



**BASELINE RISK ASSESSMENT FOR PLUMBING MAINTENANCE AT GEORGE MUNICIPALITY MAIN BUILDING AND VARIOUS FACILITIES**

COMPANY	BASELINE RISK ASSESSMENT	<b>HAZARD IDENTIFICATION AND RISK ASSESSMENT</b>		
COMPILED BY	ERIC NQAMPI			
DATE OF ASSESSMENT	11JUNE 2026			
SCOPE OF WORK	PLUMBING MAINTENANCE AT GEORGE MUNICIPALITY MAIN BUILDING AND VARIOUS FACILITIES.			
REVIEW DATE	EVERY ONE (1) year or after reportable incident or change in scope of work.			

Probability Index	5	Almost certain to inevitable	Severity index injury /disease	5	Fatal	Severity index (Production)	5	No production for at least 12 months	Severity index due to Environment	5	Permanent effects	Severity index (Financial impact)	5	Greater than R500 000.00	Frequency index	5	Hazards permanently present
	4	Probable		4	Permanently disabling injury		4	Loss of 1 month or more		4	Long term > 2 years		4	R100 000. 00 – R499 999,00		4	Hazards arises every week
	3	Improbable		3	Likely to be absent for more than 14 days		3	Loss of 1 week in production		3	Medium – 6 months to 12 months		3	R10 000.00 – R99 999.00		3	Hazards arises every month
	2	Less than even a chance		2	Medical recovery within 14 days		2	Loss of 1 day in production		2	Short term 1 day to six (6) months		2	R1 000.00 – R9 999.00		2	Hazards arises every year
	1	Highly improbable		1	First aid only		1	Loss of half day in production		1	Insignificant effect		1	R0 – R999.00		1	Hazards arises every five (5) years
	0	Not probable		0	Near misses		0	No loss of time but production		0	No aspect or impact		0	No cost involved		0	No hazards exists

**BASELINE RISK ASSESSMENT FOR PLUMBING MAINTENANCE AT GEORGE MUNICIPALITY MAIN BUILDING AND VARIOUS FACILITIES**

								affected by shock of employees												
										PRIORITY OF ACTION					ACTION TO BE TAKEN					
										RISK VALUE	A	75 – 100%	Immediate	Training, Safe Work Practice, Method Statements & detailed action plans						
											B	60 – 74%	Within 1 week	Training, Safe Work Practice, Method Statements & detailed action plans						
											C	45 – 59%	Within 1 month	Training, Safe Work Practice, Method Statements & detailed action plans and registers						
											D	30 – 44%	Within 6 months	Training and Safe Operating Procedures						
											E	15 – 29%	Within 12 months	Training						
											F	0 – 14%	As reasonable	Training						
Ref No.	Sequence of Activity in Action	Hazards (Safety, Health and environment)	Risk rating E (L + C)				Risk Rating	Control Measure	Control Effectiveness Rating											
			Exposure (E)	Likelihood (L)	Consequence (C)				Control Type	Control effectiveness rating										
1.	Site Establishment	<ul style="list-style-type: none"> <li>Damage to Construction equipment.</li> <li>Damage to existing electrical or Telecommunication lines.</li> <li>Damage to property of client.</li> <li>Construction vehicles crashes with site personnel causing injuries and fatal accidents.</li> </ul>	2	3	4	14	<ul style="list-style-type: none"> <li>The contractor will be required to develop and submit prior to commencement of work a risk assessment, health and safety plan, the method statements, and all relevant supporting documentation to ensure that all overall activities are properly planned.</li> <li>When using lifting equipment and cranes to assist with site establishment, ensure that all relevant risk assessments and method statements are conducted &amp; employees are briefed on the risks involved.</li> <li>Use competent employees to fulfil functions during the activities.</li> <li>Ensure that site is suitably and sufficiently barricaded and provided with controlled access points to prevent the entry of unauthorized persons.</li> </ul>	Administrative	Satisfactory											

BASELINE RISK ASSESSMENT FOR PLUMBING MAINTENANCE AT GEORGE MUNICIPALITY MAIN BUILDING AND VARIOUS FACILITIES

2.	Hazardous Chemical Substances	Exposure to hazardous chemical substances.	4	2	3	20	<ul style="list-style-type: none"> <li>Before any employee is allowed to use HCS, they must be provided with training, warned about possible hazards as per MSDS. Correct and relevant PPE should be issued and wearied to mitigate any possible risk.</li> </ul>	Administrative and the use of PPE	Good
		Adhesive aggregate used to attach drywall splashes into eyes, skin contact causing irritation and other	2	4	3	14	<ul style="list-style-type: none"> <li>Ensure employees are provided with PPE.</li> </ul>	PPE	Good
3.	Electricity	Electrical shock due to contact with live electrical wire	3	5	3	24	<ul style="list-style-type: none"> <li>Develop detailed method statement and ensure that it is implemented.</li> <li>Exclusion zones to be created with rigid barriers and warning signs.</li> <li>No machine to be operated in an area where any part of machine or equipment can contact electrical wire.</li> <li>All persons to be provided with training in the hazards associated with live electrical wire.</li> <li>Provide employees with relevant PPE.</li> </ul>	Combination of Administrative process and PPE	Satisfactory
	Electricity	Electrical shock or electrocution due to the use of unsafe electrical equipment (including generators)	3	5	3	24	<ul style="list-style-type: none"> <li>Electrical equipment to be inspected by an authorised operator or user on a daily basis prior to use.</li> <li>Details of these inspections to be recorded in a register which will be kept on site at all times.</li> </ul>	Administrative	Satisfactory
	Electricity	Electrical shock or electrocution due to contact with live overhead power lines	3	5	3	24	<ul style="list-style-type: none"> <li>Electrical artisans need to be mindful of existing electrical wires. Before any equipment is used on a work site, an assessment should be carried out and reports of such assessments kept in the Contractor's SHE file.</li> </ul>	Administrative	Satisfactory
4.	Ladder: to gain access to ceilings/elev	Falling from the ladder leading to various injuries	3	3	3	18	<ul style="list-style-type: none"> <li>Must be erected by a qualified person.</li> <li>Contractor to appoint such qualified person and must ensure that no worker uses a scaffolding that is not approved for use by a competent person.</li> </ul>	Administrative	Good

BASELINE RISK ASSESSMENT FOR PLUMBING MAINTENANCE AT GEORGE MUNICIPALITY MAIN BUILDING AND VARIOUS FACILITIES

	ated working sites.						<ul style="list-style-type: none"> <li>• Provide personal protective equipment</li> </ul>		
5.	Erecting working platforms	Poor manual handling leading to sprains, strains, and fractures.	4	3	5	32	<ul style="list-style-type: none"> <li>• Train employees on good lifting techniques.</li> <li>• Providing suitable working platforms for working conditions.</li> </ul>	Administrative	Good
6.	Moving materials for employees	<ul style="list-style-type: none"> <li>• Poor terrain</li> <li>• Incorrect type of trolley to lift materials.</li> <li>• Repetitive lifting of materials</li> <li>• Damage to existing office equipment.</li> </ul>	4	3	5	32	<ul style="list-style-type: none"> <li>• Train employees on good lifting techniques</li> <li>• Introduce the lifting machinery to avoid accidents to employees.</li> <li>• Existing office equipment must be protected throughout the construction activities.</li> </ul>	Administrative	Good
7.	Drilling and grinding	Flying particles that can cause respiratory ailments.	4	3	5	32	<ul style="list-style-type: none"> <li>• Machine guard to be fitted and ensure that the machine is working properly. Inspection and pre-checks to be conducted before using any driven machine.</li> <li>• The necessary PPE to be provided for personnel.</li> </ul>	Engineering and Administrative	Satisfactory
8.	Working in enclosed areas or confined space.	<ul style="list-style-type: none"> <li>• Accumulation of particulate matter within the confines of the building.</li> <li>• Lack of oxygen.</li> <li>• Damage to property such as fibre cables and electrical wires.</li> </ul>	3	3	5	24	<ul style="list-style-type: none"> <li>• Employees must ensure that their workspace is well ventilated.</li> <li>• Proper lighting/illumination measure to be installed where applicable.</li> <li>• Employees must be cognizant and avoid overcrowding when working in confined spaces.</li> <li>• PPE must be used at all times.</li> </ul>	Administrative and Engineering	Good

BASELINE RISK ASSESSMENT FOR PLUMBING MAINTENANCE AT GEORGE MUNICIPALITY MAIN BUILDING AND VARIOUS FACILITIES

9.	Improper stacking and storage of material and equipment	Material falls due to improper stacking causing injuries to persons.	3	4	4	24	<ul style="list-style-type: none"> <li>Stacking should be supervised by competent person. Best stacking practices should be applied. Training for those responsible for discharging this duty should be provided.</li> </ul>	Administrative	Good
10.	Loading and offloading	Back injuries	3	3	6	27	<ul style="list-style-type: none"> <li>Train employees on safe lifting techniques, reduce the weight of items to be lifted and use the mechanical to lift heavy items.</li> </ul>	Administrative	satisfactory
11.	Portable Electrical Equipment	Noise will be generated by portable electrical equipment which will lead to noise induced hearing loss	2	2	3	10	<ul style="list-style-type: none"> <li>Contractor to provide PPE (Ear Protection).</li> <li>Workers should be rotated to reduce exposure.</li> <li>Noise must be measured and if found to be more than 85 decibels, the contractor must provide means to mitigate the impact.</li> <li>Contractor to conduct continuous awareness and communication with Municipal personnel regarding the probable exposure to noise pollution and the remedial actions applicable.</li> </ul>	Administrative	Satisfactory
12.	Use of Adhesive aggregate (e.g. Rhinolite)	Inhalation of air containing particulate matter leading to respiratory problems like asthma.	3	3	4	21	<ul style="list-style-type: none"> <li>The Contractor must ensure that particulate matter in their working zones is suppressed through applicable methods, such as providing adequate ventilation.</li> <li>Provide the PPE such as Dust mask to mitigate the impact. Medical surveillance must be conducted before the commencement of the project and after the project.</li> </ul>	Administrative	Good
13.	Mistakes in operation by employees and operators	Lack of training leads to mistakes, use of equipment incorrectly	4	5	4	36	<ul style="list-style-type: none"> <li>All employees on site to be properly inducted.</li> <li>Competent supervision to be provided on site.</li> </ul>	Administrative	Good

BASELINE RISK ASSESSMENT FOR PLUMBING MAINTENANCE AT GEORGE MUNICIPALITY MAIN BUILDING AND VARIOUS FACILITIES

14.	Interface with municipality personnel	<ul style="list-style-type: none"> <li>Mixing up of municipality personnel with construction activities exposes both parties to possible risks and hazards, due to poor hoarding / screens and barricades.</li> <li>Poor communication between municipality personnel and Contractor.</li> <li>Contractor not coming up with clear plan of suppressing indoor air pollution.</li> </ul>	4	5	4	36	<ul style="list-style-type: none"> <li>Hoarding must be erected to separate municipal personnel from construction activities.</li> <li>Barricading must be installed around working zones.</li> <li>Good working relationship must exist between municipal personnel and management of the Contractor so that decanting can take place in harmony.</li> <li>Visible signage must be put up across all working zones for ample awareness on the site conditions and prohibitions applicable to it.</li> <li>Warning signs to be included around other areas that may be affected by the movement of Contractor personnel to and from the working zone.</li> </ul>	Engineering and administrative controls	Good
15.	Housekeeping	<ul style="list-style-type: none"> <li>Housekeeping not being maintained daily.</li> <li>Generated waste, scrap and debris not removed from</li> </ul>	4	3	4	28	<ul style="list-style-type: none"> <li>Housekeeping to be maintained daily.</li> <li>Hoarding must be maintained daily and must be kept up to standard.</li> </ul>	Administrative	Good

BASELINE RISK ASSESSMENT FOR PLUMBING MAINTENANCE AT GEORGE MUNICIPALITY MAIN BUILDING AND VARIOUS FACILITIES

		<p>site at reasonably appropriate intervals.</p> <ul style="list-style-type: none"> <li>• Construction areas near occupied offices not sufficiently hoarded.</li> </ul>							
16.	Working at elevated position / at height	<ul style="list-style-type: none"> <li>• Falling objects</li> <li>• Employees working at heights not having necessary competency to work at heights.</li> </ul>	4	5	5	40	<ul style="list-style-type: none"> <li>• Tools and material to be secured while working at heights to prevent falling from heights.</li> <li>• Adequate training and awareness to be provided to employees on working in elevated/fall position.</li> <li>• The necessary safety equipment must be provided prior to commencing with activities.</li> </ul>	Engineering and administration	Good
17.	Fall protection	<ul style="list-style-type: none"> <li>• Employees not working according to approved fall protection plan.</li> <li>• Employees not trained on fall protection plan.</li> <li>• Lack of supervision to ensure that workers are implementing the approved fall protection plan.</li> </ul>	4	5	5	40	<ul style="list-style-type: none"> <li>• Fall Protection plan to be communicated among all employees by means of induction training and toolbox talks.</li> <li>• Employees to have the necessary competency to qualify to work at heights.</li> <li>• Fall protection plan to be updated throughout the project life span.</li> <li>• Fall protection plan to address all site-specific conditions.</li> </ul>	Engineering and administration	Good

BASELINE RISK ASSESSMENT FOR PLUMBING MAINTENANCE AT GEORGE MUNICIPALITY MAIN BUILDING AND VARIOUS FACILITIES

18.	Painting and attributed tools and equipment.	Paint being flushed down drains	<b>3</b>	<b>4</b>	<b>3</b>	<b>21</b>	<ul style="list-style-type: none"> <li>• All cleaning of paint brushes to be conducted in a controlled manner and working area.</li> <li>• No paint to be disposed off down drains or into the stormwater systems.</li> <li>• Empty paint containers to be removed from site and disposed off as per regulations on disposal of hazardous chemical waste.</li> </ul>	Administrative	Good
-----	--	---------------------------------	----------	----------	----------	-----------	--	----------------	------

BASELINE RISK ASSESSMENT FOR PLUMBING MAINTENANCE AT GEORGE MUNICIPALITY MAIN BUILDING AND VARIOUS FACILITIES

**1. A risk level is attributed to each circumstance in the following manner**

- Low Risk = 1 – 15
- Medium Risk = 16 – 30
- High Risk = 31 – 50

**2. Risk Ranking calculation**

**2.1 Consequence**

- Medical Treatment only or less (minor injury) = 2
- Average Lost Time Injury = 4
- Major Injury = 6
- Fatality or Permanent disabling injury = 8

**2.2 Probability**

- Not likely to occur in our lifetime = A
- Could occur = B
- Has happened = C
- Common Occurrence = D

**2.3 Calculation of Risk**

- Consequence = probability x frequency

**3. Evaluation of results**

Activities listed in the high risk zones must be seen as tasks requiring immediate attention. Administration will in most instances solve some of the problems satisfactory, administration would involve training and awareness programmes to educate employees about the hazards and risks associated with their tasks.

An implementation plan must be devised to address the outstanding issues which may need engineering solution or PPE if all attempts fail. The action plan must be cognisance of the specific hazards that need to be eliminated.

**4. Assessment Team**

The following professionals were involved in the design of this baseline risk assessment for Plumbing maintenance at George Municipality's Main Building and various Facilities:

Eric Nqampi – Pr. CHSA  
Dunyiswa Nosana: CHSO  
Siwapiwe Bekebu: CHSO  
Vacía Jabe: CHSO

BASELINE RISK ASSESSMENT FOR PLUMBING MAINTENANCE AT GEORGE MUNICIPALITY MAIN  
BUILDING AND VARIOUS FACILITIES

**5. Task Specific Risk Assessment**

Should the baseline risk assessment indicate tasks in high risk zone, a specific task risk assessment must be conducted. The assessment will then target the specific tasks and hazards attached to the identified activity.

**6. Required and Existing Control Measures**

- Safe Work Procedures
- Training
- Medical Examination
- Supervision
- Risk assessment
- Mitigation measures
- Consequence management