



شركة مسقط الدولية للقطر  
MUSCAT INTERNATIONAL BITUMEN LLC

## HEALTH SAFETY & ENVIRONMENT (HSE) MANUAL

DOCUMENT ID	: MIB/HSE/HSEMS
REVISION	: 01
DATE	: 17/7/12

	PREPARED BY	REVIEWED BY	APPROVED BY
SIGN & DATE			

SAFETY IS OUR PRIORITY



<b>SI #</b>	<b>CONTENTS</b>	<b>Page #</b>
1	Safety Health & Environment Policy	4
2	Safety Health & Environment Objectives	5
3	Basic Safety Rules	6
4	General Safety Rules	7
5	Emergency Instructions	16
6	Action incase of Spillage/Leakage of Chemicals	19
7	Hazards of Bitumen	20
8	First Aid for Bitumen Burns	21
9	Fire Protective System	24
10	Personal Protective Equipments	27
11	Environment Pollution	29
12	Our Goals	32



SI #	HSE Activity Schedules	Page #
13	HSE Induction Training Attendance Format	33
14	First Aid Box Format	34
15	Incident and Accident Report Format	35
16	Fire Extinguisher Format	36
17	Work Permit Format	37
18	Emergency Response /Mock Drill Format	38
19	Tool Box Meeting Format	39
20	Working at Height Format	40
21	Electrical Work Format	41



## **Health, Safety & Environment Policy**

سياسة الصحة، السلامة والبيئة

MIB is committed to working Safely and protecting Health of its employees and others that may be affected by our operations and also minimize impact of their activities on the Environment. We believe that all accidents are Preventable. MIB will strive for continuous Improvement of its HSE performance by the efficient Management of HSE System.

A approach to HSE management to be applied which shall:

1. Acceptance of direct individual to comply with HSE management system requirements.
  2. Establish and maintain procedure for reporting, investigation, recording and analyzing accidents and incidents.
  3. To encourage employees to work safely and empower them to stop work when the conditions and action are unsafe.
  4. Set objectives and targets, measure and reporting HSE activities.
  5. Adhering to company procedure of securing a safe work place.
  6. Reduce potential long term liabilities.

### ***The purpose of this HSE policy is:***

1. Provide and maintain to ensure safe work place.
  2. Prevent all incidents and accidents by implementing adequate control measures.
  3. Protect the health and safety of our employees and other person associated with our activities.
  4. Provide proper personal protective equipment and supervise their use.
  5. To ensure substance are safe without any risk when being used or handled.

نلتزم بمقتضى الدوائية للقرار العمل بأمان وحماية مرضيقيها والآخرين الذين قد يتعرضون من انشطتنا والتقليل من الانشطة التي قد تتعرض لها البيئة. نحن نؤمن بأن جميع الحوادث يمكن الوقاية منها. وسوف نسعى جاهدين من أجل التحسين المستمر لأداء الصحة ، السلامة والبيئة خلال كل كافة إدارة الصحة . السلامة والبيئة .

هذا نهج متبع لإدارة الصحة ، السلامة والبيئة . فيما يلى  
البعض منها :-

- ١- قبول الفرد بالإمتنال لمتطلبات إدارة الصحة والسلامة.
  - ٢- إنشاء والحفظ على إجراءات التحقق وتقديم التقارير وتسجيل وتحليل الحوادث والأحداث.
  - ٣- تشجيع الموظفين على العمل بسلام وتمكينهم من توقف العمل عندما تكون الشروط والإجراءات غير آمنة.
  - ٤- تحديد المقاصد والأهداف ، قياس وإبلاغ انشطة الصحة، السلامة والبيئة.
  - ٥- التزام الشركة بإجراءات وتأمين مكان آمن للعمل بدون أي مخاطر.
  - ٦- خفض محتمل الالتراتمات على المدى الطويل.

**لغير من سياسة الصحة . الصلامة والبيئة هو :-**

- توفير وسائل لضمان سلامة مكان العمل .
  - منع جميع الحوادث من خلال تنفيذ تدابير الوقاية الكمالية
  - حماية صحة وسلامة موظفينا والآخرين الذين يرتبطون مع أنشطتنا
  - توفير معدات الوقاية الشخصية المناسبة والإشراف على استخدامها
  - يجب ضمان المواد آمنة بدون أي مخاطر عندما يتم استخدامها أو التعامل معها .

AHMED AL-SHANFARI

## Managing Director

三

## **Safety, Health & Environment objectives:**

- Strike to reduce the probability of the accidents which have the potential to cause injury, disablement, loss of life & property.
- Take measure to minimize health impairment of people involved in loading as well as unloading of bitumen.
- To minimize degradation of the general environment in & around the location, by controlling probable situations which have the potential to adversely effect the environment.
- To minimize undue wastage of the material resources including water and other solvents, which help in preventing environment pollution.
- To educate the employees so that they can be aware of their own safety, health & well being as well as their responsibility towards the environment.
- 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 & mention their workplace free of unsafe action & condition.



## **Basic Safety Rules:**

- All workers are must to wear cover all uniform, helmet and hand gloves while on duty.
- Smoking is strictly prohibited in plant.
- For handling chemicals workers must use face mask and goggles.
- Materials used in the plant like Bitumen is very expensive and hazardous make sure that there is no spillage and wastage.
- Keep the barricades in front of the trucks while on loading.
- Do not enter any vessel or equipment, without proper permit.
- No hot work in plant without a fire permit.
- For doing any maintenance work, the work permission is necessary.
- Do not use any fire alarm or fire extinguisher when there is no emergency situation.
- Do not start any work without a proper PPE.

### **These are amending for emergency use:**

- Job safety analysis to be followed.
- Work as per instructions only, know the instruction is to be followed in case of emergency
- Keep PPE in clean and suitable condition.
- Report any abnormal conditions, sound or vibration to your HSE officer.
- When you hear the fire alarm siren. Leave the building/area immediately and proceed to designated assembly area, it is opposite to the office.

## **General Safety Rules:**

### **▪ House keeping:**

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

### **▪ Approval:**

- a. Wearing apron, no person working on or near moving vehicles shall be loose clothing.
- b. The worker who involved in loading or unloading shall put on tight fitting apron, shoes, boots must be tightly lashed.
- c. Casual clothes should not wear by the worker at the time of work.

### **▪ Personal Protective Equipments:**

PPE like goggles, face mask, apron, gloves, safety shoes, helmet etc. are issued for personnel protection for jobs where special

hazard exhaust 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 maintenance 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) Vessel entry permit
- 3) Hot work permit
- 4) Temporary electrical connection permit
- 5) 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 or certain motion or equipment unauthorized.
- b) Oiling, cleaning and repairing of machinery shall not be normally carried without first stopping machinery completely

- c) No person switch on electricity, turn on gas, bitumen or air or acid or certain motion 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, flywheels, rotating collars with projecting shield etc, shall be properly guarded.

- **Electricity:**

- a) No worn 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 shall operate any switch gear or other electric equipments except for routine starting and stopping motors and switching on or switching off lights, fans etc.

- **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 and handling.
- e) The LPG 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.

## **OUR AIM – ZERO ACCIDENTS**

- **Trucks**

- a) All vehicles shall comply with traffic regulations within the site and they shall not exceed the speed limit of 15 Kmph.
- 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 are 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 site 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 does not have that smoking things.

- **First-aid boxes**

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

- **Health**

Any contagious or communicable disease suffered by the employee shall be intimated to the management by the individual. Food, water and beverages shall be taken designated place only.

- **Reporting of accidents**

Whenever an injured person is required to be sent to the 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 / spillages. These shall be reported, investigated and remedial actions thereof shall be expeditiously implemented to prevent recurrence.

- **Horse play:**

Horse play of any kind is prohibited inside the site. Do not distract the attention of others at work.

- **Emergency:**

An emergency shall be declared if an untoward incidents (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 everybody on their roles in the event of such emergency. Participation in these drills is mandatory as per procedure.



**Follow safety ever  
accident will be never**

### **Emergency 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 equipments.
- Leave the room / kitchen / store / office etc, with visitors if any.
- Close door behind you.
- Report to assembly point.
- Do not enter the room / kitchen / store / office etc, before emergency co-ordinator gives you permission.
- Check and ensure that all occupants have been vacated.
- If all have been vacated proceed to assembly point and report to emergency co-ordinator.
- 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-ordinator.
- Contact MIB staffs / 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 THE BELL/ALARUM.....!!
- ATTACK THE FIRE WITH APPROPRAITE FIRE EXTINGUISHER.
- Contact PDO Supervisor / HSE officer.

2) If NO, immediately call 5555 , 9999. 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-ENTER THE ROOM BEFORE THE EMERGENCY GIVES YOU PERMISSION.
- CONTACT MIB Staffs / HSE officer.

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

**Emergency numbers:**

PDO areas – 5555

Civil areas – 9999

HSE officer – 99468456

Asst-operation manager – 97722003

**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 case of bitumen) 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, inform 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.

### **Hazards of bitumen:**

Bitumen in service on for example roads, roofs or pavements are virtually solid and do not present any known health or environmental hazard

Bitumen is normally manufactured, stored, transported and handled hot. Hence the most significant hazard is the potential to cause severe burns. Hot bitumen gives off fumes. These can cause respiratory tract or eye irritation. Much scientific research has been carried out to establish that, apart from this irritation, there is no evidence that bitumen is hazardous to worker health. Good temperature control and work practices can prevent or minimize worker exposure to fumes from bitumen.

How can worker exposure to fumes from bitumen be minimized?

Worker exposure can be minimized by the use of good working practices, such as:

1. Keeping the temperature of the material as low as practically possible;
2. Working in well ventilated conditions (including simple practices e.g. standing upwind of the source of fumes);
3. Job rotation around the worksite;
4. Use of personal protective equipment, especially in confined spaces.

### **First aid for bitumen burns:**

### **NOTES FOR GUIDANCE OF FIRST AID AND MEDICAL PERSONNEL**

All persons working with hot bitumen should be familiar with these

recommendations in order to administer first aid to burn victims. This document should accompany the patient and be placed in a prominent position before transport to doctor or hospital.

## **NO ATTEMPT SHOULD BE MADE TO REMOVE THE BITUMEN AT THE WORKSITE**

### **• FIRST AID**

When an accident has occurred the affected area should be cooled immediately to prevent the heat causing further damage. The burn should be drenched in cold water for at least ten minutes for skin and at least 5 minutes for eyes. However, body hypothermia must be avoided. No attempt should be made to remove the bitumen from the burned area.

### **• FURTHER TREATMENT, FIRST AID AND MEDICAL CARE**

The bitumen layer will be firmly attached to the skin and removal should not be attempted unless carried out at a medical facility under the supervision of a doctor. The cold bitumen will form a waterproof, sterile layer over the burn which will prevent the burn from drying out. If the bitumen is removed from the wound there is the possibility that the skin will be damaged further, bringing with it the possibility of complications. Furthermore, by exposing a second degree burn in order to treat it, there is the possibility that infection or drying out will make the wound deeper.

## **BITUMEN BURNS**

### **• SECOND DEGREE BURNS**

The bitumen should be left in place and covered with a Tulle dressing containing paraffin or a burn ointment containing paraffin, e.g. Flammazine (silver sulphadiazine). Such treatment will have the effect of softening the bitumen enabling it to be gently removed over a period of days. As a result of the natural re-epithelialisation of the wound any remaining bitumen will peel off in time.

- **THIRD DEGREE BURNS**

Active removal of the bitumen should be avoided unless primary surgical treatment is being considered due to the location and depth of the wound. In such cases removal of the bitumen is best carried out in the operating theatre between the second and fifth day after the burn occurred. By the second day the capillary circulation has usually recovered and the bed of the wound is such that a specialist can assess the depth to which the burn has penetrated. There are normally no secondary problems such as infections to contend with before the sixth day. However, it is essential to commence treatment using paraffin based substances from the day of the accident to facilitate removal during surgery.

- **CIRCUMFERENTIAL BURNS**

Where hot bitumen completely encircles a limb or other body part the cooled and hardened bitumen may cause a tourniquet effect. In the event of this occurring the adhering bitumen must be softened and/or split to prevent restriction of blood flow.

- **EYE BURNS**

No attempt should be made to remove the bitumen by unqualified personnel .the patient should be referred urgently for specialist medical assessment and appropriate treatment. Considerable effort has been made to assure the accuracy and reliability of the information contained

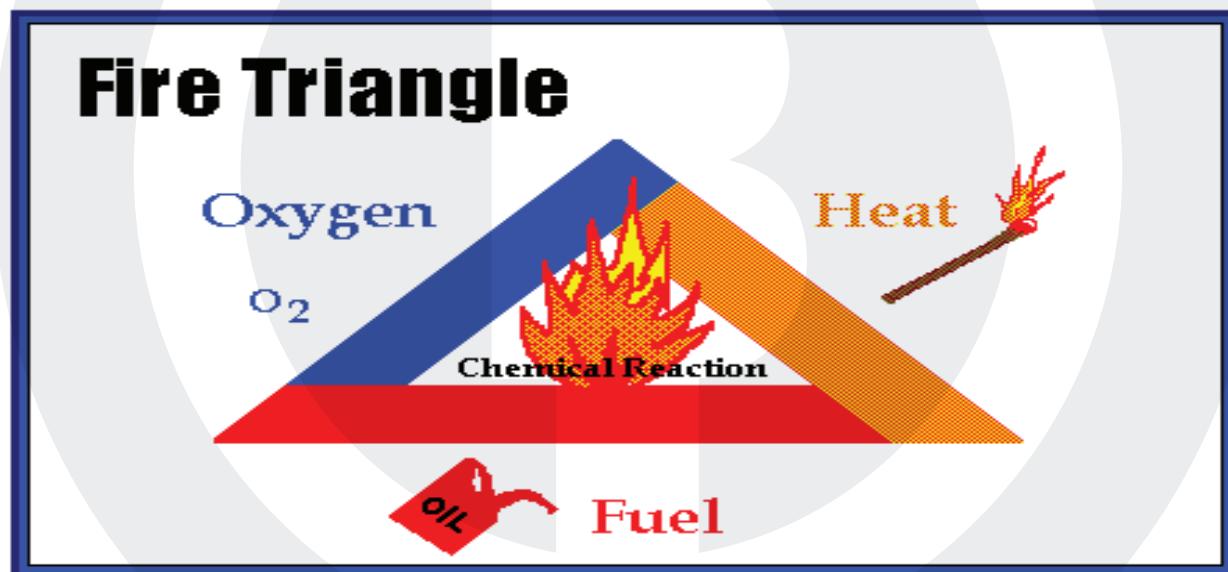
### **Fire Protection System:**

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 fire 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, cable etc.)

### **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 fire by cooling. Water spray gives better cooling; water jet is used to extinguish fire 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.

- **CO<sub>2</sub>:**

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

- **DCP:**

Dry chemical powder extinguishes fires of class A, D & E. it extinguish by blanketing/smothering action.

At MIB, we have portable fire extinguishers and a fire 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

Extinguishers should be housed in suitable weather-proof boxes or shrouds to ensure serviceability at all times.

Extinguishers must be inspected regularly and a permanent record maintained.

## **Personal Protective Equipment:**

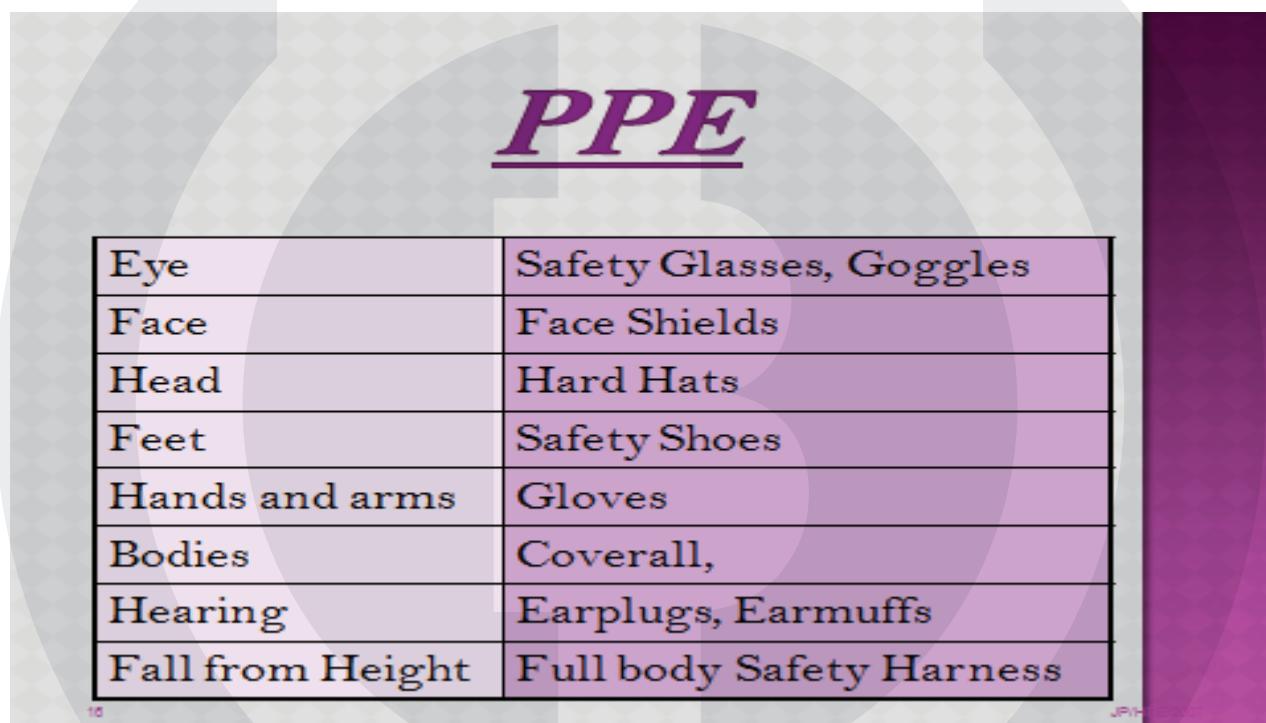
Personal protective equipments protect the human being from exposure against various kinds of hazards. PPE themselves do not eliminate accidents or the hazard, but protect against the effects thereof.

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.



<b><u>PPE</u></b>	
<b>Eye</b>	Safety Glasses, Goggles
<b>Face</b>	Face Shields
<b>Head</b>	Hard Hats
<b>Feet</b>	Safety Shoes
<b>Hands and arms</b>	Gloves
<b>Bodies</b>	Coverall,
<b>Hearing</b>	Earplugs, Earmuffs
<b>Fall from Height</b>	Full body Safety Harness

These protect against physical injury to the external parts of the body as well as absorption into the skin causing systemic effects.

## **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 from 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 etc. 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 soil 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 coming 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 miserable 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 extent 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 innocuous.

- 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.



## **Our Goals:**

Through effective and transparent HSE management, we aim to protect our employees, be the preferred contractor for customers and the favored employer in the Bitumen supplier sector, 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.

Ensign is 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.