
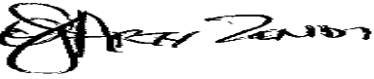




ETHEKWINI MUNICIPALITY Occupational Health & Safety Unit

BASELINE RISK ASSESSMENT

Document Title	Baseline Risk Assessment
Client	EThekwini Municipality – Human settlements Unit
Project	Construction of 190 top-structure units at Riverdene Housing Project
Contract Number	1H-31191
Internal reference	BRA09/12/2024
Compiled by (Safety officer)	Name and surname: Siya Nkosi Signature:  Date: 09/12/2024
Reviewed by (Manager: Safety & Risk)	Name and surname: Arty Zondi Signature:  Date: 09/12/2024

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 – 31191
- (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

Construction vehicle and mobile plants

Site security

Working in a fall risk position

Painting

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	<ul style="list-style-type: none">Fragile roof; Working in fall risk position; Unsafe ladder; Inhalation of asbestos dust; Public exposure to asbestos dust; Illegal dumping of asbestos sheets	<ul style="list-style-type: none">Fall risks; Death; Broken borne; Disablement; Lung disease; Lawsuits; Environmental damage; Legal fines	3	6	7	126	3
2	Demolition work							
		<ul style="list-style-type: none">Mechanical and manual demolition	<ul style="list-style-type: none">Dust; noise; uncontrolled collapsing of structure; flying objects; No pre-planning; untrained operator	2	6	7	84	3
3	Public safety							
		<ul style="list-style-type: none">Public	<ul style="list-style-type: none">Injury to body;	6	6	3	108	3

		exposure to construction activities; community unrest; fighting over resources	work stoppage; Legal claims					
4	Blockwork							
		<ul style="list-style-type: none"> Unsafe working at height platforms; Unsafe hand tools; Contact with mortar 	<ul style="list-style-type: none"> Fall risk; broken bone; dislocation; Injury to hands; Skin dermatitis 	6	6	3	108	3
5	Site establishment							
	<ul style="list-style-type: none"> 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 	<ul style="list-style-type: none"> Incompetent construction mobile plant operator. Manual Handling of equipment and materials. Uneven surfaces. Driving on dangerous and undulating terrain. 	<ul style="list-style-type: none"> Body injuries/ Accidents. Destruction of services. Burns/ death 	2	6	3	36	2

		Reckless driving. Electrocution. Incorrect/ poor connection of temporary services						
6	Site clearing							
	<ul style="list-style-type: none"> Clearing of the site using construction mobile plant and hand tools 	<ul style="list-style-type: none"> Incompetent driver/operator; Unsafe construction mobile plant/hand tools; Petrol and oil spillages; Existing services; Noise 	<ul style="list-style-type: none"> 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							
	<ul style="list-style-type: none"> Construction of roof 	<ul style="list-style-type: none"> Working on fall risk position; Unsafe roof access; Untrained roof erectors; No/poor roof work 	<ul style="list-style-type: none"> Falling from; Falling into; broken borne; death; disablement; Head injuries 	6	6	7	252	4

		planning; Collapsing of the roof; Falling objects						
8	Excavation work							
	<ul style="list-style-type: none"> Manual and mechanical excavation 	<ul style="list-style-type: none"> Unsafe hand tools; Unsafe construction mobile plants; Uneven surface/ ground condition; Incompetent construction mobile plant operator; Oil leak; Unforeseen underground services 	<ul style="list-style-type: none"> 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							
	<ul style="list-style-type: none"> Conducting activities using hand-tools and electrical tools 	<ul style="list-style-type: none"> Unsafe hand-tools/ electrical tools. Possible of pinch 	<ul style="list-style-type: none"> Injury to hands 	6	3	1	18	1
10	Painting							
		<ul style="list-style-type: none"> Paint inhalation. Paint ingestion. Paint spillage. 	<ul style="list-style-type: none"> Respiratory illness. Health related complications. Ground/ floor 	3	6	3	54	2

		Paint contact with body	contamination. Skin irritation.					
11	Construction mobile plants and vehicles							
	<ul style="list-style-type: none"> Use of construction vehicles and mobile plants and equipment 	<ul style="list-style-type: none"> Unsafe construction plants and equipment. Incompetent drivers or operators. Oil leaks 	<ul style="list-style-type: none"> Accidents; injury to employees and public; death; disablement; damage to property. Environmental contamination 	6	6	7	252	4
12	Site security							
		<ul style="list-style-type: none"> Unguarded site camp; Inadequate security provision; No safe access control 	<ul style="list-style-type: none"> Loss of material and equipment/ financial risks/ theft/ unlawful invasion or damage new of houses 	6	6	7	252	4
13	Working in a fall risk positions							
		<ul style="list-style-type: none"> Falling into; Falling from; Medical unfit; Untrained person 	<ul style="list-style-type: none"> Broken borne/ disablement/ death 	6	6	7	252	4

RISK PROFILE:

Construction of 190 topstructure units at Riverdene Housing Project 1H-31191

