

Business/Operating unit:				
Date:				
List activity	Activity type (Routine/Non-routine)	Hazard nr	Hazard Identification	Risk Nr

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

Department:

Prepared by:

Associated risk

Risk type

Cause(s) of the risk

Exposed group/employees

Risk Owner

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

Occupational Health and Safety Baseline risk assessment template					
		Authorised by:			
					Name:
					Designation:
					Signed:
Date:					
Refer to Occupational Health and Safety Risk assessment procedure 32-520					
Exposure patterns	What are the possible consequences?	Existing Controls			

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

			Next Review Date (every 2 years):
<i>Additional Controls or Tasks Aimed at improving Existing Controls</i>	<i>Monitoring Mechanisms</i>	<i>Control Owner</i>	<i>Legal and Other Requirements</i>

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	Template identifier:	240-70044602
	Document identifier	
	Revision number:	1
	Revision date:	31-May-24
Target Date	Current Status	Integrated Risk Management (IRM) reference number

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[illegible]

[illegible]

R	Safety	1	A	Fully effective	I
N	Health	2	B	Mostly effective	II
		3	C	Mostly ineffective	III
		4	D	None	IV
		5	E		
		6			

III	II	I	I	I
III	II	II	I	I
IV	III	II	I	I
IV	III	II	II	I
IV	IV	III	II	II
IV	IV	III	III	III
A	B	C	D	E
Likelihood				

Occupational Health and Safety Bas			
Business/Operating unit:	ASH DAMP PROJECT		
Date:	07-Nov-19		
Refer to Occupational Health and Safety			
<i>List activity</i>	<i>Hazard Identification</i>	<i>Associated risk</i>	<i>Risk type</i>
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
Civil Work			

Rigging and lifting of pulleys	Working on elevated position	Exposure to working at heights could lead to falling which may result in severe injuries or fatalities	Safety
Manual lifting of plates and equipment	falling of plates	Exposure to falling object that may lead to injuries/fatality	Safety
		Exposure to mishandle equipment could lead to poor Ergonomic	Health
Mechanical lifting of plates and equipment using cranes	Falling of plates	Exposure to falling of plates could lead to serious injuries and possibly fatality	Safety
	Incorrect operation of the machinery	Exposure to incorrect use of machinery could result in Struck by incident	Safety
	equipment failure	use of wrong equipent or defective equipment	Safety
Hot work	Sharp edges on metal plates/sheets.	Finger cuts and loss of eye sight due to welding sparks	Safety
	Sparks that can burn employees	1st to 2nd degree burn	Safety
	Sparks	Finger cut and skin cut.	Safety
	Welding fumes	Respiratory infection with flu like symptoms	Health

	Ultra violet rays.	Eye infection that could result in arc eye then cataract.	Safety
	Defective electrical welding equipment	Electrocution	Safety
	Trapping of a limb between the plate and the machine as well as the possibility of getting contact with the flying objects	Loss of a limb or part of it during bending and rolling. Skin cut due to flying objects from the drilling process.	Safety
	Noise	Noise induced hearing loss	Health
Excavation	Driven machinery	Collapsing of walls which may result in machinery capsizing	Safety
	Slip and fall into the pit of the excavation	Tripping and fall resulting in injuries and possible fatality.	Safety
	Dust	Respiratory and Inhalation lungs infections due to exposure to dust. Infections and irritation of the eye	Health
	Noise	Noise induced hearing loss	Health
	Vibrations	Musculoskeletal disorder : Muscle sprains and strains resulting in back, knee, and ankle pains.	Health
Concrete work	Flying stones	Infections and irritation of the eye. Skin cuts	Health
	Concrete dust	Respiratory and Inhalation lungs infections due to exposure to dust. Infections and irritation of the eye	Health
	Chemicals	Nasal and lung infections that will result in lung disease.	Health
	Noise	Noise induced hearing loss	Health

	Falling	Falling that will lead to injuries and fatalities.	Safety
	Vibrations	Musculoskeletal disorder : Muscle sprains and strains resulting in back, knee, and ankle pains.	Health
	Sharp objects	Finger cuts	Safety
	Falling of foam work	Injuries by wheelbarrow, shovels	Safety
ELECTRICAL and C&I			
Hotwork Activities	Fumes emitted from the hotwork equipment	Exposure to fumes due to incorrect use of respiratory personal equipment could lead respiratory disease	Health
	Sparks from the hotwork equipment	Exposure to sparks could lead to skin burn	Safety
	Fires and electric shock from the hotwork equipment	Exposure to fire or electrocuted as result of making use of defective equipment could lead fire in the plant, severe injuries and /or fatalities	Safety
	Flying objects from the hotwork activities (Cutting disc)	Exposure to flying object as a result of incorrectly using electrical tool or defective could lead to cut injuries	Safety
	Ultra violet rays	Exposure to ultra violet rays could lead to eye injuries	Health
Lifting and Rigging motors with crane	Moving machinery	Exposure to moving machinery could lead to struck incidents	Safety
	Falling objects	Exposure to falling object that may lead to struck by object incident	Safety
	Failure of equipment	Exposure to a failing equipment could lead to severe injurie and /or fatalities	Safety
	misusing handtools	Exposure to handtools could lead to Pinch points / hand injuries	Safety

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Baseline risk assessment template			
		Next Review Date (every 2 years):	Template identifier:
		Document identifier	
		Revision number:	1
		Revision date:	31-May-24
Risk assessment procedure 32-520			
<i>What are the possible consequences?</i>	<i>Existing Controls</i>	<i>Control Owner</i>	<i>Legal and Other Requirements</i>
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)	Person allocated the responsibility for implementing the agreed controls	Where relevant, list the relevant legislative and or Eskom requirements that prescribe the control.

Multiple injuries and/or fatalities	Improvise by hooking up on the scaffold. Employees trained on Life Saving Rules. Pre-job briefing is carried out.	Contracto Site Manager/Supervisor	Construction Regulation, Life saving rules
injuries and/or fatality	Provision of PPE (boots and gloves); Employees carry plates for very short distances. Risk assessment is carried out. Overhead Crane authorization.	Contracto Site Manager/Supervisor	OHSAct
Back injuries or over exert	Provision of PPE (boots and gloves); Employees carry plates for very short distances. Risk assessment is carried out. Overhead Crane authorization.	Contracto Site Manager/Supervisor	
Multiple injuries and/or fatalities	Task risk assessment is carried out; crane is inspected using a checklist; The employee who operates a crane has a competence certificate; The lifting equipment is load tested.	Contracto Site Manager/Supervisor	OHSAct
injuries and/or fatality	Competent operator, equipment maintenance record , Risk assessment, equipment inspection sheet, toolbox talk, three way communication (Radio), Correct PPE, Life saving rule, Pre job plans, BSO, flag man, barricade	Contracto Site Manager/Supervisor	
injuries and/or fatality	Competent operator, equipment maintenance record , Risk assessment, equipment inspection sheet, toolbox talk, three way communication (Radio), Correct PPE, Life saving rule, Pre job plans, BSO, flag man, barricade	Contracto Site Manager/Supervisor	
Finger cuts and loss of eye sight due to welding sparks	Provision of gloves, welding helmet and apron, Risk assessment carried out for each job.	Contracto Site Manager/Supervisor	OHSAct
Serious bodily injuries	PPE provided include aprons, skullcaps, boots and fire resistant overalls amongst others.	Contracto Site Manager/Supervisor	OHSAct
Finger cut and skin cut.	Guards are provided on the grinder. PPE provided include aprons, skullcaps, goggles, boots and fire resistant overalls amongst others.	Contracto Site Manager/Supervisor	OHSAct
Respiratory infection with flu like symptoms	Welding is carried out in a well ventilated environment. Employees are provided with visors.	Contracto Site Manager/Supervisor	OHSAct

Eye infection that could result in arc eye then cataract.	Provision of visor with protection for exposure to UV Rays. Screens to protect those people in the area.	Contracto Site Manager/Supervisor	OHSAct
Serious body burn because of electrocution.	All electrical equipment are inspected before use. Welding equipment is not used in damp environment. The wet surfaces are drained off before any welding is undertaken.	Contracto Site Manager/Supervisor	OHSAct
Loss of a limb or part of it during bending and rolling. Skin cut due to flying objects from the drilling process.	Safety guards are provided on the machines. Gloves and goggles are worn when drilling is undertaken.	Contracto Site Manager/Supervisor	OHSAct
Noise induced hearing loss	Custom made as well as disposable hearing protections are provided.	Contracto Site Manager/Supervisor	OHSAct Noise Induced Hearing Loss Regulations
injury and/or fatality	Competent operator, equipment maintenance record , Risk assessment, equipment inspection sheet, toolbox talk, three way communication (Radio), Correct PPE, Life saving rule, maintain safety operating distance, flag man	Contracto Site Manager/Supervisor	OHSAct
Tripping and fall resulting in injuries and/or injuries.	Toolbox talks (Awareness) are held. Barricading the manhole, warning signs, PPE,	Contracto Site Manager/Supervisor	OHSAct
Lung infection that could result with silicosis, eye infection, nasal infection, skin infection	Provision of sprinkling truck to suppress the dust, Provide dust mask FFP2/FFP3. Awareness (toolbox talk), put up warning signs	Contracto Site Manager/Supervisor	OHSAct; HCS Regs.
Noise induced hearing loss	Custom made as well as disposable hearing protections are provided.	Contracto Site Manager/Supervisor	OHSAct Noise Induced Hearing Loss Regulations
Musculoskeletal disorder : Muscle sprains and strains resulting in back, knee, and ankle pains.	Ergonomics awareness, Applying the STAR principle, Task observations	Contracto Site Manager/Supervisor	OHS Act
Nasal and lung infections that will result in lung disease.	Wearing of PPE while offloading, Applying the STAR principle, Task observations, awareness provided. Using MSDS data, wearing correct PPE. Showers at the offloading area.	Contracto Site Manager/Supervisor	
Lung infection that could result with silicosis, eye infection, nasal infection, skin infection	Plant is washed with water to reduce the level of coal dust on the plant. The plant is on a regular planned maintenance. Access control (mandatory sign posted). FFP2. employees are wearing long sleeved clothing. Dust masks are provided.	Contracto Site Manager/Supervisor	OHSAct; HCS Regs.
Nasal and lung infections that will result in lung disease.	Wearing of PPE while offloading, Applying the STAR principle, Task observations, awareness provided. Using MSDS data, wearing correct PPE. Showers at the offloading area.	Contracto Site Manager/Supervisor	
Noise induced hearing loss	Custom made as well as disposable hearing protections are provided.	Contracto Site Manager/Supervisor	OHSAct Noise Induced Hearing Loss Regulations

Falling that will lead to injuries and fatalities.	PPE is worn, awareness, Apply life saving rules,	Contracto Site Manager/Supervisor	OHS Act, PSR, LSR
Musculoskeletal disorder : Muscle sprains and strains resulting in back, knee, and ankle pains.	Ergonomics awareness, Applying the STAR principle, Task observations	Contracto Site Manager/Supervisor	OHS Act
Finger cuts	Awareness on paper handling	Contracto Site Manager/Supervisor	OHS Act
Injuries	Wearing of PPE and awareness provided,	Contracto Site Manager/Supervisor	OHS Act
Respiratory infections. Resulting with flu like conditions.	Provision of PPE (Respiratory Mask), Medical surveillance programme, Toolbox talk, Extraction fans for ventilation	Contracto Site Manager/Supervisor	
Skin burn, property damage	Provide PPE (Apron, Leather gloves, Faceshield) Welding screen, fire blanket, fire watch, fire extinguisher, Permit to work	Contracto Site Manager/Supervisor	
Property Damage, Injuries or Fatalities	Provide fire resistant PPE (Apron, Leather gloves, Faceshield etc) Welding screen, fire blanket, fire watch, fire extinguisher, Permit to work, Inspection for electrical equipment, Safe working procedures, supervision and competent person	Contracto Site Manager/Supervisor	
Skin cuts	Provide appropriate PPE, Safe working procedures, supervision and competent person	Contracto Site Manager/Supervisor	
Eye infection that could result in arc eye then cataract.	Provision of visor with protection for exposure to plasma. Screens to protect those people in the area are available.	Contracto Site Manager/Supervisor	
Severe injuries and /or Fatality	Appoint competent operator, Service Maintenance records & Inspection records, Proof of road worthy.	Contracto Site Manager/Supervisor	
Severe injuries and /or Fatality	Maintain good housekeeping, barricade activities, provide safety signs, contain all tools, awareness/toolbox talk to be held before every task, risk assessment to be conducted, provide PPE (Hardhat), full time supervision on activities	Contracto Site Manager/Supervisor	
Severe injuries and /or Fatalies	Appoint competent operator, Service Maintenance records & Inspection records, toolbox talk to be held, plant job observation/supervision, daily task risk assessment to be conducted. Induction training.	Contracto Site Manager/Supervisor	
hand injuries	Provide safety gloves, conduct risk assessment , communicate toolbox talk for awareness, safe work procedure. Inspection records for tools	Contracto Site Manager/Supervisor	

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Consequence rating
1
2
3
4
5
6

Consequence criteria

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

Likelihood

Score	Descriptor	Safety
A	Highly unlikely	<ul style="list-style-type: none"> ▪ More than a "100 year event" ▪ Exceptionally unlikely, even in the long-term future ▪ < 5% probability.
B	Unlikely	<ul style="list-style-type: none"> ▪ Could occur in "years to decades" ▪ May occur but not anticipated ▪ ≥ 5% and < 20% probability.
C	Possible	<ul style="list-style-type: none"> ▪ Could occur within "months to years" ▪ May occur shortly but a distinct probability it will not, or ≥ 20% and < 70% probability.
D	Likely	<ul style="list-style-type: none"> ▪ Could occur within "weeks to months" ▪ Balance of probability will occur ▪ ≥ 70% and < 90% probability.
E	Unavoidable	<ul style="list-style-type: none"> ▪ Could occur within "days to weeks" ▪ Impact is imminent ▪ ≥ 90% probability.

Exposure criteria

Occupational hygiene	
Exposure	Probability of exceeding OEL
Rare (once a year)	No exposure (or exposure < 10% of OEL)
Short periods of time, a few times per day/ intermittent (once in six months, three months, or a month)	Low exposure (< 50% of OEL)
Continuous for between one and two hours (often/ weekly)	Moderate exposure (chronic exposure > 50% of OEL or acute exposure ≥ OEL)
Continuous for between two and four hours (frequent/daily)	High exposure (chronic exposure > OEL, or exposure exceeding OEL-STEL)
Continuous for eight-hour shift	Very high exposure (chronic exposure > 2 x OEL or exposure exceeding OEL-C)

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RISK CON

RCE
<i>Fully effective</i>
<i>Mostly effective</i>
<i>Mostly ineffective</i>
<i>None</i>

CONTROL EFFECTIVENESS GUIDE

Guide

Nothing more to be done except review and monitor the existing controls. Controls are well designed for the risk, are largely preventive and address the root causes. Management believes that they are effective and reliable at all times. Reactive controls only support preventive controls.

Most controls are designed correctly and are in place and effective. Some more work to be done to improve operating effectiveness or management has doubts about operational effectiveness and reliability of the controls.

While the design of controls may be largely correct in that they treat most of the root causes of the risk, they are not currently operationally very effective. There may be an over-reliance on reactive controls, or some of the controls

Virtually no credible control. Management has no confidence that any degree of control is being achieved.

Consequences	6	I	I
	5	II	II
	4	III	III
	3	IV	III
	2	IV	IV
	1	IV	IV
		A	B

Priority	Risk ranking	Action r
I	Very high	Immediate action requir be captured on IRM sys
II	High	Strong mandatory actio risks to be captured on
III	Medium	Action required, possibl level.
IV	Low	Minor or no action requi

RISK MATRIX		
I	I	I
II	I	I
II	I	I
II	II	I
III	II	II
III	III	III
<i>C</i>	<i>D</i>	<i>E</i>
Likelihood		

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ired.