPE	Contractor
			Bending and repetitive motions		Back aches		HIRA Supervision Ergonomics awareness Hand tools inspection PPE	Contractor
		Hazardous chemical substances (HCS)	Inhalation of HCS		Respiratory illness Respiratory irritation		HIRA Medical fitness Training & competence MSDS and awareness PPE Provision of adequate natural ventilation	Contractor

								Correct disposal of HCS waste	
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NB: Current site conditions to be considered when considering hazard minimisation measures.



In front of the construction area



behind the construction area



Current condition of plant room door