

SOUTH AFRICAN NATIONAL SPACE AGENCY

PROJECT: MATJIESFONTEIN GROUND STATION

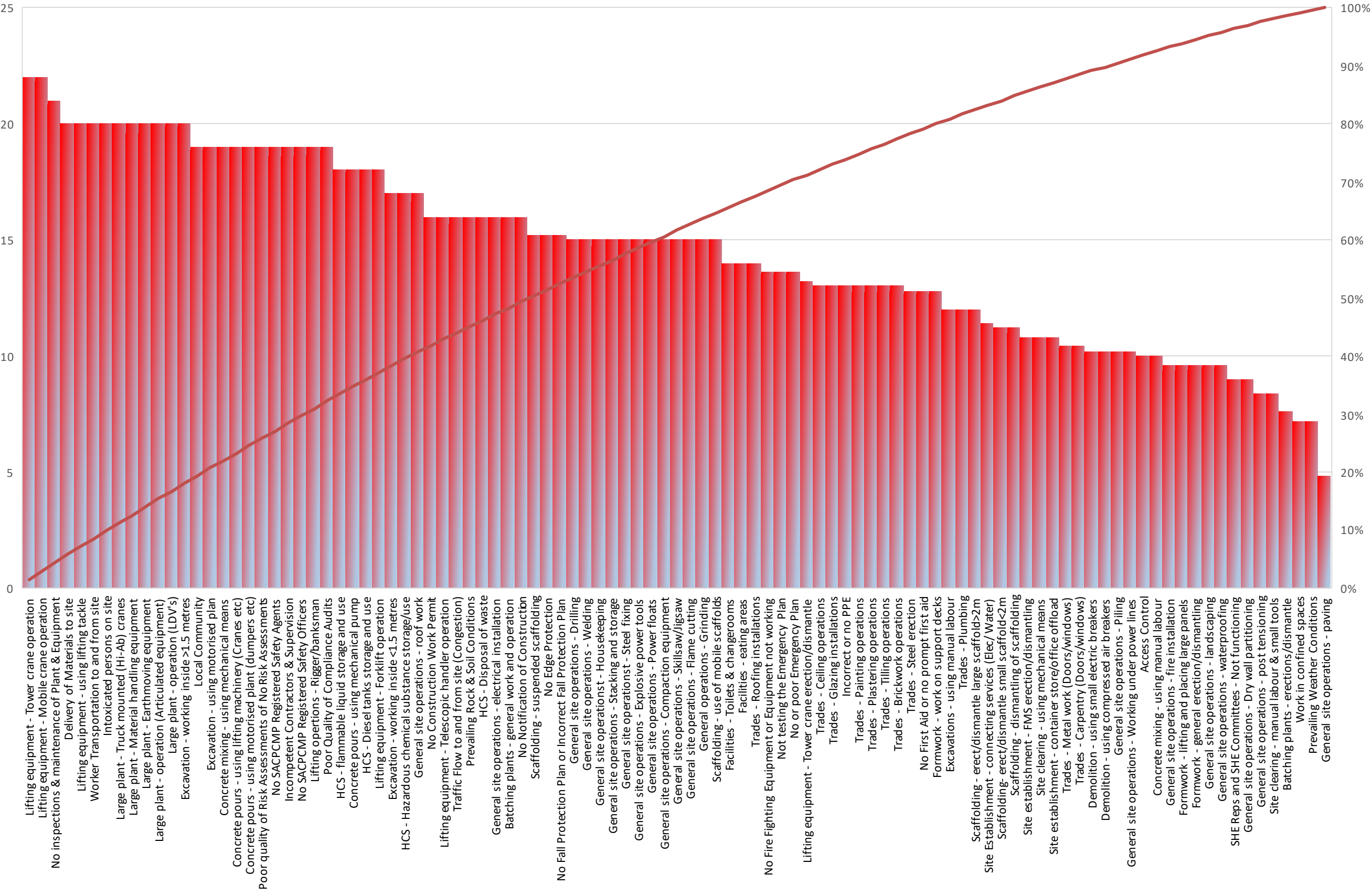
BASELINE RISK ASSESSMENT


Revision: 0

Date 07/10/2024

[illegible]

Project Risk Profile (Pareto Indication)



PROJECT BASELINE RISK ASSESSMENT														
PROJECT: SANSA MTJ GROUND STATION			<div><div>MITIGATING CONTROLS 1. No evidence of control measures 2. Verbal instructions/procedures 3. Documented instructions/procedures 4. Documented instructions/procedures approved</div></div>											
COMPILED BY: JB CHANDLER														
DATE: 07 OCTOBER 2024														
SCOPE: NEW BUILD														
REVISION: 00														
ACTIVITIES BASED ON PROGRAMME OF WORK	KEY SHE HAZARDS & UNWANTED EVENTS	FREQUENCY	SEVERITY	PURE RISK RATING	Mitigating	Residual Risk	Severity Categories						Additional Actions or More Detailed Assessments (TRA - Task Risk Assessment) SWMS - Safe Work Method Statement	Responsible
		1 - 5	1 - 5		1 - 5			F	BI	II	FI	LI		
Delivery of Materials to site	Motor vehicle accident, property damage, dropped loads, impact with power lines - injuries/fatalities.	5	4	20	5	4.00	5	4	5	4	3	4	Site establishment TRA & SWMS + training.	S 16(2) R 8(1) & 8(5)
Access Control	Unauthorised, unprotected access - injuries.	5	2	10	5	2.00	5	2	2	2	3	1	Access control TRA & SWMS + training.	S 16(2) R 8(1) & 8(5)
Site clearing - manual labour & small tools	Snakes, Insects, musculo-skeletal Injuries.	3	2.8	8.4	5	1.68	3	2	4	3	3	2	Access control TRA & SWMS + training.	S 16(2) R 8(1) & 8(5)
Site clearing - using mechanical means	Moving machinery, contact with underground services, Motor vehicle accident, exhaust fumes, collapse of ground.	3	3.6	10.8	5	2.16	3	4	4	4	4	2	Access control TRA & SWMS + training.	S 16(2) R 8(1) & 8(5)
Site establishment - FMS erection/dismantling	Snakes, insects, musculo-skeletal injuries, hand tools (hand injuries), sharp objects.	3	3.6	10.8	5	2.16	3	4	4	4	4	2	Access control TRA & SWMS + training.	S 16(2) R 8(1) & 8(5)
Site establishment - container store/office offload	Motor vehicle accident, property damage, dropped loads, impact with power lines - injuries/ fatalities.	3	3.6	10.8	5	2.16	3	4	4	4	4	2	Access control TRA & SWMS + training.	S 16(2) R 8(1) & 8(5)
Site Establishment - connecting services (Elec/ Water)	Motor vehicle accident, property damage, dropped loads, impact with power lines - injuries/ fatalities.	3	3.8	11.4	5	2.28	3	4	5	4	4	2	Access control TRA & SWMS + training.	S 16(2) R 8(1) & 8(5)
Facilities - Toilets & changerooms	Biological agents (Ecoli/ Staph), no water or cleaning products.	5	2.8	14	5	2.80	5	3	3	2	3	3	Facilities TRA & SWMS + training.	S 16(2) R 8(1) & 8(5)
Facilities - eating areas	Biological agents (Ecoli/ Staph) ,no water or cleaning products, smoking of lack of hygiene.	5	2.8	14	5	2.80	5	3	3	2	3	3	Facilities TRA & SWMS + training.	S 16(2) R 8(1) & 8(5)
Excavations - using manual labour	Musculo-skeletal injuries, hit by hand tools, impact services(water, electricity).	5	2.4	12	5	2.40	5	1	4	2	2	3	Excavations TRA & SWMS + training.	S 16(2) R 8(1) & 8(5)
Excavation - using motorised plan	Motor vehicle accident, property damage, dropped loads, impact with power lines - injuries/ fatalities.	5	3.8	19	5	3.80	5	4	4	4	4	3	Excavations TRA & SWMS + training.	S 16(2) R 8(1) & 8(5)
Excavation - working inside <1.5 metres	Moving machinery, contact with underground services, motor vehicle accident, exhaust fumes, collapse of ground.	5	3.4	17	5	3.40	5	3	4	4	3	3	Excavations TRA & SWMS + training.	S 16(2) R 8(1) & 8(5)
Excavation - working inside >1.5 metres	Moving machinery, contact with underground services, motor vhicle accident, exhaust fumes, collapse of ground.	5	4	20	5	4.00	5	4	5	4	4	3	Excavations TRA & SWMS + training.	S 16(2) R 8(1) & 8(5)
Batching plants - erections/dismantle	Dropped loads, hand tools, falls from height, lifting equipment.	2	3.8	7.6	5	1.52	2	4	4	4	4	3	Batching TRA & SWMS + training.	S 16(2) R 8(1) & 8(5)
Batching plants - general work and operation	Moving machinery, dust, noise, vehicles, live electricity, flammable fuels, exhaust fumes.	5	3.2	16	5	3.20	5	3	4	3	3	3	Batching TRA & SWMS + training.	S 16(2) R 8(1) & 8(5)
Concrete mixing - using manual labour	Musculo-skeletal injuries, impact with hand tools, cementicious products.	5	2	10	5	2.00	5	2	2	2	2	2	Concrete Mixing TRA's & SWMS + Training	S 16(2) R 8(1) & 8(5)
Concrete mixing - using mechanical means	Moving machinery, dust, noise, vehicles, live electricity, flammable fuels, exhaust fumes, cementicious products.	5	3.8	19	5	3.80	5	4	4	4	4	3	Concrete mixing TRA's & SWMS + training.	S 16(2) R 8(1) & 8(5)
Concrete pours - using lifting machinery (Cranes etc)	Dropped loads, impacts with lifting equipment, nip points on cement buckets, cementicious products.	5	3.8	19	5	3.80	5	4	5	4	4	2	Concrete mixing TRA's & SWMS + training.	S 16(2) R 8(1) & 8(5)
Concrete pours - using motorised plant (dumpers etc)	Moving machinery, dust, noise, vehicles, flammable fuels, exhaust fumes, cementicious products.	5	3.8	19	5	3.80	5	4	5	4	4	2	Concrete mixing TRA's & SWMS + training.	S 16(2) R 8(1) & 8(5)
Concrete pours - using mechanical pump	Moving machinery, dust, noise, vehicles, flammable fuels, exhaust fumes, cementicious products.	5	3.6	18	5	3.60	5	4	3	4	4	3	Concrete mixing TRA's & SWMS + training.	S 16(2) R 8(1) & 8(5)
Lifting equipment - Tower crane erection/dismantle	Dropped loads, impacts with lifting equipment, fall from height, live electricity, exhaust fumes.	3	4.4	13.2	5	2.64	3	5	5	5	4	3	Tower crane TRA's & SWMS + training.	S 16(2) R 8(1) & 8(5)
Lifting equipment - Tower crane operation	Dropped loads, impacts with lifting equipment, fall from height, live electricity, exhaust fumes .	5	4.4	22	5	4.40	5	5	5	5	4	3	Tower crane TRA's & SWMS + training.	S 16(2) R 8(1) & 8(5)
Lifting equipment - Mobile crane operation	Dropped loads, impacts with lifting equipment, fall from height, live electricity, exhaust fumes.	5	4.4	22	5	4.40	5	5	5	5	4	3	Mobile crane TRA's & SWMS + training.	S 16(2) R 8(1) & 8(5)

ACTIVITIES BASED ON PROGRAMME OF WORK	KEY SHE HAZARDS & UNWANTED EVENTS	FREQUENCY	SEVERITY	PURE RISK RATING	Mitigating	Residual Risk	Severity Categories						Additional Actions or More Detailed Assessments (TRA - Task Risk Assessment) SWMS - Safe Work Method Statement	Responsible
		1 - 5	1 - 5		1 - 5		F	BI	II	FI	LI	EI		
Lifting equipment - Telescopic handler operation	Motor vehicle accident, property damage, dropped loads, impact with power lines - injuries/fatalities, exhaust fumes.	5	3.2	16	5	3.20	5	3	4	3	3	3	Telehandler TRA's & SWMS + training.	S 16(2) R 8(1) & 8(5)
Lifting equipment - Forklift operation	Motor vehicle accident, property damage, dropped loads, impact with power lines - injuries/fatalities, exhaust fumes.	5	3.6	18	5	3.60	5	4	5	4	3	2	Forklift TRA's & SWMS + training.	S 16(2) R 8(1) & 8(5)
Lifting equipment - using lifting tackle	Dropped loads, impacts with lifting equipment & tackle, sharp equipment, nip points.	5	4	20	5	4.00	5	4	5	4	4	3	Lifting tackle TRA & SWMS + training.	S 16(2) R 8(1) & 8(5)
Lifting operations - Rigger/banksman	Dropped loads, impacts with lifting equipment & tackle, sharp equipment, nip points.	5	3.8	19	5	3.80	5	4	4	4	4	3	Rigger/ banksman TRA & SWMS + training.	S 16(2) R 8(1) & 8(5)
Formwork - general erection/dismantling	Lifting equipment, dropped loads, fall from height, hand tools, collapse of Formwork/scaffolding, shutter oil.	3	3.2	9.6	5	1.92	3	3	5	3	3	2	Formwork TRA & SWMS + training.	S 16(2) R 8(1) & 8(5)
Formwork - lifting and placing large panels	Lifting equipment, dropped loads, fall from height, hand tools, collapse of Formwork/scaffolding, shutter oil.	3	3.2	9.6	5	1.92	3	3	5	3	3	2	Formwork TRA & SWMS + training.	S 16(2) R 8(1) & 8(5)
Formwork - work on support decks	Lifting equipment, dropped loads, fall from height, hand tools, collapse of Formwork/scaffolding, shutter oil.	4	3.2	12.8	5	2.56	4	3	5	3	3	2	Formwork TRA & SWMS + training.	S 16(2) R 8(1) & 8(5)
Scaffolding- erect/dismantle small scaffold<2m	Musculo-skeletal Injuries, hit by hand tools, fall from height, scaffold collapse.	4	2.8	11.2	5	2.24	4	2	4	3	3	2	Scaffolding TRA & SWMS + training.	S 16(2) R 8(1) & 8(5)
Scaffolding - erect/dismantle large scaffold>2m	Musculo-skeletal Injuries, hit by hand tools, fall from height, scaffold collapse.	4	3	12	5	2.40	4	3	4	3	3	2	Scaffolding TRA & SWMS + training.	S 16(2) R 8(1) & 8(5)
Scaffolding - use of mobile scaffolds	Musculo-skeletal Injuries, hit by hand tools, fall from height, scaffold collapse.	5	3	15	5	3.00	5	2	5	3	3	2	Scaffolding TRA & SWMS + training.	S 16(2) R 8(1) & 8(5)
Scaffolding - dismantling of scaffolding	Musculo-skeletal Injuries, hit by hand tools, fall from height, scaffold collapse.	4	2.8	11.2	5	2.24	4	3	5	2	2	2	Scaffolding TRA & SWMS + training.	S 16(2) R 8(1) & 8(5)
Scaffolding - suspended scaffolding	Musculo-skeletal Injuries, hit by hand tools, fall from height, scaffold collapse.	4	3.8	15.2	5	3.04	4	4	3	4	4	4	Scaffolding TRA & SWMS + training.	S 16(2) R 8(1) & 8(5)
Demolition - using small electric breakers	Structure collapse, dust, vibration, noise, flying debris, live electricity.	3	3.4	10.2	5	2.04	3	3	5	3	3	3	Demolition TRA & SWMS + training.	S 16(2) R 8(1) & 8(5)
Demolition - using compressed air breakers	Structure collapse, dust, vibration, noise, flying debris, exhaust fumes.	3	3.4	10.2	5	2.04	3	3	5	3	3	3	Demolition TRA & SWMS + training.	S 16(2) R 8(1) & 8(5)
Trades - Brickwork operations	Musculo-skeletal injuries, hit by hand tools, fall from height, scaffold collapse, hit by brick being dropped.	5	2.6	13	5	2.60	5	3	4	2	2	2	Brickwork TRA & SWMS + training.	S 16(2) R 8(1) & 8(5)
Trades - Plastering operations	Musculo-skeletal Injuries, hit by hand tools, fall from height, scaffold collapse, dust, contact dermatitis.	5	2.6	13	5	2.60	5	3	4	2	2	2	Plastering TRA & SWMS + Training	S 16(2) R 8(1) & 8(5)
Trades - Painting operations	Musculo-skeletal injuries, hit by hand tools, fall from height, scaffold collapse, hazardous chemicals.	5	2.6	13	5	2.60	5	3	4	2	2	2	Painting TRA & SWMS + training.	S 16(2) R 8(1) & 8(5)
Trades - Ceiling operations	Musculo-skeletal injuries, hit by hand tools, fall from height, scaffold collapse, dropped tools and materials.	5	2.6	13	5	2.60	5	3	4	2	2	2	Ceiling TRA & SWMS + training.	S 16(2) R 8(1) & 8(5)
Trades - Roofing installations	Musculo-skeletal injuries, hit by hand tools, fall from height, scaffold collapse, dropped tools and materials.	5	2.8	14	5	2.80	5	3	5	2	2	2	Roofing TRA & SWMS + training.	S 16(2) R 8(1) & 8(5)
Trades - Glazing installations	Musculo-skeletal injuries, hit by hand tools, fall from height, scaffold collapse, dropped tools and materials.	5	2.6	13	5	2.60	5	3	4	2	2	2	Glazing TRA & SWMS + training.	S 16(2) R 8(1) & 8(5)
Trades - Tiling operations	Musculo-skeletal injuries, hit by hand tools, fall from height, scaffold collapse, dropped tools and materials.	5	2.6	13	5	2.60	5	3	4	2	2	2	Tiling TRA & SWMS + training.	S 16(2) R 8(1) & 8(5)
Trades - Carpentry (Doors/windows)	Musculo-skeletal injuries, hit by hand tools, fall from height, scaffold collapse, dust, noise, live electricity.	4	2.6	10.4	5	2.08	4	3	4	2	2	2	Carpentry TRA & SWMS + training.	S 16(2) R 8(1) & 8(5)
Trades - Metal work (Doors/windows)	Musculo-skeletal injuries, hit by hand tools, fall from height, scaffold collapse, dust, noise, live electricity.	4	2.6	10.4	5	2.08	4	3	4	2	2	2	Ironmongery TRA & SWMS + training.	S 16(2) R 8(1) & 8(5)
Trades - Steel erection	Lifting Equipment, dropped loads, fall from height, hand tools, collapse of scaffolding, welding.	4	3.2	12.8	5	2.56	4	3	5	3	3	2	Steel erection TRA & SWMS + training.	S 16(2) R 8(1) & 8(5)

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		1 - 5	1 - 5		1 - 5		F	BI	II	FI	LI	EI		
Trades - Plumbing	Musculo-skeletal injuries, hit by hand tools, fall from height, scaffold collapse, dust, noise, live electricity, hazardous chemicals / hazardous biological agents.	4	3	12	5	2.40	4	3	4	3	2	3	Brickwork TRA & SWMS + training.	S 16(2) R 8(1) & 8(5)
Large plant - operation (LDV's)	Moving vehicles, contact with powerlines, motor vehicle accidents, exhaust fumes, collapse of ground.	5	4	20	5	4.00	5	4	5	4	4	3	Vehicle TRA's & SWMS + training.	S 16(2) R 8(1) & 8(5)
Large plant - operation (Articulated equipment)	Moving vehicles, contact with powerlines, motor vehicle accidents, exhaust fumes, collapse of ground.	5	4	20	5	4.00	5	4	5	4	4	3	Vehicle TRA's & SWMS + training.	S 16(2) R 8(1) & 8(5)
Large plant - Earthmoving equipment	Moving vehicles, contact with powerlines, motor vehicle accidents, exhaust fumes, collapse of ground.	5	4	20	5	4.00	5	4	5	4	4	3	Vehicle TRA's & SWMS + training.	S 16(2) R 8(1) & 8(5)
Large plant - Material handling equipment	Moving vehicles, contact with powerlines, motor vehicle accidents, exhaust fumes, collapse of ground, dropped load.	5	4	20	5	4.00	5	4	5	4	4	3	Vehicle TRA's & SWMS + training.	S 16(2) R 8(1) & 8(5)
Large plant - Truck mounted (Hi-Ab) cranes	Moving vehicles, contact with powerlines, motor vehicle accidents, exhaust fumes, collapse of ground.	5	4	20	5	4.00	5	4	5	4	4	3	Vehicle TRA's & SWMS + training.	S 16(2) R 8(1) & 8(5)
General site operations - Welding	Ultra violet radiation, welding fumes, explosives, welding gases, live electricity, sharp/hot product.	5	3	15	5	3.00	5	3	4	3	3	2	Welding TRA & SWMS + training.	S 16(2) R 8(1) & 8(5)
General operations - Grinding	Noise, dust, fumes, vibration, live electricity, sharp/hot product, sparks & shards.	5	3	15	5	3.00	5	3	4	3	3	2	Grinding TRA & SWMS + training.	S 16(2) R 8(1) & 8(5)
General site operations - Flame cutting	Ultra violet radiation, welding fumes, explosives, welding gases, live electricity, sharp/hot product.	5	3	15	5	3.00	5	3	4	3	3	2	Flame cutting TRA & SWMS + training.	S 16(2) R 8(1) & 8(5)
General site operations - Skillsaw/Jigsaw	Noise, dust, fumes, vibration, live electricity, sharp/hot product, sparks & shards, sharp blade.	5	3	15	5	3.00	5	3	4	3	3	2	Skillsaw TRA & SWMS + training.	S 16(2) R 8(1) & 8(5)
General site operations - Drilling	Noise, dust, fumes, vibration, live electricity, sharp/hot product, sparks & shards, sharp drill bits.	5	3	15	5	3.00	5	3	4	3	3	2	Drilling TRA & SWMS + training.	S 16(2) R 8(1) & 8(5)
General site operations - Compaction equipment	Noise, dust, fumes, vibration, live electricity, or exhaust fumes.	5	3	15	5	3.00	5	3	4	3	3	2	Compaction TRA & SWMS + training.	S 16(2) R 8(1) & 8(5)
General site operations - Power floats	Noise, dust, fumes, vibration, live electricity, or exhaust fumes.	5	3	15	5	3.00	5	3	4	3	3	2	Power Float TRA & SWMS + training.	S 16(2) R 8(1) & 8(5)
General site operations - Explosive power tools	Noise, dust, fumes, vibration, explosive cartridges, deflected projectiles.	5	3	15	5	3.00	5	3	4	3	3	2	Explosive power tools TRA & SWMS + training.	S 16(2) R 8(1) & 8(5)
General site operationst - Steel fixing	Lifting equipment, dropped loads, fall from height, hand tools, collapse of scaffolding, welding, sharp product.	5	3	15	5	3.00	5	3	4	3	3	2	Steel fixing TRA & SWMS + training.	S 16(2) R 8(1) & 8(5)
General site operations - Stacking and storage	Collapse of stacking & storage, manual handling , lifting equipment.	5	3	15	5	3.00	5	3	4	3	3	2	Stacking & storage TRA & SWMS + training.	S 16(2) R 8(1) & 8(5)
General site operationst - Housekeeping	Poor housekeeping, slips, trips, falls, cuts.	5	3	15	5	3.00	5	3	4	3	3	2	Hosuekeeping TRA & SWMS + training.	S 16(2) R 8(1) & 8(5)
General site operations - Working under power lines	Live electricity.	3	3.4	10.2	5	2.04	3	3	5	3	3	3	Power lines TRA & SWMS + training.	S 16(2) R 8(1) & 8(5)
General site operations - Piling	Noise, dust, exhaust fumes, moving machinery, moving vehicle, hydraulics, pneumatics.	3	3.4	10.2	5	2.04	3	3	5	3	3	3	Piling TRA & SWMS + training.	S 16(2) R 8(1) & 8(5)
General site operations - Dry wall partitioning	Noise, dust, fumes, vibration, live electricity, hand & power tools, manual handling.	3	3	9	5	1.80	3	3	4	3	3	2	Dry wall/ partitioning TRA & SWMS + training.	S 16(2) R 8(1) & 8(5)
General site operations - electrical installation	Live electricity.	5	3.2	16	5	3.20	5	3	5	3	3	2	Electrical installations TRA & SWMS + training.	S 16(2) R 8(1) & 8(5)
General site operations - paving	Noise, dust, manual handling, hand Tools.	3	1.6	4.8	5	0.96	3	1	4	1	1	1	Paving TRA & SWMS + training.	S 16(2) R 8(1) & 8(5)
General site operations - landscaping	Manual handling, fertilizer, hand tools, lawn mowers, brush cutters .	3	3.2	9.6	5	1.92	3	3	4	3	3	3	Landscaping TRA & SWMS + training.	S 16(2) R 8(1) & 8(5)
General site operations - roof work	Manual handling, fall from heights, dropped tools and materials.	5	3.4	17	5	3.40	5	5	5	3	3	1	Roof work TRA & SWMS + training.	S 16(2) R 8(1) & 8(5)
General site operations - fire installation	Musculo-skeletal injuries, hit by hand tools, fall from height, scaffold collapse, dropped tools and materials.	3	3.2	9.6	5	1.92	3	3	5	3	3	2	Fire instalations TRA & SWMS + training.	S 16(2) R 8(1) & 8(5)
General site operations - waterproofing	Musculo-skeletal Injuries, hit by hand tools, fall from height, scaffold collapse, dropped tools and materials, hot tools .	3	3.2	9.6	5	1.92	3	3	5	3	3	2	Waterproofing TRA & SWMS + training.	S 16(2) R 8(1) & 8(5)

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General site operations - post tensioning	Snapped cables, hydraulic & pneumatic pressure, noise.	3	2.8	8.4	5	1.68	3	3	5	2	2	2	Post tensioning TRA & SWMS + training.	S 16(2) R 8(1) & 8(5)
HCS - flammable liquid storage and use	Fires, explosions, hazardous substances exposure & spills.	5	3.6	18	5	3.60	5	4	5	3	3	3	Task risk assessment & SWMS + training.	S 16(2) R 8(1) & 8(5)
HCS - Diesel tanks storage and use	Fires, explosions, hazardous substances exposure & spills.	5	3.6	18	5	3.60	5	4	5	3	3	3	Task risk assessment & SWMS + training.	S 16(2) R 8(1) & 8(5)
HCS - Hazardous chemical substance storage/use	Fires, explosions, hazardous substances exposure & spills.	5	3.4	17	5	3.40	5	4	4	3	3	3	Task risk assessment & SWMS + training.	S 16(2) R 8(1) & 8(5)
HCS - Disposal of waste	Manual handling, moving vehicles, lifting equipment, sharp material, hazardous substances.	5	3.2	16	5	3.20	5	3	4	3	3	3	Task risk assessment & SWMS + training.	S 16(2) R 8(1) & 8(5)
Work in confined spaces	Low oxygen environment, hazardous substances, explosions , fires, entrapment.	2	3.6	7.2	5	1.44	2	4	5	4	4	1	Task risk assessment & SWMS + training.	S 16(2) R 8(1) & 8(5)
Prevailing Rock & Soil Conditions	High groundwater levels - ingress into excavations.	4	4	16	5	3.20	4	4	5	4	4	3	Task risk assessment & SWMS + training.	S 16(2) R 8(1) & 8(5)
Prevailing Weather Conditions	Area known for severe storm activity (wind and rain).	2	3.6	7.2	5	1.44	2	4	5	3	3	3	Task risk assessment & SWMS + training.	S 16(2) R 8(1) & 8(5)
Traffic Flow to and from site (Congestion)	Significant congestion and impedement of traffic at peak times.	5	3.2	16	5	3.20	5	4	4	3	3	2	Task risk assessment & SWMS + training.	S 16(2) R 8(1) & 8(5)
Incompetent Contractors & Supervision	Project stopped - unsafe acts & conditions.	5	3.8	19	5	3.80	5	3	5	4	4	3	Task risk assessment & SWMS + training.	S 16(2) R 8(1) & 8(5)
No Construction Work Permit	Project stopped.	5	3.2	16	5	3.20	5	3	2	4	4	3	Task risk assessment & SWMS + training.	S 16(2) R 8(1) & 8(5)
No Notification of Construction	Project stopped.	5	3.2	16	5	3.20	5	3	2	4	4	3	Task risk assessment & SWMS + training.	S 16(2) R 8(1) & 8(5)
Poor Quality of Compliance Audits	Unsafe acts & conditions.	5	3.8	19	5	3.80	5	3	5	4	4	3	Task risk assessment & SWMS + training.	S 16(2) R 8(1) & 8(5)
No SACPCMP Registered Safety Officers	Project stopped - unsafe acts & conditions.	5	3.8	19	5	3.80	5	3	5	4	4	3	Task risk assessment & SWMS + training.	S 16(2) R 8(1) & 8(5)
No SACPCMP Registered Safety Agents	Project stopped - unsafe acts & conditions.	5	3.8	19	5	3.80	5	3	5	4	4	3	Task risk assessment & SWMS + training.	S 16(2) R 8(1) & 8(5)
Intoxicated persons on site	Fall from height, injury to workers, motor vehicle accident.	5	4	20	5	4.00	5	4	5	4	4	3	Task risk assessment & SWMS + training.	S 16(2) R 8(1) & 8(5)
SHE Reps and SHE Committees - Not functioning	Unsafe acts & conditions.	3	3	9	5	1.80	3	3	4	3	3	2	Task risk assessment & SWMS + training.	S 16(2) R 8(1) & 8(5)
No First Aid or no prompt first aid	Injuries become worse of infected.	4	3.2	12.8	5	2.56	4	3	4	3	3	3	Task risk assessment & SWMS + training.	S 16(2) R 8(1) & 8(5)
Poor quality of Risk Assessments of No Risk Assessments	Project stopped - unsafe acts & conditions.	5	3.8	19	5	3.80	5	3	5	4	4	3	Task risk assessment & SWMS + training.	S 16(2) R 8(1) & 8(5)
No or poor Emergency Plan	Unsafe acts & conditions.	4	3.4	13.6	5	2.72	4	3	5	3	3	3	Task risk assessment & SWMS + training.	S 16(2) R 8(1) & 8(5)
Not testing the Emergency Plan	Workers unaware of how to respond.	4	3.4	13.6	5	2.72	4	3	5	3	3	3	Task risk assessment & SWMS + training.	S 16(2) R 8(1) & 8(5)
No Fire Fighting Equipment or Equipment not working	Fire and explosions - fire spread.	4	3.4	13.6	6	2.27	4	3	5	3	3	3	Task risk assessment & SWMS + training.	S 16(2) R 8(1) & 8(5)
No inspections & maintenance of Plant & Equipment	Unsafe acts & conditions.	5	4.2	21	5	4.20	5	4	5	4	4	4	Task risk assessment & SWMS + training.	S 16(2) R 8(1) & 8(5)
Incorrect or no PPE	Injuries to workers ,incorrect disposal of contaminated PPE.	5	2.6	13	5	2.60	5	2	4	2	2	3	Task risk assessment & SWMS + training.	S 16(2) R 8(1) & 8(5)
No Edge Protection	Fall from height , materials dropped from height.	4	3.8	15.2	5	3.04	4	4	5	4	4	2	Task risk assessment & SWMS + training.	S 16(2) R 8(1) & 8(5)
No Fall Protection Plan or Incorrect Fall Protection Plan	Fall from height , materials dropped from height.	4	3.8	15.2	5	3.04	4	4	5	4	4	2	Task risk assessment & SWMS + training.	S 16(2) R 8(1) & 8(5)
Worker Transportation to and from site	Motor vehicle accident, multiple fatalities.	5	4	20	5	4.00	5	4	5	4	4	3	Task risk assessment & SWMS + training.	S 16(2) R 8(1) & 8(5)
Local Community	BMF demand for work, violence, fires emergencies.	5	3.8	19	5	3.80	5	5	5	4	3	2	Task risk assessment & SWMS + training.	S 16(2) R 8(1) & 8(5)

RISK RATING MATRIX

HIGH
17 - 25

MEDIUM
8 - 16

LOW
1 - 7

					SEVERITY CATEGORIES						
					RATING	IMPACT ON BUSINESS ACTIVITIES (BI)	NATURE OF INCIDENT (PAST AND FUTURE POTENTIAL) (II)	NATURE OF LOSS / DAMAGE (FINANCIAL) (FI)	LEGAL/SAG IMPACT (LEGAL) (LI)	NATURE OF ECOLOGICAL IMPACT (ENVIRONMENTAL). (EI)	
FREQUENCY	5	10	15	20	25	5	CATASTROPHIC DOWN TIME PROCESS DELAY >MONTH	FATAL INJURY/ SEVERAL INJURIES	DEVASTATING DAMAGE/LOSS >R10 MIL	INTER- NATIONAL PRESSURE	IRREVERSIBLE ECOLOGICAL AND/OR SOCIAL DAMAGE
	4	8	12	16	20	4	CRITICAL DOWN TIME PROCESS DELAY < MONTH	DISABLING INJURY >3 DAYS	WIDESPREAD DAMAGE/LOSS BETWEEN R1 - R10 MIL	NATIONAL GOVERNMENT PRESSURE	MAJOR INCIDENT, POTENTIAL REVERSIBLE WITH LONG TERM ECOLOGICAL DAMAGE AND PERMANENT IMPACT ON COMMUNITY
	3	6	9	12	15	3	SERIOUS DOWN TIME PROCESS DELAY (>WEEK)	DISABLING INJURY <3 DAYS	WIDESPREAD DAMAGE/LOSS <R1 MIL	PROVINCIAL GOVERNMENT PRESSURE	POTENTIAL REVERSIBLE WITH LONG TERM ECOLOGICAL DAMAGE AND SIGNIFICANT IMPACT ON COMMUNITY
	2	4	6	8	10	2	MEDIUM DOWN TIME PROCESS DELAY (>DAY)	MINOR INJURY	MINOR DAMAGE/LOSS <R50 000	LOCAL AUTHORITIES REACTION (ORGANISED)	SHORT-TERM ECOLOGICAL DISTURBANCE AND/OR RESTRICTED IMPACT ON COMMUNITY
	1	2	3	4	5	1	MINIMAL OR ZERO DOWN TIME PROCESS DELAY (<DAY)	NO INJURY	INSIGNIFICANT DAMAGE OR ZERO LOSS	INDIVIDUAL COMPLAINTS (LITTLE OR NO REACTION)	MINIMAL OR ZERO ENVIRONMENTAL CONSEQUENCES, ECOLOGICAL STRESS AND/OR NUISANCE TO THE COMMUNITY
SEVERITY				FREQUENCY OF EXPOSURE	DESCRIPTION	Rare	LOW LIKELIHOOD	CAN HAPPEN	PROBABLE	REGULAR	
					PROBABILITY	COULD HAPPEN ONCE IN 5 YEARS	COULD HAPPEN ONCE A YEAR	COULD HAPPEN ONCE A MONTH	COULD HAPPEN ONCE A WEEK	COULD HAPPEN ONCE A DAY	
					FREQUENCY	1/5 YEARS	1/YEAR	1/MONTH	1/WEEK	1/DAY	
					RATING	1	2	3	4	5	