## FAVOURED MIKE COCOA NIGERIA LIMITED

# **HEALTH SAFETY & ENVIRONMENT (HSE) MANUAL**

Document ID: FMC/HSE/MAN

Revision: 00

Date: 12.08.2024

	Prepared by	Approved by
	Bldr. Julius Okoh	Mr. Michael Echu Keto
SIGNATURE & DATE		

S/N	CONTENTS	Page
1	Health Safety and Environment Policy	3
2	Health Safety and Environment Objectives	4
3	Basic Safety Rules	4
4	General Safety Rules	5
5	Emergency Instructions	10
6.	Action in case of Spillage/Leakage of Chemicals	11
7.	Fire Protective System	12
8.	Personal Protective Equipment	14
9.	Environment Pollution	14
10	Our Goals	16
11	Appendix	17-29

#### 1. HEALTH, SAFETY AND ENVIRONMENT POLICY

**Favoured Mike Cocoa Nigeria Ltd** is committed to providing health and safe working conditions and is focused on minimizing damage to the environment wherever it operates. This would be accomplished through training, communication and performance measurement of identified HSE parameter thereby facilitating continual improvement.

We shall strive to conduct our business in compliance with Legal regulations and other requirements in line with interested party concerns and will systematically manage the occupational risks and environmental impacts(s) identified and reported.

## Responsibilities

## Management will:

- Ensure the business complies with all legislation relating to health and safety
- ➤ Eliminate or minimize all workplace hazards and risks as far as reasonably practicable
- Supervise workers to ensure work activities are performed safely
- Consult with and involve workers on matters relating to health safety and wellbeing
- Provide appropriate safety equipment and personal protective equipment
- ➤ Provide a suitable injury management and return to work program Workers will:
  - ➤ Take reasonable care for their own health and safety
  - > Follow safe
  - > work procedures, instructions and rules
  - Participate in safety training, report all injuries and incidents
  - Use safety equipment and personal protective equipment as instructed

We expect Associates, Investors, Customers, Subcontractors and Society to comply with Favoured Mike Cocoa Nigeria Ltd Health Safety and Environment Policy.

Policy approved by

#### **Favoured Mike**

## **Managing Director/CEO**

Please note that Health Safety and Environment Policy is to be reviewed every two years.

## 2. Health Safety & Environment Objectives

- 1. Strike to reduce the probability of the accidents which have the potential to cause injury, disablement, loss of life & property.
- 2. Take measure to minimize health impairment of people involved in loading as well as unloading of items.
- 3. To minimize degradation of the general environment in & around the location, by controlling probable situations which have the potential to adversely affect the environment.
- 4. To minimize undue wastage of the material resources including water and other solvents, which help in preventing environment pollution.
- 5. To educate the employees so that they can be aware of their own safety, health & wellbeing as well as their responsibility towards the environment.
- 6. To train, retrain & thereby motivate the employees so that they are able to identify & eliminate prevailing unsafe practices as well as we able to improve, upgrade & ensure that their workplace is free of unsafe action & condition

#### 3. BASIC SAFETY RULES AND REGULATIONS

- 1. The Use of Personal Protective Equipment such as Helmet, Safety shoe, Protective clothing, is compulsory for all Farm workers.
- 2. Good housekeeping in and around your workplace must be maintained.
- 3. Don't indulge in horseplay i.e. abusing, distracting, fighting etc.
- 4. Always drive with your Seat Belt fastened.
- 5. Don't store flammable liquid in open or surface tank.
- Don't throw hand tools at co workers.

- 7. Do not consume alcohol, drugs and narcotics during working hours.
- 8. All incident at the Farm must be reported to the Safety Officer and your Supervisor.
- 9. Follow all safety procedure and avoid short-cuts.
- 10. Secure all tools and equipment before leaving your place of work.
- 11. Temperature check may be done before entering the Farm every day.

Note: Violators of these Safety rules and instructions shall be sanctioned

## 4. General Safety Rules:

## Housekeeping:

- a. Work place and surrounding area shall be kept clean and free from obstructions.
- b. On job completion all tools, equipment and left over material shall be collected at designated storage place.
- c. Waste material and other intermediate material shall be removed and kept in covered containers.
- d. Slipping substances such as grease, bitumen or oil spilled on floor, shall be wiped and cleaned immediately.

## **Mandatory:**

- a. Protective clothing, no person working on or near machines or moving vehicles shall be loose clothing.
- b. The worker who involved in loading or unloading shall put on tight fitting cloths and safety shoes must be tightly lashed.
- c. Casual clothes should not be worn by the worker during the working hours.

## **Personal Protective Equipment:**

PPE like goggles, face mask, clothing, gloves, safety shoes, helmet etc. are issued for personnel protection for jobs hazardous and it is mandatory by the personnel while engaged on such work.

## Stacking materials:

- a) All material shall be stacked tightly and up to safe height to prevent them from falling or causing some other piles to fall.
- b) No material shall be stacked in passages and emergency exit.

## Eye protection:

Goggles or face shields must be used by all personnel engaged in operations involving hazards to eyes these operations shall be identified by the HSE officer.

#### **Defective tools:**

All defective tools like chisels with irregular heads, spanner with worn jaws, broken hammers shall be brought to the notice of the HSE officer and discard it.

#### **Guards:**

Machine guard and other safety devices shall not be removed except for making repairs lubricating or cleaning by authorized person. These must be replaced before starting machines.

#### **Clearance Certificate:**

Incidents often occurs when maintenance work or project work is carried out in a half hazard way. Before taking any upkeep work each job should be analyzed in details to find out what are possible hazards involved in the executing job and identifying methods to be adopted to prevent incidents Type of certificate/Permit used in the plant clearance system:

- 1) Work request and standard certificate
- 2) Hot work permit
- 3) Temporary electrical connection permit
- 4) Work on height permit

#### Plant modification authorization:

Any modification to plant or equipment shall be carried out only after obtaining PMA.

Starting and repairing machinery:

- a) No person shall attempt to operate equipment unauthorized.
- b) Oiling, cleaning and repairing of machinery shall not be normally carried without first stopping machinery completely
- c) No person switches on electricity, turn on gas, bitumen or air or acid and machinery without first making sure that no one in position to be injured.
- d)All expose moving parts of machinery such as pulleys, belts, couplings, chains, fly wheels, rotating collars with projecting shield etc, shall be properly guarded.

## **Electricity:**

- a) No work shall be done in close proximity to electric supply line and operations without the approval of components authority.
- b) The use of defective plugs, socket and flexible cable shall be avoided.
- c) No one except a person duly authorized by electrical authority shall operate any switch gear or other electric equipment except for routine starting and stopping motors and switching on or switching off lights, fans

#### Ladders

- a) Ladders with broken and missing rings or split side rails or otherwise defective shall not be used.
- b) No metallic ladders shall be used for electrical work or any work to be executed in close proximity to the electric supply lines or apparatus unless it has rubber shoes.

## Handling and storage of gas cylinders:

Cylinders of compressed gas either flammable or otherwise can be lethal if they are mishandled or misused. Care must be taken in all aspects of their use, particular attention must be paid to the care of valves or regulator, and these are perhaps a cylinder's most vulnerable parts. If, during careless handling, damage occurs to the valve or regulator, an innocuous cylinder can turn into a deadly missile. The vast store of energy contained in a gas cylinder can culminate into a powerful jet propulsion unit if there is nothing to control its release. Flammable gases and oxygen case particular

problems especially if leakage occurs and instant recognition of cylinders is vital for the course of action to be followed.

## The following precautions are mandatory;

- a) The oxygen and acetylene cylinders shall not be stored together except during use.
- b) Gas cylinder shall be stored upright.
- c) Full and empty cylinders shall be kept apart to prevent confusion and mistake.
- d) No valve or lading on a gas cylinder shall be lubricated. The cylinders shall be kept away from oil and grease during storage an d handling.
- e) The LPG (Liquefied Petroleum Gas) cylinder shall be stored under cover. Away from the direct rays of the sun and the store room shall be properly ventilated.
- f) Filled gas cylinders shall not be rolled on the ground. These shall be moved on cylinder cars or trolleys.

#### **Trucks**

- a) All vehicles shall comply with traffic regulations within the site and they shall not exceed the speed limit of 15Kmph.
- b) Stop the engine while loading or unloading.
- c) Don't start the engine until loading man takes the barricades away.
- d) Riding on a running vehicles and any part of the vehicle except on a proper seat is strictly prohibited.
- e) Sitting on the side laps or standing in a truck while in motion is strictly prohibited.
- f) Driver's shouldn't go on the top of the loading area it's highly forbidden.

## Smoking:

Smoking is strictly prohibited in the farm premises and any location shall be a punishable offence. All the personnel shall deposit the match boxes and lighters at the front office in case of visitors. It is the person/section visited, who shall ensure that the visitors do not have that smoking things.

#### First-aid boxes

First-aid boxes shall be provided in suitable places in the site, factory and office.

#### Health

Any contagious or communicable disease suffered by the employee shall be communicated to the management by the individual.

Food, water and beverages shall be taken at designated place only.

## Reporting of accidents

Whenever an injured person is required to be sent to the farm clinic or hospital for treatment, the executive on duty should prepare the copies of accident form as per the procedure and give to the HSE Officer. In case of serious accident information should be passed at once to location head.

## **Investigation of Accidents:**

The essential requirements of successful accidents prevention practice are:

- a) Every accident is investigated expeditiously and causes are analyzed critically.
- b) Remedy for avoiding recurrence is recommended and applied.

#### **Unusual occurrence:**

These are learning incidents which have the potential of accidents / mishaps. These shall be reported, investigated and remedial actions thereof shall be expeditiously implemented to prevent recurrence.

## Horseplay:

Horseplay of any kind is prohibited inside the farm. Do not distract the attention of others at work

## 5. Emergency Instruction

An emergency shall be declared if an untoward incident (fire, major solvent/inflammable material spill or major injury accidents) occurs and requires the mobilization of all possible resources to tackle it. Regular drills shall be conducted to familiarize every-body on their roles in the event of such emergency. Participation in these drills is mandatory as per procedure

#### Instructions:

In the case of an emergency like fire, gas leak etc. / On hearing a bell or alarm

- Stop work if any, switch off gas hot plate / all equipment.
- ➤ Leave the room / kitchen / store / office etc., with visitors if any.
- Close door behind you.
- > Report to Muster/assembly point.
- ➤ Do not enter the room / kitchen / store / office etc, before emergency coordinator gives you per mission.
- Check and ensure that all occupants have been vacated.
- ➤ If all have been vacated proceed to assembly point and report to emergency coordinator.
- > Perform roll call / head count.
- Do not allow occupants and visitors to return to the room / kitchen / store / office etc, until advised by the emergency co-coordinator.
- Contact HSE officer.

[Do not do anything that may endanger yourself or others]

## **Emergency action in fire incident:**

In the event of a fire follow the following general rules: After discovering the fire:

- 1) Assess the situation to determine if onsite resources are adequate to respond. If YES, initiate response.
  - > SHOUT FIRE, FIRE......!
  - ➤ SOUND THEBELL/ALARAM......!
  - > ATTACK THE FIRE WIT H APPROPRAITE FIRE EXTINGUISHER.
  - Contact Supervisor / HSE officer

- .2) If NO, immediately call Radio/Switch room. The operator will ask the following questions:
  - ➤ What happened?
  - > Where it happened?
  - ➤ What is your name?
  - What is your current location?
  - What is your telephone number?
  - Do you need an ambulance?
  - Do you need the fire brigade?
- 3) If fire is in building/accommodation:
  - CLOSE THE DOOR OF THE ROOM WHERE THE FIRE IS LOCATED.
  - REPORT TO THE ASSEMBLY POINT NEAR GATE.
  - > IF YOU HAVE VISITORS YOU MUST TAKE THEM WITH YOU.
  - DO NOT RE-E NTER THE ROOM BEFORE THE EMERGENCY GIVES YOU PERMISSION.
  - > CONTACT

Supervisors / HSE officer.

[Make site safe, provide first aid and preserve the site]

**Emergency numbers:** 

Director -

Manager/Supervisor -

HSE officer -

# 6. Action to be taken in the event of major leakage / spillage of chemicals:

- 1. Using appropriate PPE, try to stop the source of leakage/spillage, taking appropriate measures as mentioned in the MSDS of the chemicals.
- 2. Collect the spilled material in suitable containers.
- 3. If the spillage is on floor, make a barricade with sand to prevent further spread.
- 4. If the liquid cannot be collected it should be soaked with sand/waste. The sand/waste soaked with material shall be sent for incineration later on.
- 5. If the liquid or its flushing has entered the storm water drain or any other drain, in form the effluent treatment department personnel.
- 6. Flushing with water may also be carried out to clean the area.

- 7. Point Nos.1 to 6 will apply for leakage from any tanker, vessel, container, storage tank etc. within the premises of the company.
- 8. Collection of spilled material as mentioned in point 2 should be carried out in the dedicated collections arrangements where provided.
- 9. In case of spillage of solid material, the material will be collected in container; if the material cannot be re-used it shall be sent for incineration or suitable disposal after consulting with the authority.

## 7. Fire Protection System:

Fire remains a threat to the plant and property, particularly as we use a number of flammable chemicals; all big fires are initially small and are best prevented if detected & extinguished in the incipient stage. Hence each one of us should be alert about fir e and know how to extinguish it

A fire takes places if a flammable material gets heated up to its ignition point in the presence of air. The fire further propagates due to the chain reaction taking place between the molecules of the fuel & oxygen. The energy released as a result of the chemical reaction is in the form of heat, light and flames. Thus a fire will start if all the three elements Heat, Fuel and Oxygen come together in right proportions. This is also known as fire triangle. A fire will continue to burn if the chain reaction is also present. This is known as tetrahedron of fire. Fire can be prevented if the three sides of fire triangle are never allowed to meet together .

Fire extinguishment is based on the following four methods:

- 1. Cooling -Removal of heat
- 2. Starving- Removal of Fuel
- 3. Blanketing/smothering cutting of oxygen supply
- 4. Breaking the chain reaction Introduction of chemicals which interfere & break the chain reaction

## Fires are classified into five categories:

Class A –Solid fires (wood, paper, cloth etc.)

Class B –Liquid fires (petrol, methanol, IPA etc.)

Class C –Gas fires (hydrogen, LPG, Acetylene etc.)

Class D – Metal fires (Na, K, aluminum, zinc etc.)

Class E – Electrical fires (panel, motors, cab

Various fire extinguishing agents are:

- 1. Water
- 2. Foam
- 3. Co2
- 4. Dry chemical powder (DCP)

#### Water:

We can use water to extinguish fires of class A.

water extinguishes a fir e by cooling.

Water spray gives better cooling;

water jet is used to extinguish fir e from a distance.

#### Foam:

It is used to extinguish fires of class b i. e. Fires in solvent/chemicals which are lighter than water. Foam being lighter, floats on solvent surface and extinguishes the fire by cooling and smothering. Foams are of two kind's chemicals foam & mechanical foam. Chemical foam is produced by the reaction of two chemicals solutions. Mechanical foam is produced by mechanical impact on a solution of foam compound in water.

#### **CO2**:

It is used to extinguish fires of class E, electrical fires. It may also be used to extinguish class B fires in container s

#### DCP:

Dry chemical powder extinguishes fires of class A, D & E. it extinguishes by blanketing/smothering action. At MIB, we have portable fir e extinguisher s and a fir e alarm system. A dry powder fire extinguisher must be provided in close proximity to the delivery flange Guidance. At least one 6kg dry

powder extinguisher must be provided in close proximity to the loading and unloading point. Minimum distance of 6 meters with maximum distance of 20 meters

Extinguisher s should be housed in suitable weather-proof boxes or shrouds to ensure serviceability at all times. Extinguisher s must be inspected regularly and a permanent record maintained.

## 8. Personal Protective Equipment:

Personal protective equipment protects the human being from exposure against various kinds of hazards. PPE themselves do not eliminate accidents or the hazard, but protect against the effects thereof. The best of engineering provisions at one time or other can fail, hence the use of PPE is a must. PPE are available for protection of various parts of body against each type of hazard. PPE should be usable, reliable, economical and maintainable in a clean hygienic condition. It should be borne in mind that PPE add to the cost of production. If these are not used appropriately, it would affect the availability of PPE.

- a. PPE must be in good condition and fit for purpose.
- b. PPE must be provided by the hauler for all drivers whilst inside the site.
- c. All PPE should be regularly checked and cleaned or replaced whenever their function to protect personnel cannot be judged as fit for purpose anymore.
- d. Responsibility lies with the user as well as with the company providing the PPE. These protect against physical injury to the external parts of the body as well as ab sorption in to the skin causing systemic effects.

#### 9. ENVIRONMENTAL - POLLUTION

The surroundings in which we live is called environment. It is basically constituted of the air we breathe, the water we drink and the soil form which we get our food. The heat and rays of the sun also have a bearing on the environment. Due to various human activities and over population our environment is being adversely affected. This is called Pollution. It is a serious threat to the very existence of human life on the earth. In order to tackle pollution, each one of us should know how actually pollution takes place and what can be done to prevent it.

#### Air Pollution:

Emissions from industries, automobiles etc, pollutes the air, we get sick if we breathe polluted air.

#### Water Pollution:

Effluents and discharges from industries, domestic sewage etc. mixes with the natural &ground water causing water pollution. If we drink water without proper treatment, we would fall sick.

#### **Soil Pollution:**

Waste from industries, human consumption et c. contain material like plastic, metals, glass, chemicals etc. when the waste is disposed ruthlessly it damage the soil. This causes loss of vegetation. The food product growing on such oil would harm our health if we eat them.

## **Global Warning:**

Due to increase in carbon-dioxide content of air the temperature of the atmosphere is increasing gradually. This causes discomfort to the living beings. The polar snow caps would melt due to the rise in temp. As the result there is a fear of land masses getting submerged when the level of water in the oceans rises.

## **Ozone Depletion:**

There is a protective layer of ozone at the uppermost portion of our atmosphere. This protects the entry of harmful ultraviolet rays from corning to the earth. Due to increase of chlorinated hydrocarbon gases in the atmosphere, this ozone layer is getting damaged. Ultraviolet rays kill living beings. This is a serious threat to the life on earth. Various forms of pollution listed above if not checked will increase human sufferings and our future generation will have a miser ab le life. We can help in preventing further pollution by contributing in the following ways

- Avoid wastage of water, energy, chemicals & usable.
- > Grow more and more trees, plant etc.

- Avoid overconsumption of materials.
- Use everything to the maximum ex tent possible.
- Use only environment friendly goods & materials.
- Follow all pollution controls rules and regulations in a systematic manner.
- Air emissions, water discharges & solid wastes should be minimized as far as possible. Before throwing away, these should be treated and made harmless.
- As far as possible recycle & reuse water, waste & natural resources.
- ➤ Share environmental awareness & manage for pollution prevention with all and one, as far as possible.

#### 10. Our Goals:

Through effective and transparent HSE management, we aim to protect our employees, customers, visitors and lower our worker compensation costs.

Our HSE Management System helps us achieve these goals by providing the framework and processes to examine the risks to our employees, the public, our property, and the environment in which we operate and determine what actions we need to take to control these risks.

Our promise to our employees and who are all associated with our concern is that we will strive for continuous improvement in every area of our HSE efforts. This means continuous improvement of our standards, systems, programs, safety performance, management leadership, and employees' awareness, knowledge, commitment, and involvement.

We are engaged in numerous initiatives to build and reinforce our health and safety culture, and we expect our employees to achieve year-over-year improvement in safety performance.

We are aiming for a destination called "zero"—zero safety incidents, zero injuries and zero days off work due to injury; in other words, a perfect HSE record. Our Driving to Zero vision means accepting that every incident is preventable, and it has helped us achieve improvements in our safety performance.

# 11. Appendix

# **Appendix 1: Project Safety Risk Assessment**

N°	Subject	Hazard	Risk level	Mitigation	Recovery	Residual risk level	Records		
	SAFETY								
S0 1	Manual lifts	Back injuries, personal injury, strains, sprains, crushing, hernia	Medium	<ul> <li>Job safety analysis for critical jobs</li> <li>Lifting aids</li> <li>Pre-task briefings and toolbox talk on safe handling techniques</li> </ul>	<ul> <li>Treat personnel.</li> <li>Emergency response services.</li> <li>Pre-employment medical fitness</li> </ul>	Low	<ul> <li>Meetings and Toolbox talk attendance records</li> <li>Medical records</li> <li>JSA</li> </ul>		
S0 2	Routine maintenan ce works	Personal injury,	Medium	<ul> <li>Job safety analysis for critical jobs</li> <li>Pre-task briefings and toolbox talk</li> <li>Adequate access</li> <li>Adequate tools and equipment</li> <li>Adequate use of PPE</li> </ul>	<ul> <li>Treat         personnel</li> <li>Emergency         response         services.</li> </ul>	Low	<ul> <li>Meetings and Toolbox talk</li> <li>Attendance records</li> <li>JSA</li> </ul>		

\$0 3	Moving machinery	Trapping	Medium	<ul> <li>Pre-task briefings and toolbox talk</li> <li>Warning signs</li> <li>Adequate guards and lighting</li> <li>Inspection of equipment</li> </ul>	<ul> <li>Treat personnel</li> <li>Emergency response services.</li> </ul>	Low	<ul> <li>Meetings and Toolbox talk</li> <li>Attendance records</li> <li>Inspection records</li> </ul>
S0 4	Moving machinery	Entanglem ent	Medium	<ul> <li>Pre-task         briefings and         toolbox talk</li> <li>No loose         clothing, or         hairs or         jewellery</li> </ul>	<ul> <li>Treat personnel</li> <li>Emergency response services.</li> </ul>	Low	<ul> <li>Meetings and Toolbox talk</li> <li>Attendance records</li> </ul>
\$0 5	Moving machinery	Impact	Medium	<ul> <li>Pre-task         briefings and         toolbox talk</li> <li>Adequate         guards,</li> <li>Reverse alarms         on heavy         equipment</li> <li>Signalman for         reversing         operations.</li> </ul>	<ul> <li>Treat         personnel</li> <li>Emergency         response         services.</li> </ul>	Low	<ul> <li>Meetings and Toolbox talk</li> <li>Attendance records</li> <li>JSA</li> </ul>
S0 6	Mechanical handling	Falling loads or injuries	High	Pre-task     briefings and     toolbox talk	Treat     personnel	Low	<ul><li>Meetings and Toolbox</li></ul>

associated with moving object	<ul> <li>Equipment inspections</li> <li>Equipment servicing and maintenances</li> <li>Job safety analysis for critical lift</li> <li>Inspections of rigging equipment</li> <li>Qualified operators</li> <li>Clearance from crane radius and load at all times</li> <li>Use of tag lines</li> <li>Speed limits for earth moving equipment</li> <li>Road signage for earth moving equipment</li> <li>Pedestrian cross access for earth moving traffic</li> </ul>	talk attendance records  JSA Inspection records Certificate of competenci es
-------------------------------	--	--

S0 7	Mechanical handling	Overturnin g equipment	High	<ul> <li>Flag man for earth moving traffic</li> <li>Pre-task briefings and toolbox talk</li> <li>Equipment inspections</li> <li>Equipment servicing and maintenances</li> <li>Job safety analysis for critical lift</li> <li>Inspections of rigging equipment</li> <li>Qualified operators</li> <li>Suitable ground</li> </ul>	<ul> <li>Treat personnel</li> <li>Emergency response services.</li> </ul>	Low	<ul> <li>Meetings and Toolbox talk attendance records</li> <li>JSA</li> <li>Inspection records</li> <li>Certificate of competenci es</li> </ul>
S0 8	Road transportati on	Vehicles accident injuries related	High	stability  DDC  Equipment inspections  Equipment servicing and maintenances  Qualified operators	<ul> <li>Treat personnel</li> <li>Emergency response services.</li> </ul>	Low	<ul> <li>DDC attendance records</li> <li>JSA</li> <li>Inspection records</li> <li>Certificate of</li> </ul>

				<ul> <li>Speed limits and signage.</li> </ul>			competenci es
\$0 9	Noise sources	Hearing damages	Medium	<ul> <li>Pre-task briefings and toolbox talk</li> <li>Noise measurements</li> <li>Ear defenders</li> <li>Signage</li> </ul>	<ul> <li>Treat personnel</li> </ul>	Low	<ul> <li>Meetings and Toolbox talk attendance records</li> <li>Noise survey records</li> </ul>
S1 0	Excavation s and earth moving	Undergrou nd facilities	High	<ul> <li>Pre-task briefings and toolbox talk</li> <li>Drawing in place</li> <li>Signalman</li> <li>Identification and signage</li> </ul>	<ul> <li>Treat personnel</li> <li>Emergency response services.</li> </ul>	Low	<ul> <li>Drawings</li> <li>Meetings and Toolbox talk attendance records</li> </ul>
S1 1	Excavation s and earth moving	Collapsing walls and associated injuries	High	<ul> <li>Pre-task briefings and toolbox talk</li> <li>Adequate shoring</li> <li>Adequate drainage</li> <li>Competent operator</li> </ul>	<ul> <li>Treat         personnel</li> <li>Emergency         response         services.</li> </ul>	Low	<ul> <li>Meetings and Toolbox talk attendance records</li> <li>Certificate of competenci es</li> </ul>

S1 2	s and earth moving	Falling of personnel and equipment	High	<ul> <li>Exclusion zones and restricted areas</li> <li>Inspection</li> <li>Pre-task briefings and toolbox talk</li> <li>Job safety analysis for critical job</li> <li>Suitable access to excavation (i.e. Ladder or stairs or ramp)</li> <li>Barricades and warning signs accordingly</li> <li>Equipment away from odges</li> </ul>	Treat personnel Emergency response services.	Low	<ul> <li>Meetings and Toolbox talk attendance records</li> <li>JSA</li> <li>Inspection records</li> </ul>
S1 3		Falling of personnel and equipment	High	edges Inspection Pre-task briefings and toolbox talk Job safety analysis for critical job Competent scaffolders	<ul> <li>Treat personnel</li> <li>Emergency response services.</li> </ul>	Low	<ul> <li>Meetings and Toolbox talk attendance records</li> <li>JSA</li> <li>Inspection</li> </ul>

				<ul> <li>Housekeeping     + toes board.</li> <li>Safe access     ladders or     stairs.</li> <li>Inspection</li> <li>PPE     (Harnesses)</li> </ul>			
S1 4	Work at height	Fall from height Falling object	High	<ul> <li>JSA</li> <li>Safe working platform</li> <li>Exclusion zone</li> <li>Signage</li> <li>Full body harness above 2 meters when working on unprotected area</li> <li>Adequate anchorage point for use of safety harness</li> <li>Safe access i.e. ladders or stairs</li> <li>Inspection by competent person of fall protection</li> </ul>	Treat personnel     Emergency response services.	Low	Meetings and Toolbox talk attendance records     Inspection records

S1 5	Housekeep	Slip and trip associated injury	Medium	system prior work starts  Tool box talk  Pre task briefing  Pre-task briefings and toolbox talk  Regular cleaning of work site  Denailing timbers  Adequate storage of materials and equipment  Access free of materials  Cable and hose arrangements	<ul> <li>Treat personnel</li> <li>Emergency response services.</li> </ul>	Low	Meetings and Toolbox talk attendance records     Inspection record
S1 6	Housekeep ing	Falling object	Medium	<ul> <li>Pre-task briefings and toolbox talk</li> <li>Regular cleaning of work site</li> <li>Adequate storage of</li> </ul>	<ul> <li>Treat personnel</li> <li>Emergency response services.</li> </ul>	Low	<ul> <li>Meetings and Toolbox talk attendance records</li> <li>Inspection record</li> </ul>

				materials and equipment • Access free of materials • Secure materials when necessary			
S1 7	Housekeep ing	Fire	Medium	<ul> <li>Pre-task briefings and toolbox talk</li> <li>No flammable materials accumulation</li> <li>Refer waste management plan.</li> </ul>	<ul> <li>Treat personnel</li> <li>Emergency response services.</li> <li>Fire extinguisher s on site.</li> </ul>	Low	<ul> <li>Meetings and Toolbox talk attendance records</li> <li>Inspection record</li> </ul>
S1 8	Electrical equipment	Electrocuti on and fire	High	<ul> <li>Pre-task briefings and toolbox talk</li> <li>Competent electrician only to work on or repair electrical equipment.</li> <li>All electrical equipment inspected</li> <li>Warning signs and lock out</li> </ul>	<ul> <li>Treat personnel</li> <li>Emergency response services.</li> <li>Fire extinguisher s on site.</li> </ul>	Low	<ul> <li>Meetings and Toolbox talk attendance records</li> <li>Inspection record</li> </ul>

S1 9	Hazardous substances	Injury associated with hazardous substances	High	tag out for maintenance operation.  Earth Liquid circuit breakers  Pre-task briefings and toolbox talk  Follow always MSDS (Material Safety data sheet) instructions for storage, handling and transportation  PPE Signage and label Ref Environmental Management Plan Inspections	Treat personnel Emergency response services.	Low	Meetings and Toolbox talk attendance records     Inspection record
\$2 0	Hazardous substances	Fire	High	<ul> <li>Follow always MSDS instruction for storage, handling and transportation</li> </ul>	<ul> <li>Treat personnel</li> <li>Emergency response services.</li> </ul>	Low	<ul> <li>Meetings and Toolbox talk attendance records</li> </ul>

				<ul> <li>Inspections</li> <li>Hot work at safe distances</li> <li>Signage and label</li> </ul>	<ul> <li>Fire         extinguisher         s on site or         other fire         fighting         equipment         when         applicable.</li> </ul>		Inspection record
S2 1	Welding, cutting and grinding	Welding flash, burns, cuts.	High	<ul> <li>Pre-task briefings and toolbox talk</li> <li>Competent operators</li> <li>Equipment up to standard</li> <li>Flash back arrestor</li> <li>PPE</li> <li>Screens</li> <li>Maintenance and inspection of equipment</li> </ul>	<ul> <li>Treat personnel</li> <li>Emergency response services</li> </ul>	Low	<ul> <li>Meetings and Toolbox talk attendance records</li> <li>Inspection and maintenan ce records</li> </ul>
S2 2	Welding, cutting and grinding	Fire and explosion	High	<ul> <li>Storage as per MSDS</li> <li>Housekeeping</li> <li>Area free of flammable material</li> </ul>	<ul> <li>Treat personnel</li> <li>Emergency response services.</li> <li>Fire extinguisher s on site</li> </ul>	Low	<ul> <li>Meetings         <ul> <li>and</li> <li>Toolbox</li> <li>talk</li> <li>attendance</li> <li>records</li> </ul> </li> <li>Inspection</li> <li>record</li> </ul>

<ul> <li>Equipment free of grease/oil product</li> <li>Inspections for leakage</li> </ul>
Sparks     containment