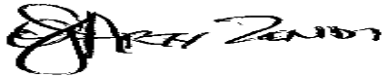




ETHEKWINI MUNICIPALITY Occupational Health & Safety Unit

BASELINE RISK ASSESSMENT

Document Title	Baseline Risk Assessment
Client	EThekwin Municipality – Human settlements Unit
Project	Rehabilitation and reconstruction of 224 top-structure units at Ntuzuma H Housing Project
Contract Number	1H-28545
Internal reference	BRA24/03/2024
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BASELINE RISK ASSESSMENT

1. INTRODUCTION: In accordance with the Occupational Health and Safety Act, (Act 85 of 1993) the Legislator places specific requirements on an Employer. One of these is prescribed in Section 8(i) of the Act where it requires the Employer to ascertain the risks and dangers which may occur within the workplace or section of the workplace and then goes on to establish working procedures or practices.

2. PURPOSE: This is conducted to create a benchmark of the potential risks that apply to the whole project or business operation.

3. SCOPE: This assessment could be approached on a site, regional or national level concerning any facet of the business operation or process or activity.

4. REVIEW AND MONITORING PLAN

The risk assessment form part of the health and safety plan to be applied on the site and must include the following:

- (a) The identification of the risk and hazards to which persons may be exposed.
- (b) An analysis and evaluation of the risk and hazards identified based on a documented method,
- (c) A documented plan and applicable safe work procedures to mitigate, reduce or control the risks and hazards that have been identified;
- (d) A monitoring plan; and
- (e) A review plan

5. REFERENCES

- (a) Tender document number 1H – 28545
- (b) Occupational Health & Safety Act and its Regulation

6. LOCALITY PLAN

Nil

SCOPE OF WORK

Asbestos work

Demolition

Public safety

Blockwork

Site establishment

Site clearing

Roof work

Excavation work

Use of hand-tools and electrical tools

Corona virus

Construction vehicle and mobile plants

Site security

Working in a fall risk position

1. RISK ESTIMATION AND EVALUATION

RISK CLASSIFICATION USING A RISK SCORE TECHNIQUE

Exposure (E) How frequently does the hazardous event occur		Risk level
Continuously		10
Frequently (daily)		6
Occasionally (weekly)		3
Unusually (monthly)		2
Rarely (few a year)		1

Probability (P) The probability of a loss when the hazardous event does occur		Risk level
Frequent (happens often)		10
Probable (quite possible)		6
Occasional (unusual, but possible)		3
Remotely possible (has happened somewhere)		1
Improbable (practically impossible)		0.5

Severity (S) Consequences of the hazardous event		Risk level
Catastrophic many fatalities; or interruption of longer than 2 weeks; or asset or environmental damage (or both) exceeding R100m		100
Disaster (few fatalities; or interruption between one and 2 weeks; or asset or environmental damage (or both) exceeding R10m)		40
Very serious (one fatality; or interruption of 6 days; or asset or environmental damage (or both) exceeding R100,000		7
Important (temporary disability; or interruption between 6 and 24 hours; or damage exceeding R10,000		3
Noticeable (first aid needed; or interruption of less than 6 hours; damage exceeding R1000)		1

Risk classification (Risk score = E x P x S)	
Risk score	Risk level
Over 400-----5	Very high risk – discontinue operation or activity
200 to 400 ----- 4	High risk – immediate correction needed
70 to 200----- 3	Substantial risk – correction needed
20 to 70----- 2	Possible risk – attention needed
Under 20 ----- 1	Risk accepted

BASELINE RISK ASSESSMENT WORKSHEET: IDENTIFYING EXISTING & POTENTIAL RISKS

	Activity	Hazard	Risk	Risk Evaluation			Risk Score	Risk level
				E	P	S		
1	Asbestos work							
	Removal; Handling; Storage and Disposal	Fragile roof; Working in fall risk position; Unsafe ladder; Inhalation of asbestos dust; Public exposure to asbestos dust; Illegal dumping of asbestos sheets	Fall risks; Death; Broken borne; Disablement; Lung disease; Lawsuits; Environmental damage; Legal fines	6	6	7	252	4
2	Demolition							
	Mechanical and manual demolition	Dust; noise; uncontrolled collapsing of structure; flying objects; No pre-planning; untrained operator	Respiratory disease; injury to body; death;	2	6	7	84	3
3	Public safety							

		Public exposure to construction activities; community unrest; fighting over resources	Injury to body; work stoppage; Legal claims	6	6	3	108	3
4	Blockwork							
		Unsafe working at height platforms; Unsafe hand tools; Contact with mortar	Fall risk; broken bone; dislocation; Injury to hands; Skin dermatitis	6	6	3	108	3
5	Site establishment							
	Manual and mechanical clearing of the land. Off-loading and positioning of containers by mobile crane. Fencing. Installation of temporary water supply, electricity, ablution facilities	Incompetent construction mobile plant operator. Manual Handling of equipment and materials. Uneven surfaces. Driving on dangerous and undulating	Body injuries/ Accidents. Destruction of services. Burns/ death	2	6	3	36	2

		terrain. Reckless driving. Electrocution. Incorrect/ poor connection of temporary services						
6	Site clearing							
	Clearing of the site using construction mobile plant and hand tools	Incompetent driver/ operator; Unsafe construction mobile plant/ hand tools; Petrol and oil spillages; Existing services; Noise	Accident; property damage; machinery running out of control; Injury to body; Environmental contamination; Noise induced hearing loss	3	6	7	126	3
7	Roof work							
	Construction of roof	Working on fall risk position; Unsafe roof access; Untrained roof erectors; No/	Falling from; Falling into; broken borne; death; disablement; Head injuries	6	6	7	252	4

		poor roof work planning; Collapsing of the roof; Falling objects						
8	Excavation work							
	Manual and mechanical excavation	Unsafe hand tools; Unsafe construction mobile plants; Uneven surface/ ground condition; Incompetent construction mobile plant operator; Oil leak; Unforeseen underground services	Broken borne; dislocation; Accidents; injuries to hands; Falling into excavation; Ground contamination	3	3	3	27	2
9	Use of hand-tools and electrical tools							
	Conducting activities using hand-tools and electrical tools	Unsafe hand-tools/ electrical tools. Possible of pinch	Injury to hands	6	3	1	18	1
10	Corona virus							
	- Transportation of employees - Use of site facilities and	Non-compliance with COVID19 Codes of	Employees could be infected with COVID19 virus, severe illness or	6	3	7	126	3

	hand-tools • Preforming construction work • Meeting/ toolbox talks	practice • Sharing of facilities and hand tools • Failure to use disinfectants • Virus contaminated vehicle, facilities and tool • Being in an enclosed place • Not using protective gear	death • Could be prosecuted or fined					
11	Construction mobile plants and vehicles							
	• Use of construction vehicles and mobile plants and equipment	• Unsafe construction plants and equipment. Incompetent drivers or operators. Oil leaks	• Accidents; injury to employees and public; death; disablement; damage to property. Environmental contamination	6	6	7	252	4
12	Site security							
		• Unguarded site camp;	• Loss of material and equipment/	6	3	3	54	2

		Inadequate security provision; No safe access control	financial risks/ theft/ unlawful invasion or damage new of houses					
13	Working in a fall risk positions							
		Falling into; Falling from; Medical unfit; Untrained person	Broken borne/ disablement/ death	6	6	7	252	4

RISK PROFILE:

Rehabilitation and reconstruction of 224 top-structure units at Ntuzuma H Housing Project 1H-27157

