






**DIMENSION BID**

WIRELINE INTERVENTION | PERFORATION SERVICES

# SAFE ENVIRONMENT ESTABLISHMENT

## DBSB-HSE-03

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<b>HSE-MS</b>	<b>SAFE ENVIRONMENT ESTABLISHMENT</b>	<b>DBSB-HSE-03-00</b>	
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### AMENDMENT RECORDS

This sheet will record all amendment of this Procedure. All particulars of the amendment shall be stated clearly. The HSE Department of Dimension Bid (M) Sdn. Bhd. (DBSB) shall be responsible for the maintenance and update of this record sheet.

<b>CLASSIFICATION</b>	<b>DATE</b>	<b>REVISION PART</b>	<b>REASON/PURPOSE OF REVISION</b>
Original Issue	25/11/2002	Establishment of procedure	Nil
Revision 1		1. Front page 2. Amendment sheet	Standardize the procedure to make it consistent with Doc. Control Procedure
Revision 2		1. Front page 2. Rename the procedure 3. Add DBSB – HSE -03 – 02 (PTW), DBSB – HSE – 03 – 03 (LOTO), DBSB – HSE – 03 – 04 LOTO Procedure	Change new DB Slogan. Formerly known as DBSB – HSE – 04 Job safety analysis. Add 3 additional element chapter; PTW, LOTO as per requirement
Revision 3	08/01/2014	• Cover	• Organization restructure
Revision 4	01/12/2014	• Cover	• Organization restructure

<b>HSE-MS</b>	<b>SAFE ENVIRONMENT ESTABLISHMENT Fundamental of Job Safety Analysis</b>	<b>DBSB-HSE-03-01</b>	
		<b>Rev.04</b>	<b>2014</b>

**Subject**                      **Fundamental of Job Safety Analysis (JSA)**

**Purpose**                      This procedure is to help recognizing the potential hazards before we perform any job and covers all activities at Warehouse and Offshore with potential hazards.

**Definition of JSA**                      Job Safety Analysis (JSA) is a thinking incident prevention tool. It involves the process of identifying hazards associated with a job and determines means and ways to eliminate or control the hazards at each steps of the job.

Refer to Occupational Safety and Health Act (OSHA) & Factory and Machinery Act (FMA) for details.

**Activities that need JSA**                      JSA is expected to be done for all Job Task with potential for safety or environmental hazards. As a guide, the following considerations do apply;

- a) Job which have a high frequency of incidents
- b) Job which have a high potential for personnel injury or environmental incident.
- c) New, change or non-routine jobs
- d) Routine jobs which have potential hazards

The individuals or team that is going to perform the work must prepare JSA worksheet. Supervisors, at a minimum are to review final **JSA** worksheet with the individuals or team.

For small jobs, individuals are highly encouraged to do personal **JSA** using this note book and keep the notebook handy.

**Applying the JSA**                      We should always refer and review our real-time working JSA during:

**Before the job**

- Stop and think. Think of what's the worst thing that could happen and develop precautions.
- Observe the work area and surroundings.
- Think through the step of what you will be doing.
- Identifying what else is going on or happening today in your work area.
- Identify any hazards
- Develop methods for controlling these hazards.

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- Satisfy yourself that the hazards are controlled before starting the job.

#### During the job

- Do you feel safe while performing the job
- Are others around you working safely
- Repeat the steps above whenever you encounter and unexpected problem

#### After the job

- Observe the work area
- Take action to control any hazards that may have been created because of the job.
- Reflect on the job performed
- Can any improvements be made?
- Discuss these improvements at workgroup meeting.

**Item to be checked** There are some item need to be checked and considered when we a constructing a JSA for a specific job such as:

#### Competency

Are people doing the job suitably trained and have the required skills?

Do personnel have the required certificates e.g., welder scaffolds, electricians or crane operators?

Are standby personnel trained and aware of responsibilities?

Are personnel trained in correct use of Personal Protective and Rescue Equipment e.g. Harnesses, breathing apparatus of hearing protection.

#### Critical procedures

Procedure must available and followed.

Require Approval to deviate

#### Emergency response

Are personnel aware of duties and location of emergency equipment?

Location of emergency system activation points?

#### Equipment and preparation

Correct equipment and preparation required identified?

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Preparation will conform to requirements of the procedures?

Solutions will be locked and tagged?

Hazardous substances

MSDS available and hazards understood?

Correct PPE will be worn?

Segregation requirements complied with?

Exposure limits will not be exceeded?

Measure to eliminate spillage in place?

Emergency preparedness addressed?

Safety and health

Proximity to high-powered antennas controlled e.g. Radar, non-directional beacons?

Weather conditions considered e.g. Sub block, wet weather gear?

Hazardous chemicals exposure prevented?

Hearing loss prevented?

Manual handling issue addressed?

Cuts, burn, dermatitis and other health issues addressed e.g. use of proper gloves, barrier cream, training?

Refer to DB JSA format for internal usage.

Refer to client's JSA format for work done at client's work site or locations.

HSE-MS	SAFE ENVIRONMENT ESTABLISHMENT Permit to Work (PTW)	DBSB-HSE-03-02	
		Rev.04	2014
<b>Subject</b>	Overview of PTW		
<b>Purpose</b>	This section provides a brief overview of the Permit to Work (PTW) system.		
<b>Definition</b>	<p>A PTW is a written record which authorized specific work at specific location for a specific period of time.</p> <p>Permits are used for controlling and coordinating work to establish and maintain safe working conditions. They ensure that all foreseeable hazards have been considered and that the appropriate precautions are defined and carried out using the correct and safe methods.</p>		
<b>Agreement</b>	The PTW is an agreement between the issuer and the receiver which documents the conditions, precautions, preparation and limitations which must be clearly understood before work commences.		
<b>Record</b>	The PTW records the step to be taken to prepare the equipment or area for the work and the safety precautions, safety equipment or specific procedure that must be followed to enable worker to safely complete the job.		
<b>Limitations</b>	The safe work permit will aid in the identification and control of hazards, but will not, by its self, make the job safe. It is the actual implementation of the precaution that makes the job safe.		
<b>Why use PTW?</b>	All work exposes the worker to same degree of hazard. The degree of hazard will determine the kind of safeguards required to protect the worker.		
<b>Type of permits</b>	<p>The type of permit required is determined by the nature of the work to be performed and the hazards that must be eliminated or controlled.</p> <p>The range of activities and locations makes it is impossible for a single type of permit to be suitable for all conditions or situations.</p> <p>The following permits are used in DB's daily operation internally and at client's facilities (onshore and offshore):</p> <ol style="list-style-type: none"> <li>1) Hot Work Permit</li> <li>2) Cold Work Permit</li> <li>3) Electrical Work Permit</li> <li>4) Radioactive Work Permit</li> <li>5) Lifting Permit</li> </ol>		
<b>Routine Work</b>	Work to be done that requires no preparation by operations personnel; oiling, greasing, daily maintenance, chipping, painting and other daily normal work at base. These do not require work permit.		
<b>Hot Work Permit</b>	Used when heat or sparks generated by the work (welding / cutting / grinding / engine operation / etc) could cause ignition of any flammable or explosive vapors or material that may be present.		

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**Cold Work Permit** Used in hazardous maintenance work that does not involve 'hot work'. Cold work permit are issue when there are no reasonable source of ignition, and when all contact with harmful substances has been eliminated or appropriate precaution taken.

**Permit issuer** The permit issuer must be sure that all the work situation identifies on the permit is described.

Where possible, the permit issuer should review the work or operation with the worker before work starts.

If the permit issuer has not reviewed the site, this should be noted on the permit and the work situation should be discussed with the worker.

**Permit receiver** The person who receiving the permit must be completely sure of the work situation, the potential hazards and the precautions required before accepting the permit.

**Special precaution** Any special precaution not normally associated with the particular work should be identified to the receiver of the permit, who must fully understand the reasons for these precautions.

(e.g.: work to be done in possible H2S area or mercury area or etc.)

Refer to client's requirements/regulation for details.

**Hot Work hazards** In a Hot Work Permit situation, examples of possible sources of ignition are as follows:

- 1) Welding
- 2) Burning
- 3) Cutting
- 4) Riveting
- 5) Grinding
- 6) Drilling
- 7) Pneumatic hammer & chipper
- 8) Non-explosive proof electrical equipment's / tools including camera
- 9) Static electricity
- 10) Internal combustion engine
- 11) Etc.

This kind of situations must be considered when performing hot work:

- 1) Presence of flammable materials.
- 2) Presence of combustible materials which burn or give off flammable vapors when heated
- 3) Presence of flammable gas in the atmosphere or entering from and adjacent area, which have not been properly protected or secure.

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#### Other permits

The issue of other types of permits must be considered with the same thoroughness as that the hot work permit.

No one should sign a work permit unless completely satisfied that the work can be done safely.

#### Signatures

All safe work permits must be signed by both the permit receiver and the permit issuer, before work is started and after it is completed a long with appropriate validation.

#### PTW essential rules

**A permit does not make a job safe.**

Follow these essential rules to ensure that the permit-to-work is doing its job.

#### **1) All those involved in the permit-to-work system are trained and competent**

- It is important that each person is adequately trained, is competent and knows exactly their responsibilities and duties.

#### **2) All risks have been removed, or controls are in place**

- The various events that could give rise to an incident have been identified.
- Their likelihood and consequences have been evaluated.
- Appropriate measures/controls are in place before the job starts.

#### **3) The Permit Issuer and Performing Authority are aware of interactions with other permits-to-work, tasks, or simultaneous operations and these are cross-referenced on the permit**

- It is important to make sure that one activity under a permit-to-work does not create danger for another, even if the other work does not require a permit.
- The Performing Authority must discuss all interactions with the work party at the toolbox talk.

#### **4) The Permit Issuer and the Performing Authority have visited the worksite prior to start of work**

- The Permit Issuer and the Performing Authority must visit the worksite and check compliance with the conditions of the permit. As a minimum, checks must be made at the start and completion of the task.
- The Performing Authority should undertake interim checks based upon the hazard, complexity and duration of the task.



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**5) The Performing Authority has verified the integrity of any isolations required for the task**

- The key to the safe completion of a task is the isolation of plant and people from hazardous conditions, in particular pressurized liquids, gases and electrical power.
- The Performing Authority should verify isolations by requiring an Isolating Authority to prove the integrity of isolations before work starts.

**6) A toolbox talk has been conducted at the worksite involving all members of the work party**

- Clear communication is vital to completing the job in a safe manner.
- An open, two-way discussion must take place prior to the start of the activity; this is usually referred to as a toolbox talk.
- This talk must involve all members of the work party. A further talk must be held if other personnel join the party, or the work scope changes.

**7) For ongoing work, there has been a handover discussion at the worksite**

- It essential that there is an informative handover regarding the current status of the task. The Performing Authorities should hold this at the worksite.

**8) The work has been completed and handed back in a safe condition**

- The Performing Authority confirms that the work for which they were responsible has been completed.
- The Performing Authority verifies this prior to the Permit Issuer allowing reinstatement of the plant and removal of isolations.
- The area must be left in a safe and tidy condition.

If any of the above are not complied with or YOU ARE UNSURE - then **STOP and ASK!**

<b>HSE-MS</b>	<b>SAFE ENVIRONMENT ESTABLISHMENT</b> <b>Fundamental of Lock Out &amp; Tag Out (LOTO)</b>	<b>DBSB-HSE-03-03</b>	
		<b>Rev.04</b>	<b>2014</b>

<b>Subject</b>	Fundamental of lock out & tag out
<b>Purpose</b>	To establish minimum requirements for lock out & tag out energy sources (mechanical / hydraulic / pneumatic / pressure / chemical / electrical/etc.) that should cause injury to personnel.
<b>Lock out / Tag out</b>	The placement of lock and tag on the energy (mechanical / hydraulic / pneumatic / pressure / chemical / electrical/etc.) isolating device in accordance with the procedure indicating that the energy isolating device shall not be operated until removal of the lock and tag.
<b>Lock out devices</b>	A device that utilizes a lock/key to hold energy in safe position for the purpose of protecting personnel.
<b>Tag out device</b>	A prominent warning device that is capable of being securely attached and that, for the purpose of protecting personnel and forbids the operation of the machine/equipments/energy/tools.

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**Subject** General Procedures for Lock Out & Tag out

## **1.0 SCOPE**

This written procedure is provided for use in developing lockout/tag-out programs which meet the requirements of the OSHA standard. This procedure may be used where there are limited numbers or limited types of machines or where there is a single power source.

## **2.0 PURPOSE**

The purpose of this procedure is to establish the minimum requirements for the lockout or tag-out of energy isolating devices. It will be used to insure that the machine or equipment is isolated from all potentially hazardous energy, and is locked out or tagged out before employees perform any servicing or maintenance activities where the inadvertent activation of the machine, or its components, could cause injury. Inadvertent activation includes unexpected energization, start-up or release of stored energy from springs, compressed gases, pressurized fluids or elevated parts.

## **3.0 RESPONSIBILITY**

Employees responsible for servicing and/or maintaining equipment will be instructed in the safety significance of the lockout/tag-out procedure. Each new employee, transferred employee or other employee whose work operations are or may be in the area, shall be instructed in the purpose and use of the lockout/tag-out procedure. New or transferred employees must receive training on the lockout/tag-out procedures prior to assignment. Lockout/tag-out devices must be provided by the employer. Lockout/tag-out devices must be standardized as to color, size and shape. Each authorized person must be assigned his/her individual lockout devices. Locks must be individually keyed.

It shall be the responsibility of the employees performing the maintenance or repair to implement the lockout/tag-out procedure before work begins.

## **4.0 DISCIPLINARY ACTION REQUIRED FOR BY-PASSING LOCKOUT/TAGOUT DEVICES:**

The only person authorized to remove the lockout/tag-out devices is that person who installed the devices. The purpose of the lockout/tag-out procedure is to prevent injuries caused by a machine being activated while someone is servicing or repairing it; therefore, unauthorized removal or by-passing the lockout/tag-out device procedure compromises the worker's safety. Any person who by-passes a lockout/tag-out device and energizes, starts or otherwise activates a machine or who removes a lockout/tag-out device without authorization shall be disciplined according to the procedures. Disciplinary action shall be taken whether or not injury or damage occurs.

## **5.0 PREPARATION FOR LOCKOUT/TAGOUT**

Make a survey to locate and identify all isolating devices to be certain which switches, valves or other energy isolating devices apply to the equipment to be locked out or tagged out. More than one energy source (electrical, mechanical or others) may be involved.

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## 6.0 SEQUENCE OF LOCKOUT/TAGOUT SYSTEM PROCEDURE

- a. Notify all affected employees that a lockout or tag out system is going to be utilized and the reason for utilizing the lockout/tag out system. The authorized employee to use the lockout/tag out system shall know the type and magnitude of energy that the machine or equipment utilizes and the hazards that exist with the energy source.
- b. If the machine or equipment is operating, shut it down by the normal stopping procedure (depress stop button, open toggle switch, etc.).
- c. Operate the switch, valve or other energy isolating device so that the equipment is isolated from its energy source. Stored energy (such as in springs, elevated machine parts, hydraulic pressure, air pressure, rotating flywheels or other types) must be dissipated or restrained by methods such as repositioning, blocking, bleeding down or other appropriate methods.
- d. Lockout/tag out the energy isolating device with assigned individual locks or tags.
- e. After ensuring that no personnel are exposed, and as a check on having disconnected the energy sources, operate the machine's normal operating controls to make certain the equipment will not operate.

*CAUTION: Return operating controls to "neutral" or to the "off" position after the test.*

- f. The equipment is now locked out or tagged out.

## 7.0 RESTORING MACHINES TO NORMAL PRODUCTION OPERATIONS

- a. Remove all tools, loose parts, etc., from the machine.
- b. Replace all guards or shields.
- c. Check the area around the machine or equipment to ensure that no one is exposed to danger after servicing or repairing is completed and that the equipment is ready for normal operation.
- d. Remove all lockout/tag out devices.
- e. Operate the energy isolating devices to restore energy to the machine or equipment.

## 8.0 PROCEDURE INVOLVING MORE THAN ONE PERSON

If more than one person is involved in the service or repair of a machine, each individual will place his/her personal lockout or tag out device on all energy isolating devices. When an energy isolating device cannot accept multiple locks or tags, a multiple lockout device (a hasp) may be used.

If lockout is used, a single lock may be used to lockout the machine or equipment, but the key to that lock must be placed in a lockout box or cabinet which allows the use of multiple locks to secure it. Each employee will then use his/her own lock to secure the box or

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cabinet. As each person no longer needs to maintain his/her lockout protection, that person will remove his/her own lock from the lockout device or from the lockout box.

## **9.0 PROCEDURE INVOLVING MORE THAN ONE SHIFT OR GROUP OF WORKERS**

There may be occasions when a lockout or tag-out device must remain in place for more than one work shift or after other personnel changes. The procedure depends on whether or not employees on the incoming shift will be working on the locked out or tagged out equipment.

- a. Service or repair work will be continued by the new shift:

Employees leaving the work place will remove their locks and incoming employees will connect their locks under the direct observation of their supervisors. The supervisors for both shifts will be present for the transfer of the lockout/tag-out.

- b. Employees on other shifts will not be working on the machines:

The lockout/tag-out devices will remain in place and the incoming personnel will be notified that a lockout/tag-out is in effect. The supervisors of both shifts will be responsible for ensuring that the information is made available to the incoming personnel.

## **10.0 UPGRADE OF ENERGY ISOLATING DEVICES REQUIRED**

Energy isolating devices designed to accept lockout devices must be installed when:

- a. Any major replacement, repair, renovation or modification of machines or equipment is performed.
- b. New machines or equipment are installed.

## **11.0 CORD AND PLUG CONNECTED ELECTRIC EQUIPMENT**

Electric equipment connected by a cord and plug is not covered by the lockout/tag-out rules when the cord is under the exclusive control of the person performing the repair or maintenance and the cord is unplugged during servicing.

## **12.0 AUDIT/INSPECTION OF THE LOCKOUT/TAGOUT PROCEDURE**

The lockout/tag-out program will be audited or inspected on a periodic basis to ensure that the procedure and requirements of the OSHA standard are being followed. Included in the audit will be documentation of review training for employees. Any deviations found in following these procedures will be corrected.

## **13. QUICK CHECKLIST FOR LOCKOUT/TAGOUT**

- a. **STEPS FOR SHUTDOWN:**

- (1) Prepare -- Before you begin, be sure you know:
  - A. All the types of energy involved.

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- B. Hazards presented by energy.
- C. How to control the energy.

- (2) Shutdown -- Turn off the machine or equipment.
- (3) Isolate -- Isolate the machine or equipment from the energy source (i.e., turn off the main circuit breaker).
- (4) Lockout -- Apply your lock. Be sure that it holds the isolating device in the "off" or "safe" position.
- (5) Release -- Release stored energy. Relieve, disconnect, restrain, block, or otherwise ensure that all energy sources (such as electrical, mechanical, hydraulic, compressed, or others) are de-energized.
- (6) Verify -- Try the on-off switch or other controls to be sure the machine will not start. Return the switch to the "off" position.
- (7) Your lockout is complete.

**b. STEPS FOR RESTART:**

- (1) Inspect - Inspect the equipment to be sure that:
  - a. All tools and other material are removed.
  - b. Machines are fully reassembled.
  - c. Guards and other safety devices are reinstalled.
- (2) Notify - Be sure that:
  - a. All employees are safely positioned.
  - b. All affected employees are notified of the restart.
- (3) Remove - Remove lockout devices. Remember that only the person who put the lock on the machine may remove it.

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## FLOWCHART

<u>RESPONSIBILITIES</u>	<u>PROCEDURE</u>	<u>DOCUMENTATION</u>
Chief Executive Officer	<u>Management &amp; Responsibility</u> <ul style="list-style-type: none"> <li>• HSE Policy</li> <li>• Measurable Objectives</li> <li>• Responsibility &amp; accountability</li> <li>• Safety Committee</li> </ul>	<ul style="list-style-type: none"> <li>• Policy Statement</li> <li>• Safety Objective</li> <li>• Personnel responsibility</li> <li>• Safety Chart</li> </ul>
Safety Committee Safety Officer Employee	<u>Hazard Identification</u> <ul style="list-style-type: none"> <li>• Job Safety Analysis</li> <li>• Hazard Hunt</li> <li>• Site Safety Inspection</li> </ul>	<ul style="list-style-type: none"> <li>• Hazard Hunt &amp; Near Miss Report</li> <li>• Safety Inspection form</li> <li>• Job Safety Analysis</li> </ul>
Safety Committee Safety Officer Employee	Risk Rating	
Safety Committee Safety Officer	<u>Control Measure</u> <ul style="list-style-type: none"> <li>• Elimination</li> <li>• Substitution</li> <li>• Isolation</li> <li>• Engineering Control</li> <li>• Administrative Control</li> <li>• Personal Protective Equipment</li> </ul>	<ul style="list-style-type: none"> <li>• Personal Protective Equipment Record</li> </ul>
Safety Committee Safety Officer	<u>Control Measure</u> <ul style="list-style-type: none"> <li>• Elimination</li> <li>• Substitution</li> <li>• Isolation</li> <li>• Engineering Control</li> <li>• Administrative Control</li> <li>• Personal Protective Equipment</li> </ul>	<ul style="list-style-type: none"> <li>• Personal Protective Equipment Record</li> </ul>

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## 1.0 PURPOSE

The purpose of this procedure is to provide a guidance and process for identifying and assessing the safety hazard at the work site arising from the activities of person at work

## 2.0 SCOPE

This procedure covers all activities at DBSB either office safety, warehouse and offshore

## 3.0 DEFINITION AND ABBREVIATION

3.1 Hazard - Situation that poses a level of threat to life, health, property, or environment

3.2 Risk - The likelihood to cause injury, fatality due to hazard

## 4.0 REFERENCES

4.1 Occupational Safety and Health Act 1994 Regulation 514

4.2 Factories and Machineries Act 1967

4.3 International Labour Organization Guideline

## 5.0 IDENTIFYING THE HAZARD

5.1 The process involves identifying all the possible situation or activities that could cause harm to people, damaged properties and environment impact.

5.2 The process of identifying the hazards can be done either during safety inspection or daily operation

5.3 Wherever applicable, the hazards shall be recorded in the following documents:

- A. Safety Inspection Form - During safety inspection [attachment 1]
- B. Hazard Hunt Form During daily Operation [Attachment 2]
- C. Job Safety Analysis – Before the job started [Attachment 3]

## 6.0 RISK RATING

6.1 After hazard's source has been identified from the workplace, assess the risk. The high rating should be tackle first.



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6.2 Two (2) factors of assessing the risk should be considered:

6.2.1 Likelihood - The chances of each of the situation and process occurring

6.2.2 Consequences- The extent of the harm (level of injury) if it occur.

6.3 Assess the likelihood of the employee exposure to the hazard and how likely this hazardous situation will occur. Then estimate the consequences to the people from fatality to negligible injuries.

6.4 Plot of likelihood and consequences on the risk rating matrix chart to determine the severity of the hazard.

Fig 1: Level and evaluation Table

Risk	Description	Action
<b>1 – 4</b>	<b>LOW</b>	Risk which is identified as LOW can be considered as acceptable and further reduction is unnecessary. However if the risk can be solved almost immediately However, if the risk can be resolved quickly with effective control measures shall be performed and recorded.
<b>5 – 12</b>	<b>MEDIUM</b>	MEDIUM risk requires planned approach to control the hazards and adopt temporary steps if necessary. All action taken must be documented onto the risk assessment form including the incident investigation date.
<b>15 – 25</b>	<b>HIGH</b>	HIGH risk requires immediate action to control hazard as stated on the control hierarchy. All action taken must be documented onto the risk assessment form including the incident investigation date.

Fig 2: Risk Matrix Chart

RISK		LIKELIHOOD				
		Rare [1]	Unlikely [2]	Possible [3]	Likely [4]	Almost Certain [5]
<b>CONSEQUENCES</b>	Insignificant [1]	1	2	3	4	5
	Minor [2]	2	4	6	8	10
	Moderate [3]	3	6	9	12	15
	Major Injury [4]	4	8	12	16	20
	Fatality [5]	5	10	15	20	25

6.5 Record all assessment in the risk assessment worksheet (attachment 4)

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## 7.0 SAFETY INSPECTION

7.1 Safety inspection shall be carried out not less than in three (3) months by safety committee.

7.2 Safety Inspection shall be based on safety inspection checklist as per attachment 1

7.3 Section representative is required to guide safety inspector during tour of his area.

## 8.0 CONTROLLING THE RISK

8.1 Hierarchy of control shall be as follows:

### a) Elimination

Remove the hazardous work practice or material from workplace. This is the most effective control measure, however, if a hazard cannot be eliminated there are number of control option that can be used.

### b) Substitution

Substitute the hazardous aspects with safer options or substitute a hazard work practice with a hazardous one.

### c) Isolation

Isolate or barricade the hazard work area or equipment from people and non-relevant personnel

### d) Engineering Control

This may include modification of tools and equipment, e.g.: providing guarding to machinery and training of personnel on proper usage of equipment.

### e) Administrative Control

DB will implement safe work practices and inculcate proper safety attitude towards every personnel. Appropriate safety training programs and incentives are to be developed and established to increase awareness and encouragement for good behavior.

### f) Personal Protective Equipment

## 9.0 MONITORING AND REVIEW

All control measure to be assessed in order to determine:

- No hazard has been created by control measure itself.
- The process should be assessed to ensure it can effectively manage the risks.
- Either it can continuously implement or not.