

**MAO PETROLEUM
COMPANY LIMITED**

**MAO DRIVE OFF BUBA MARUWA ROAD IJEGUN-EGBA
SATELLITE TOWN LAGOS**

**H S E
MANAGEMENT
SYSTEM POLICY**

H S E

MANAGEMENT SYSTEM

1.1 PREAMBLE

MAO Health, Safety and Environment System is based on the Company's HSE Policies and comprises of a number of guidelines and manual, describing our approach to HSE considering the Company's activities and providing its employees a safe place to work. However, Safety also means line management responsibility and involves each Manager and Supervisor at all levels in our Company.

The HSE system documentation provides the guidelines to achieve our goals and is documented as described below:

- Management Manual
- HSE Handbook
- HSE Plan
- Hazard Management
- HSE at work
- Staff Health
- Safety Audits
- Transportation
- Safety Laws & Regulations

Therefore Supervisors and Managers are expected to:

- Adequately train Employees for safe performance of their work.
- To ensure that all operations and activities comply with local laws and government rules and regulations.
- Conduct accident investigations thoroughly and effectively, ensure that preventive measures are implemented.

- Work plans are developed with due consideration for potential hazards and safety.
- Carry out periodic inspections and discuss with personnel, environment and safety improvement.
- Take into account safety performance in personnel evaluation.
- Create awareness that every employee is individually accountable for their safety and the safety of others.

Safety Policy Statement

It is the policy of MAO to comply with the terms of the Health and Safety at work requirements, and to provide our employees a safe place of work and maintain a healthy and safe working environment.

MAO' Health and Safety objective is to minimize the number of instances of occupational accidents and illnesses and ultimately to achieve an accident free work place and Zero LTI.

All employees will be provided with such equipment, information, training and supervision, as it is necessary to implement the policy and the stated objectives.

MAO also acknowledges the employee's right to refuse, or stop work if the work site is unsafe or safety standards are proven to be below acceptable conditions.

While the management of MAO will do all that is within its powers to ensure the Health and Safety of its employees, it is recognized that Health and Safety at work is the responsibility of each and every individual associated with the Company.

Safety means line management responsibility and involves each engineer and supervisor at all levels in our Company. It is the duty of each employee to take reasonable care of their own and other peoples' welfare and to report any situation, which may pose threat to the well being of any other person.

All injuries, however small, sustained by a person at work must be reported to the safety manager. Accident records are crucial to the effective monitoring and revision of the Company's policy and must therefore be accurate and comprehensive.

The management of MAO will provide every employee with the training necessary to carry out his or her tasks safely. However, if an employee is unsure how to perform a certain task safely or he feels it would be dangerous to perform a safe job, then it is the employee's duty to report this to the MAO safety officer or safety manager. MAO is responsible for maintaining and enhancing the safety awareness of its personnel.

HEALTH SAFETY AND ENVIRONMENT POLICY

- Fire fighting and prevention.
- Daily, inspection of firefighting equipment to avoid disappointment in times of need.
- Traffic control within the depot to maintain orderliness within the facility.
- Truck inspection to meet up safety standard and Department of Petroleum Resources (D.P.R.) policy.
- Spillage control to avoid fire outbreak.
- Ensure safety reception of product through standby duties.
- We ensure proper flushing of cargo hose, to avoid contamination of product quality.
- Ensure safety connection, disconnection and draining of hose after vessel reception.
- Creation of emergency awareness through evacuation drill and lecture.
- Enforcement of safety policy through disciplinary action.
- Fire drill at regular interval to facilitate emergency response.
- All operational staff must be on their personal protective equipment (P.P.E.) regardless of your post at all time.
- Good housekeeping within the depot always to ensure safety of health and property.
- Committed to the highest health and safety standards in touching lives in many positive ways.
- Committed to provide and maintain a safe accident free and healthy work environment.
- Issuing working permits to ensure safe working environment.
- We conduct safety talks to government officers or government agency.
- We provide and monitor first aid with the company in case of an emergency.

MAOS Health and Safety Policy will be continually monitored and updated.
The Company's clients will be issued a copy of the HSE policies.

Signed:

Group Managing Director

Safety Manager

ENVIRONMENTAL QUALITY ASSURANCE STATEMENT

MAO activities have an impact on the environment in which we operate, on land, air, water, and the life forms found there. We will conduct all operations in a lawful and environmentally responsible manner.

1.0 POLICY STATEMENT

Adopt the MAO Environmental Statement as the policy document

2.0 ENVIRONMENTAL PROGRAMS

Periodically presenting reports summarizing the environmental impact on the work place.

3.0 INTEGRATION

Integrate EQAP with all company activities including organization, assignment of responsibilities through services rendered to our clients within the environment we operate.

4.0 MEASUREMENT AND REGISTRATION

Quantity and record and use of materials and energy, discharges and effects, resulting from operations in order to minimize environmental impact.

5.0 TRAINING

Develop and maintain an education and training program to enhance motivation and involvement of management, and all other employees, clients and contractors.

6.0 INSPECTION, AUDITING AND REPORTING

Implement systems for inspection, auditing and reporting in order to inform management, other employees and appropriate third parties of environmental issues including functioning of EQAP, problem areas, complaints and incidents.

Signed:

Group Managing Director

Safety Manager

COMPANY POLICIES

1.0 HEALTH POLICY

Employees taken on for work with MAO must be physically fit and healthy.

This will be achieved by pre-employment and continuous medical check-up for all personnel. MAO may require employees to participate in a supervised programme of medication (e.g. Malaria prophylaxis) and inoculations against disease (e.g. Hepatitis). Full participation is important to monitor and maintain the Health and Fitness of all workers.

CONDITIONS TO ENHANCE GOOD HEALTH AND HYGIENE

Good health depends on a balance of work, rest, sensible and regular meals.

- Preventive measures as well as easily effective treatment are essential to avoid spread of simple infections.
- Provision of potable water, sanitary toilet facilities, sleeping quarters (if applicable), rubbish disposal, should be considered, to maintain high standard of hygiene.
- Cuts and abrasions should be cleaned at once and first aid treatment administered.
- Prolonged exposure to gas oils and other materials that may cause suffocation, dermatitis and skin irritations must be reduced. All traces of oil should be thoroughly washed from the skin and

hydrocarbon solvent strongly avoided. Work clothes must be laundered frequently.

- Taking precautions to avoid mosquito bites can reduce the risk of contracting malaria. This can be achieved by use of proper clothing, mosquito wire-screening and nets, keeping windows and doors closed and the use of insecticides.

2.0 FIRE SAFETY POLICY

MAO Fire and Safety Procedures take account of special fire hazards in specific areas of the work place.

The MAO depot fire service inspection staff and/or safety manager are responsible for ensuring compliance with fire safety and prevention codes, inspecting and testing fire fighting, prevention and protection equipment

All employees within the depot have a duty to conduct their operation in such a way as to minimize the risk of fire. This involves taking care when working in depot, keeping combustible materials separate from sources of ignition and avoiding unnecessary accumulation of combustible materials.

Supervisors are responsible for keeping their operating areas safe from fire, ensuring that their staffs are trained in fire prevention and emergency procedures.

All employees within the depot have a duty to report immediately any fire, smoke or potential fire hazards to the Safety Manager.

3.0 SAFETY AUDIT POLICY

By the nature of MAO' working environment, the sophistication of depot and associated equipment, as well as the products we provide, involving the presence of highly inflammable vapours and release of gas or liquids coupled with man's imperfection - unsafe acts and hazardous conditions are inevitable.

The Hazards, if not identified - assessed - controlled - and monitored or completely eliminated, can result in accidents. MAO recognizes this fact and therefore has it as its policy to carry out frequent HSE Audits at all its work sites and operations.

All front line supervisors are mandated to carry out Site Safety Audit regularly, make reports and forward same to the Safety Manager, who reviews the reports and follows up to ensure corrective measures are implemented in good time.

The Safety Manager ensures that training on Safety Audit, (Management and Technical Safety Audits) are carried out. Reports are compiled; recommendations made, and followed-up, to ensure compliance, and closed out.

It is the responsibility of all the work force to carry out Safety Audit both in and outside their department's area of operations and report to the Safety Manager or his immediate subordinate. Repeated violation of Audit recommendations will be discouraged and positive attitudes toward Safety rewarded. This policy shall apply to all workforce and all are required to read, understand and abide by this policy.

4.0 ALCOHOL POLICY

MAO is committed, at all times, to achieve a safe working environment free from the use and/or the abuse of alcohol and intoxicating drugs through education intervention and disciplinary measures. MAO prohibits the use, possession, or sale of illicit drugs. MAO also requires its employees to be free from the influence of alcohol in order to ensure the safety of its operations, employees, and environment in which we operate.

It is a termination offence for any employee of MAO to be under the influence of alcohol or in possession of or under the influence of any non-prescribed drug such as Cocaine, Amphetamine (Speed), Marijuana, Heroin, Hashish or other illegal or controlled substance while working in the depot or in transit transportation by either authorized MAO Vehicles or nominated MAO third party transporter.

5.0 SMOKING POLICY

Smoking is not only injurious to health but also a potential safety Hazard. Smoking in public places exposes non-smokers to health related hazards and it is the duty of MAO to protect employees from unnecessary exposure to hazards.

This rule applies to every part of the depot.

The smoking of cigarettes or pipes is prohibited anywhere in the depot at all times. This ban also includes all conference/meeting rooms, corridors, public areas and shared offices.

H S E MANAGEMENT MANUAL

HSE MANUAL

1.0 INTRODUCTION TO HEALTH, SAFETY AND ENVIRONMENT

1.1 This Manual covers all aspects of the Company's operations regarding Health, Safety and Environment.

1.2 The purpose of the Manual is to:

- provide the legal and mandatory standards to HSE
- provide the basis of HSE specifications for customers/contractors
- Provide guidance to achieve the requirements set by the Company.

1.3 The Manual is divided into Chapters, consisting of "Stand-alone Documents" with own Index and Revision Status.

1.4 This Manual summarised in a concise and practical manner all accessible HSE information within the Company.

1.5 Compliance with the regulations and standards are mandatory but, however, do not relieve users and contractors the obligation to follow common and sound practice under the contracts performed.

1.6 THE HSE MANUAL IS A CONTROLLED DOCUMENT

All deviations shall be requested through the relevant Company procedure.

"Change Request Procedure"

1.7 DEFINITIONS

HSE - Health/Safety/Environment

Accident - The word “Accident is used to denote an incident causing injury, illness and/or damage.

Incident - The word is defined as an event or has caused injury, illness and/or damage to assets, third parties or environment.

Hazard - Hazard is the existing potential to cause harm, including injury, bad health as well as damage to property, assets environment, product losses or increased liabilities.

Hazard Area - Means an area of operation in which an atmosphere containing any significant quantity of flammable gas or vapour in a concentration that is capable of ignition

ORGANIZATION

Health and Safety at work is everyone’s responsibility, however, some responsibilities are legally defined.

The law says that:

Employers have overall responsibility for the Health and Safety of all people working for them.

Employees have a legal duty to avoid doing things which might endanger their own safety or anyone else’s.

To achieve success in health and safety management within MAO, the hierarchy of safety responsibilities is outlined as follows:

HSE PERSONNEL

1. DIRECTOR OF SAFETY

The Director of Safety is the person in MAO who has overall and final responsibility for Health and Safety in the Company, and is the Chief Executive Officer.

The role within MAO of the Director of Safety is defined

To:

- Formulate and develop the Health and Safety Policy and set priority objectives, after due consultations with HSEV advisors.
- Allocate funds for development and training.
- Attend HSE Seminars and other relevant Safety meetings.

2. SAFETY MANAGER

The Safety Manager is the delegated Deputy of the Director of Safety and responsible to:

- Devise systems and procedures to achieve these objectives and safety targets.
- Oversee monitoring activities to ensure that systems and procedures are established, implemented and contracted and adequate training is provided.

3. SAFETY OFFICER

The Company's Safety Officer will deputize for the Safety Manager during his absence; he will be responsible for the supervision of Health and Safety in all depot areas:

- Ensure that employees understand and comply with MAO ' policy.
- Inspection of plant and equipment
- Accident investigation and reporting
- Monitoring Company's Health and Safety objectives.
- Monitoring Company's performance in health and safety.
- Safety training.
- Safety statistics.

4. SAFETY COMMITTEE

The function of a Safety Committee provides a form of communication between management and employees and to:

- Study accident and disease records and identify trends and areas for improvement.
- Investigate accidents and incidents.
- Report to management, unsafe conditions and practices in the workplace.
- Consider safety representatives' reports and inspection records and discuss possible courses of action.
- Assist in development of HSE policy and safety rules.

- Consider the effectiveness of current safety provisions and suggest areas of improvement.

PERSONNEL RESPONSIBILITIES

HSE - STAFF RESPONSIBILITY DESCRIPTION

A-1 MANAGEMENT & ADVISOR

The HSE Advisors are responsible for:

- Practical demonstration of commitment to the Company HSE Policy and Personal HSE awareness.
- Assisting in the formulation of short and long term HSE objectives and strategies and coordination of occupational health, safety and environmental activities.
- The development of HSE procedures and proposing appropriate HSE standards for management approval.
- Support to the Company, by advice and facilitation, in the development and implementation of the annual HSE plan.
- Fostering of appropriate interfaces with Government agencies on HSE matters particularly as regards realism and practicality of impending legislation and standards setting.
- Promoting HSE awareness and attitude by showing genuine interest and visible personal commitment towards the subject.
- Ensuring adequate staffing of the HSE department in numbers and quality to ensure professional HSE advice is available throughout the Company's operational areas.

- Providing HSE inspection, OH survey and other HSE related services as required by operations.
- Ensuring that emergency services are suitably equipped, manned, and relevant personnel trained and drilled to deal with incidents.

A-2 COMPANY MANAGERS

- Practical demonstration of commitment to the Company's HSE Policy and personal HSE awareness.
- Formulation and management of functional HSE plans based on Company's policies.
- Frequent visits to storage tank areas, and visible allocation of priority to HSE targets.
- Clear clarification that no activity should commence until all necessary HSE measures are in place.
- Frequent communications with staff on HSE issues, especially on incident feedback and new initiatives (planned and ad hoc HSE meetings).
- Provide facilities, tools and equipment such that all work can be carried out safely and without a negative impact on the environment.
- Ensuring that only contractors with adequate HSE management capabilities are invited to tender for Company work and that all bids are analyzed to demonstrate such capability before commercial evaluation.

- Ensuring that no work starts without a proper safety plan, without an adequate pre mobilization audit, without provision of the necessary qualified supervisor, without an adequate HSE inspection and reporting structure and, where appropriate, proper permit to work provisions.
- Setting annual HSE tasks and targets and reviewing progress with line management on a pre-agreed schedule.
- Monitoring and verifying HSE performance and taking corrective action as appropriate.
- Ensure top management HSE audits and depot visits are carried out as planned.
- Taking note of good HSE performance and promote/put in place reward systems or for non performers ensure adequate disciplinary actions are taken.
- Holding line management, including their contractors, accountable for the implementation of HSE plans against targets.
- Endorsement of programmes and budgets, only when satisfied that adequate competent resources can be made available for the safe and responsible execution of the work.
- Approval of manpower, training and development plans, required to provide a workforce capable of executing the work program safely and responsibly.
- Enhance overall staff training, towards HSE aspects with the aim to raise their HSE awareness, attitude and commitment.

B – 1 LINE MANAGEMENT (Operations)

❖ SECTION HEADS ENGINEERS

❖ SUPERVISORS

- Demonstrating strong commitment towards Company HSE targets together with a strong personal HSE attitude and drive.
- Observance of Company HSE policies and rules and a willingness to stop work if adequate HSE measures are not in place.
- Willingness to back up their subordinates when they stop work, on the basis of the best information available, and believe that continuation is incompatible with Company HSE rules.
- Clear formulation and management of departmental HSE tasks and targets based on Company HSE plans.
- Ensuring that Company staff and customers/contractors understand departmental HSE tasks/targets and comply with them at all times.
- Proper HSE performance assessment of subordinates in annual staff reports or competence evaluation.
- Promoting HSE awareness by showing genuine interest and visible personal commitment in all HSE issues.
- Only to approve missions necessary for business purposes.
- Issuing clear written instructions, to make sure specific hazards are understood and protective measures are taken.
- Frequent depot visits (inspections/mini audits) showing visible commitment towards the reduction of unsafe acts and conditions.

- Provision of a safe and healthy working environment and that adequate PPE is available at all times.
- Ensuring' that customers/contractors comply with contractual requirements, e.g. provide safe tools, equipment and PPE.
- Close, regular monitoring of HSE performance and annual HSEplan execution, early identification of problems arising andformation of remedies to stay on track.
- Carrying out incident investigation and reporting in line withCompany procedures.
- Active leadership of and participation in, departmental incidentand audit reviews and in application of the lessons learned from them.
- Ensuring that all incidents, inspections and audit recommendationsare followed up and closed out.
- Development of area specific emergency response programme(drills, exercises involving other sections / departments) to ensurestaff/customers/contractors can and will respond properly,
- Identification and competence assurance of the manpower, trainingand other resources required for the safe and responsibleimplementation of Company activities, ○ Active participation in the HSE meetings which they chair orattend and ensuring that all HSE meetings at the subordinate levelsquality.
- Communicating HSE issues, specifically incident feedback, new HSE initiatives and other relevant information to staff and customers/contractors.

- Implementation of special initiatives (i.e. competitions, demonstrations, and seminars) appropriate to HSE concerns unique to their area of activity.
- Preparing adequate HSE budget proposals (Capex, Opex) for management review and operations requirements.

B-2 LINE MANAGEMENT (Office)

❖ DEPARTMENT HEADS

❖ SAFETY ENGINEERS

❖ HR MANAGER

- Shall ensure a safe working environment for all staff and visitors.
- They shall discharge the responsibility through the issuing and implementation of a department HSE plan, cascading from the operations and department business plans. These in turn cascade down from the corporate HSE plan, and are designed to show a visible commitment to the HSE needs of staff, they will hold all supervisors and staff responsible for safety.
- Weekly meetings with staff will discuss and promote HSE issues, and staff will be made aware of identified hazards.
- Only to approve missions necessary for business purposes.
- Perform safety audits of each office in their department every year.
- Make staff aware of identified hazards.
- Stop unsafe activities.
- Make staff aware of safety drills, procedures and plans.;

B-3 OFFICE STAFF

- Shall ensure a safe working environment for themselves and Visitors.
- Shall work in line with the department's HSE plan and the corporate HSE plan.
- Shall report incidents and near misses at once, and shall identify and report potentially dangerous situations.
- Heavy objects are not to be stored above head height, on cabinets or high shelves.
- All office furniture must be safe. Dangerous or broken furniture must be clearly marked so that it cannot be used and promptly sent for repair. All staffs are responsible for their own furniture.
- Offices shall not have trip hazards.

C - 1 COMPANY EMPLOYEES

- Every MAO employees must plan and perform his day's work in accordance with the HSE Policy. An activity must be suspended when the employee believes that it cannot be carried out in accordance with the policy and he must report this immediately to the supervisor.

All employees are responsible for:

- Work according to the instruction of their supervisors and compliance with the HSE rules, operating procedures and practices.
- Alerting their supervisors when they believe that working conditions are incompatible with Company HSE Policy and Regulations thus enabling the supervisor to suspend activities.

- Reporting all incidents/unsafe acts or hazardous conditions to their immediate supervisor without delay.
- Seat belts to be worn at all times on Company business. If the vehicle does not have a seat belt, another must be used.
- Wearing PPE correctly as and when required and maintaining them in good order.
- Adopting a "brother's keeper" attitude to their work mates and customer/contractor staff, using their own experience to stop others from committing unsafe acts.
- Being proactive and practicing HSE awareness by ensuring that customers/contractors know the Company's "golden rules" and follow them.
- Attending department/section HSE meetings, toolbox talks, etc. and participating actively.

PREAMBLE

Attached for information and guidance is a comprehensive statement of the Company's Safety and Health program, which has been developed with a view to the Company's structure and operations.

The Manual should make a positive contribution to the Company's Safety performance, when assigned to the third party, in order to:

- (a) Understand the third party and MAO' strong commitment to Safety, Health and the environment,
- (b) Understand the Company's Safety Policy at organizational levels.

- (c) Enhance more effective communications of the Company's Safety and Health Program to all new employees.
- (d) Provide a Safe place of Work and safe environment to live.
- (e) Communicate with our customers/contractors and employees at all levels.

1.0 POLICY IMPLEMENTATION

1.1 The Company will conduct its activities in such a manner as to:

- Abide by the MAOPolicy
- Protect the safety and health of its employees.
- Comply with applicable laws and regulations.
- Provide a safe place of work and environment.
- Prevent loss or damage to third party property or injury resulting from our activities.
- Ensure that vendors comply with our policy.
- Reject work in unsafe conditions.

2.0 SAFETY PROCEDURES

General

- All employees should be aware of, respect, and adhere to the rules and procedures contained in these procedures.
- All employees shall immediately report any unsafe practices or conditions to the relevant safety representative.

- Any person under the influence of alcohol or any other intoxicating drug, which might impair motor skills or judgement, whether prescribed or otherwise obtained, shall not be allowed on the job.
- Horseplay, practical joking or any other act, which might jeopardize the health and safety of any person, is forbidden.
- Any employee whose level of alertness and/or ability are reduced due to illness or fatigue will not be allowed on the job if this might influence the health and safety of that employee or any other person.
- Employees shall not adjust, move or otherwise tamper with any electrical equipment, machinery or air, water lines in a manner not within the scope of their duties, unless instructed to do so by a senior member of the staff.
- All waste material must be disposed of carefully and in such a way that they do not constitute a hazard to other workers or employees.
- No employee should undertake a job, which appears to be unsafe.
- No employee should undertake a job until he has received adequate safety instructions and is authorized to carry out the task.
- All injuries must be reported to the Safety Engineer or a delegated Safety representative.
- Employees should take care to ensure that all protective guards and other safety devices are properly fitted and in good working

order and shall immediately report any deficiencies to the supervisor or the Safety Manager.

- Work shall be well planned and supervised to avoid injuries in the handling of heavy materials and while using equipment.
- No employee should use chemicals without the knowledge required to work with chemicals safely.
- Employees are expected to attend departmental safety meetings when so requested by the Company of the Client.

2.1 ORGANIZATION AND ADMINISTRATION:

(GUIDE FOR INTERNAL SAFETY AUDIT)

2.1.1 SAFETY POLICY:

Every Department should have issued the MAO Safety Policy. Is it available to all personnel?

2.1.2 SAFETY RESPONSIBILITY:

- Statement of organization and arrangement to give effect to above Policy.
- Have authority and responsibility level for safe work been defined and issued?
- Has the relevant department, a Health and Safety Committee? D Are internal safety surveys being carried out, when was the last one?
- Involvement of employees in safety activities, attitudes.

2.1.3 SAFETY REGULATIONS:

- Are written Safety Regulations readily available to personnel?

- From observations/discussions are personnel aware of and implementing these?

2.1.4 OPERATING INSTRUCTIONS/FLOW DIAGRAMS:

- Are they up-to-date (when revised last)?
- Readily available to all operators, supervisors and managers.
- Is the responsibility for updating at an agreed frequency allocated to a named person?

2.1.5 TRAINING

- Is there any formal safety training?
- Any on-the-job training?
- Fire fighting training
- Breathing apparatus training
- Permit to work procedure training (e.g. For Authorized Signatories) D Are records kept of training received by personnel?

2.1.6 INCIDENT / ACCIDENT REPORTING:

- Is there a formal system for reporting? D Is it being correctly implemented?

2.1.7 FIRST AID:

- Is there a Medical Centre?
- Ambulance Services (own or rely on others)
- Trained First Aiders.

2.1.8 PERMIT-TO-WORK SYSTEM:

- Is a written procedure in use?
- Is it applied to all MAO and Contractors' personnel?
- Are personnel authorized to sign Permit-to-work aware of their responsibilities?
- Does written authority appoint such authorized persons, if so, on what basis?

2.1.9 COMMUNICATION BETWEEN MANAGEMENT AND STAFF:

- What system exists?
e.g. on matters relating to health and safety at work, reporting to Manager, instructions to Shifts regarding work, log book etc.
- Inter-shift communication and hand-over.
- Radio communication. Use of proper procedure.

2.1.10. REPORTING OF DEFECTS FOR REPAIR/MAINTENANCE

- Is there a system in use?
e.g. how are repairs to faults on equipment implemented? D Is there a procedure for dealing with items which reflect on safety standards, e.g. if a hazard is there immediate action?

2.1.11 SAFETY EQUIPMENT / PROTECTIVE CLOTHING:

From the discussion, the team will be aware of what is issued or made available and on site, should check whether use is made • of these items: e.g. Safety helmets, gloves, safety footwear, overalls, weather protection.

- Warning notices displayed, e.g. Eye Protection, Noise, Helmet, No smoking, toxic, Hygiene, etc.
- Is eye protection issued/made available?
- Are eye wash facilities available, e.g. on the storage tank area/jetty?
What is the condition?
- Are safety showers provided? Are they in working order?
- Resuscitation equipment availability.

2.1.12 AVAILABILITY OF REFERENCES LITERATURE / CODES OF PRACTICE, ETC.

- Are appropriate items readily available to authorized personnel?
e.g. MOSR, 1997M API, HSG,... etc.
- Are they controlled, e.g. registered, etc.?

2.2 HOUSEKEEPING:

- The Team should check and comment on the standard of good housekeeping maintained on the various areas visited.

2.3 SAFE ACCESS AND EGRESS:

- Whilst carrying out the Safety Audit, the team should check that all aspects of the provision of safe access and egress to the place of work are satisfactory.

2.4 FIRE FIGHTING EQUIPMENT, ALARMS etc.

- Check that portable fire extinguishers are available. Maintenance?
- Fire fighting water supply, pumps, Hydrants Ring Main System Storage?
- Foam monitors. Foam supply
- Fixed water monitors
- Halon systems
- Sprinkler systems
- Vehicles
- Check on testing, inspection, maintenance and records.
- Alarm system, detectors, testing, etc.
- Prevention of fire regulations, Available, Displayed, Implementation.
- Check that International standard shore fire connection provided and maintained on Jetty.
- Emergency exits in buildings, etc.
- Fire Training Ground

2.5 LIFE SAVING APPLIANCES:

- Check that lives saving appliances are provided and properly maintained.

2.6 MISCELLANEOUS SAFETY ITEMS

- Safety displays and notices. Condition?

- Does Line Manager/Supervisor carry out safety /good housekeeping inspections? If yes, is a report made, etc.
- Check general hygiene, cleanliness of washing and toilet facilities.
- Do Operators/Technicians carry out any safety checking as part of their normal duty. E.g. a check of equipment at specified intervals to ensure that they are in place/available such as first aid boxes, eye wash cabinets.
- Lighting – Adequate at night, etc
- Are any equipment of operation unsafe?
- Internal movement: signs, parking, use of bicycles (if applicable)

2.7 EMERGENCY PLAN

- The depot should have an Emergency Plan.
- The Emergency Plan should lay down procedures for dealing with emergencies such as fire, product spillage, gas leak, overflow, loading arm failure, etc.
- Are these action plans up-to-date?
- Is there formal training covering emergency drills/exercises.
- Mutual Aid arrangements.
- Communications in the event of an emergency:
 - Between CUSTOMERS AND MAO
 - Between MAO, and regulatory authorities.
- Evacuation procedure in the event of an emergency;
- Serious injury requiring hospital treatment.

- Escalation of an emergency.

2.8 STORAGE AND HANDLING FACILITIES:

2.8.1 DESIGN AND CONSTRUCTION STANDARD:

- Storage tanks
- Standards?
- Bunding

2.8.2 LAY-OUT, GRADING, DRAINAGE, FIRE PROFFING:

- In accordance with standards?
- Spillage control.

2.8.3 VENTING AND RELIEF VALVES:

- What system provided for protection of tanks and pipelines in event of any excess pressure, etc.?
- Relief valve cleanliness and checks made.

2.8.4 SAFETY DISTANCES:

- Comment on safety distances, e.g. storage tanks and boundaries,etc.
- Work sites must be kept clean and orderly

2.9 WORKING ENVIRONMENT

- Work sites must be kept clean and orderly
- Work surfaces must be kept dry or appropriate steps taken to ensure the surfaces are slip-resistant.
- Spills must be cleaned up immediately.

- All combustible scrap, waste and debris must be stored safely and removed promptly.
- Combustible dust must be cleaned up with a vacuum system to prevent the dust from going into suspension. The accumulated combustible dust must be removed routinely. Metallic or conductive dust must be prevented from entering or accumulating on or around electrical enclosures or equipment.
- All oil and gas fired devices should be equipped with flame failure controls which will prevent flow of fuel if pilot lights or main burners are not working.
- All pits and floor openings should be covered when not in use and should be clearly marked when open.

3.0 SAFETY MANAGER

3.1 General Policy is the responsibility of the Safety Manager; safety staff officers will provide expert assistance to Supervisors and Senior Engineers for implementation of the Company's Safety program.

This will include:

- * Safety and health training resources and programs
- * Knowledge and interpretation of all laws and regulations applicable to safety and health
- * Reporting and analyzing safety information
- * Providing Specific work procedures
- * Guidance on hazard awareness and reporting
- * Advice and Counsel Supervisors
- * Inspect and audit safety objectives

- * Reporting of incidents, injuries and dangerous occurrences (RIDDOR)
- * Conducting risk assessments (COSHH)
- * Inspect and audit safety objectives.
- * Reporting of incidents, injuries and' dangerous occurrences (RIDDOR)
- * Conducting risk assessments (COSHH)

SAFETY TRAINING

- 4.1 Safety training is regarded as an indispensable ingredient of an effective Health and Safety programme.
- 4.2 In order to supply each Employee with adequate knowledge of accident or illness potential, he must know about and respect the job hazard, before he can be expected to work safely. Specific job training will be provided to ensure understanding of depot hazards. It is our opinion that if a job is not done safely then it is not done effectively.
- 4.3 Each Employee should receive training (whether seconded to third party sites, visiting vendors or manufacturers or being permanently employed by the Company) on emergency procedures such as fire evacuation, emergency shutdown situation, escape routes etc.
- 4.4 Further training involves current permit to work systems, hazardous area equipment, accident and incident investigation, road safety and defensive driving, chemical exposure, radioactivity.

5.0 SAFE PRACTICES

- 5.1 Safe practices are presented as guidelines for acceptable safe practices at depot, either at design stage or during operations.

6.0 SAFETY MEETINGS

- * The Company requests all Employees to attend all formal safety meetings, the attendances of the O and M staff is mandatory
- * Safety meetings with customers and clients are recommended. Frequency to be determined by safety manager
- * Meetings are held to maintain and enhance the safety awareness of all Employees.
- * Employees are encouraged to propose measures to improve safety within his own work/assignment area.

7.0 SAFETY STATISTICS

7.1 The company's Safety Statistic Monthly Return Form contains the following information:

- * Total man-hours
- * Average number of Employees
- * Total lost time per month
- * Total medical treatment cases per month

A lost time injury is one, which results from an industrial incident and necessitates absence from work of the injured person for more than one (1) day.

8.0 PERSONNEL INJURY PREVENTION

8.1 GENERAL

The Company's activities are carried out under a wide range of work scenarios within the Petroleum Industry, which offer a significant degree of hazard. The success of our safety depends on the Employees' understanding and acknowledgment of the principles:

- * Management and all levels of supervision and each individual Employee are responsible for preventing injuries.
- * Training and safety motivation is the responsibility of the Supervising Staff on an ongoing basis.
- * Prevention of injuries cannot be effective unless the principles of safety are clearly understood.
- * Preventing accidents is increasing the Company's efficiency and reducing operational costs.

8.2 PERSONNEL PROTECTIVE EQUIPMENT (PPE)

All employees that may be exposed to a risk to their Health and Safety while at work will be provided with suitable, properly by MAO or other third party will be properly assessed prior to use.

Proper clothing is the first defense against personal injury caused by element of nature, tools or equipment.

It is the responsibility of every employee to wear and use the required PPEs provided. Likewise, each employee is responsible for ensuring such equipment is kept in good state.

- * All field (storage Tank Area) crew members must wear suitable safety wear.
- * Safety helmets must be worn on sites.
- * Fire retardant overalls are recommended.
- * Gloves should be worn for specified jobs.

- When selecting eye and face protectors, careful consideration should be given to the kind and degree of hazard, and the degree of protection and comfort offered.

The main causes of eye injuries are:

- Infrared rays
- Ultraviolet rays
- Exposure to chemicals (Battery Acid) or Battery explosions
- Exposure to particles and foreign bodies
Ordinary prescription glasses do not offer protection.
- Hard hats and protective footwear are provided and must be worn where and when needed.
- Use of loose clothing around moving machinery or rotating part of any machine, vibrators or drills is completely discouraged. Coveralls are provided for work.
- Breathing apparatus (open circuit type) shall be used by personnel who are required to enter tanks, vessels, etc., which might be deficient of oxygen or contain H₂S.
- Personnel exposed to high level of noise should be provided with hearing protectors and its use ensured.

8.3 MANUAL LIFTING & MOVING

Neglecting or violation of basic safe manual lifting rules causes most back injuries. You can prevent a painful back injury, cuts and abrasion as a result of improper handling of materials, by first assuming a squatting position, keep the object close to your body and raise the object by straightening the knees, not the back. Get help when needed.

- Always use mechanical devices rather than manual handling wherever reasonably practicable to do lifting and moving of objects. The type of equipment used should be appropriate for the task at hand.
- The load to be lifted or moved must be inspected for sharp edges, slivers and wet or greasy patches.
- When lifting or moving a load with sharp or splintered edge gloves must be worn. Gloves should be free from oil, grease or other agents, which might impair grip.
- The route over which load is to be lifted or moved should be inspected to ensure that it is free of obstructions or spillage which could cause tripping or spillage.
- Employees should not attempt to lift or move a load, which is too heavy to manage comfortably.
- Where team lifting or moving is necessary one person should act as a coordinator, giving commands to lift, lower, etc.

8.4 TOOLS

Hand Tools

The use of hand tools is potentially hazardous especially when used in a hazardous environment covered by a work permit.

Pneumatic Tools

Pneumatic hand tools must have a fail-safe device

Abrasive / Cutting Wheels

The major hazard associated with abrasive wheels is the disintegration of the wheel while in service.

Protection guards should be maintained on such tools.

Electrical Equipment

The use of electrical equipment such as handled equipment and battery operated equipment should only be used following the guidelines of the permit to work system.

8.5 LIFTING EQUIPMENT

For any lifting equipment not fitted with capacity (S.W.I), and warning devices, it shall only be operated under the attached special conditions.

- Max. Load capacities shall be clearly stenciled on the machine and a load chart shall be in the operator's cabin.
- Sling shall be oversized two and a half times the load to be lifted.
- A sling capacity chart shall be consulted to determine sling size. Chart will be posted at each job site tool room where slings are stored.

8.6 EQUIPMENT CONTROL

Regular equipment checks shall be carried out monthly by the supervisor at each job site. These checks shall be documented and a copy kept on a file at the job site. Any deficiency shall be noted and corrective action shall be noted.

Routine daily checks shall be carried out by the operator, and equipment controller shall initiate a daily repair work required on machines and a log of such repairs shall be kept by the supervisor, referencing company equipment number and date of service.

Any unserviceable or unsafe piece of equipment found during these routine inspections shall be tagged and noted as "**NOT USABLE, DO NOT OPERATE**". The supervisor shall also notify all personnel.

This applies to the use of equipment such as:

- Gas, Oil or Petrol driven Machines & Equipment
- Welding Equipment
- Gas welding & Cutting Equipment
- Lifting Equipment
- Scaffolding
- Storage and usage of Cylinders
- Radioactive Isotopes & X-ray Machines
- Sand & Grit blasting
- High pressure water cleaning

8.7 EARTH WORKS AND CONSTRUCTION PLANT

When carrying out earthworks the following precautions shall be taken:

- Ensure that the plant/equipment is operated and supervised by experienced supervisors.

- Ensure that all pits and slopes, which could overturn plant, are pointed out to the operators and marked with drums, stakes or bunting.
- Install and maintain warning signs that earthworks are in progress at Roads and access.
- Under no circumstances should any person put into motion any mobile plant or equipment unless he has relevant license to do so.
- All construction vehicles shall have a valid certificate for license of worthiness.
- All construction plant/vehicles shall be kept in a safe and good working condition.

9.0 MATERIAL SAFETY DATA SHEETS

9.1 Hazardous materials are encountered in many areas within the petroleum industry. Data sheets advise how to:

- * handle toxic chemicals
- * Deal with hazardous substances such as, H₂S (Selection of materials, HIC and SSC testing etc.)
- * Welding or other potential ignition sources in the vicinity of hydrocarbons

10.0 CONTINGENCY PLANS

10.1 Petroleum products depot operations have the potential of causing injury to personnel or damage to property

10.2 For these reasons contingency plans exist to minimize impacts by proper and timely action.

10.3 Assigned personnel to such plans must understand the detailed explanation of emergency evacuation plans, etc.

10.4 See Emergency Response Procedure.

11.0 VEHICLES AND DRIVING

11.1 The company requires all Employees to give particular attention to all matters of road safety with the aim of preventing road accidents, using the principles of defensive driving.

- * All vehicle/tanker drivers and passengers must wear seat belts.
- * All Company Employees must wear seat belts before driving out, and entering depot.
- * All vehicle drivers must be in possession of a valid driving license and observe local driving regulations.
- * All- necessary car papers such as vehicle license and insurance must be valid.
- * All vehicle drivers must respect road signs and speed limits.
- * Tanker/vehicle drivers shall under no circumstances drive whilst under the influence of alcohol.
- * Tanker/vehicle drivers shall take a "break" every two hours when driving long distances.

- * Tanker owners/operators shall ensure that the trucks are properly maintained and serviced.

12.0 INCIDENT AND ACCIDENT REPORTING

- 12.1 Company employees shall inform the safety manager within twenty four hours (24) of all incidents involving themselves, third party personnel, plant or equipment. Incidents are defined as "unintentional or unplanned events that may or may not result in personal injury, equipment, plant or property damage, or any of these conditions"
- 12.2 The Company's safety manager shall inform the customers' head office of all such incidents, if it involves any of their representatives at the depot.

13.0 CONTROL PROCEDURES

13.1 MILESTONES

The management at each level is encouraged to establish safety milestones for safety performance.

13.2 AUDITS

Managers and supervisors each level are expected to conduct audits of their activities at timely intervals to assure themselves that objectives, tasks and targets under their control are met. Such audits and reports should follow the Company's standards and outline:

- * Location audited
- * Frequency planned
- * Method used
- * Follow up required

14.0 SAFETY ON SITE

Safety on site acts at 3 different levels:

- Level I Hazard prevention by a continuous supervision of equipment, procedures, hot works and personnel information.
- Level II Intervention in case of an emergency or accident.
- Level III Preparation of equipment and personnel for any emergency situation by maintaining the equipment and personnel training.

In an emergency, particularly in case of fire, both operators and safety personnel are necessary.

SAFETY COMPETENCY

SUPERVISING SAFETY

REQUIRED ELEMENTS OF COMPETENCY:-

- Audit safe working practices.
- Audit safe working conditions.
- Conduct accident and incident enquiries.
- Ensure work is carried out by competent staff.

- Carry out effective safety training.
- Address safety issues.
- Identify hazards, evaluate and address risks.
- Conduct tool box talks.

ELEMENT DETAILS:-

Audit safe working practices

1. Audits of safe working practices are undertaken by the safety manger in accordance with the guidelines for audits with regard to:-
 - Frequency
 - Quality
 - Participants
 - Areas covered
2. A formal audit structure is laid down beforehand covering:-
 - Tool Box Talks (requirement, whether carried out and quality)
 - Knowledge of and adherence to all relevant standards or procedures
 - Competence of staff
 - Adequacy of and adherence to permits
 - Condition and use of materials
 - Condition or worksite
3. During the audit, performance is accurately judged in the above areas
4. Audit recommendations are recorded in accordance with any depot operational procedures.
5. Audit follow up actions are carried out in accordance with any depot operational procedures.

6. Audit findings are notified to supervisors, other departments or members of staff as appropriate.
7. Worksites in the candidates sphere of responsibility or under his control are physically checked at least once per job, and more often where work is of a hazardous nature, to ensure work is being carried out safely.
8. Follow up actions from such routine inspections are carried out.

Audit safe working conditions

1. Audits of the conditions of those areas designated, within which service activities take place are undertaken by the candidate with regard to:-
 - Frequency
 - Quality
 - Participants
 - Areas covered
 -
2. A formal audit structure is laid down beforehand covering, for example :-
 - Condition of floor and access routes
 - Availability of personal protection
 - Condition of safety systems
 - Condition of permanent equipment
 - Condition of temporary equipment
3. During the audit, performance is accurately judged in the above areas.
4. Audit recommendations are recorded in accordance with any depot procedures.

5. Audit follow up actions are carried out as required.
6. Worksites in the candidate sphere of responsibility are physically checked at least once per job. Other areas for which the candidate is responsible are checked at appropriate intervals.
7. Follow up actions from such routine area inspections are carried out.

Conduct accident and incident enquiries

1. Initial action is taken at the scene of the incident to safeguard personnel.
2. Initial action is taken at the scene of the incident to secure the site.
3. An initial assessment of the incident is carried out and the appropriate Line Manager notified.
4. The site of the incident and any plant or equipment is inspected:-
 - "As early as possible
 - Disturbing the site as little as possible
 - Taking accurate notes, photographs and sketches as necessary
5. Sufficient and appropriate documentary evidence is obtained.
6. Appropriate personnel are interviewed and in a manner in accordance with company procedures.
7. All evidence is compiled, checked and analyzed.
8. Valid conclusions (which include an accurate assessment of the incident potential IPM) are drawn as to both immediate and underlying causes.
9. Appropriate recommendations are made.
10. A complete and accurate report is made and forwarded in accordance with procedures.

Ensures work is carried out by competent staff

1. All staff under the candidate's supervision are notified of the requirement for proven competence.
2. Work is allocated only to persons who are competent to perform to the specified standard or, where the person is not yet competent; such work is closely supervised by a competent person.
3. Where possible, staffs deemed "Not Yet competent" have their training needs identified and addressed.

Carry out effective safety training

1. Emergency Response Team training is carried out at intervals.
2. Emergency Response Team training content is in accordance with the Safety Plan.
3. A debrief is held after any team emergency exercise.
4. Conclusions from such debriefs are recorded and auctioned
5. Formal safety training is provided to candidate's subordinates in accordance with individual needs and company policy.

Address safety issues

1. Candidate should be capable of organizing and chairing his own Safety Meetings where safety issues and concerns as well as proposed improvements, raised by own staffs are investigated and when deemed fit followed up accordingly.
2. Deficiencies in safe working practices and conditions, when brought to the attention of the candidate are auctioned.

3. Where required, expert advice is sought to assist in resolving safety issues raised.
4. Where doubt as to the safety of any operation exists, a solution which errs on the safe side is adopted.
5. Information concerning safety issues is effectively disseminated.
6. Recommendations from audits, inspections and incident investigations are carried out.
7. A high personal standard of safety is maintained.
8. A positive attitude to safety within own team is encouraged.

Identify Hazards, Evaluate and Address Risks.

1. The hazards associated with a particular operation or conditions are identified.
2. Potential conflict between activities within the candidate's area of responsibility or on the candidate's assets is identified.
3. The degree of risk associated with a particular operation, combination of operations or condition is accurately assessed.
4. Actions are taken to reduce the degree of risk to an acceptable level.
5. Contingency plans are put in place for potential hazards associated with a particular operation or a combination of operations or certain conditions.
6. Hazards, potential conflicts, associated degree of risk, precautions and contingency plans are communicated to all relevant parties.

Conduct tool box talks

1. Tool Box Talks are carried out prior to the start of any new job; particular emphasis should be made:-
 - Prior to commencement of any non routine jobs
 - Prior to commencement of a routine job with which the parties concerned are unfamiliar.
 - Following a change in work objectives, plan, methods, work environment or personnel.
 - Whenever required by supervision or personnel executing the job
2. All personnel participating in a job, the immediate site supervisor and the area authority attend the Tool Box Talk.
3. Tool Box Talks will be carried out at the site where the job is to be executed.
4. Tool Box Talks address the following areas:-
 - Objectives of the job
 - The person with overall responsibility
 - Individual and group responsibility and required skills
 - Job steps and how each will be handled
 - Appropriate procedures
 - Potential hazards, associated risks and contingency plans
 - PTW requirements and precautions
 - Potential conflict and interactions with other work
5. Personnel are encouraged to participate in the discussions.
6. Questions are asked of participants to ensure understanding.

7. Total Box Talks are limited to between 5 and 15 minutes duration with maximum of approximately 12 attending.

SAFETY COMPETENCE

1.0 EMERGENCY RESPONSE

- 1.1 Fire Water System
- 1.2 Communication
- 1.3 Area/Muster points
- 1.4 Extinguisher
- 1.5 Resuscitation
- 1.6 F + G Protection
- 1.7 ESD Systems

2.0 EMERGENCY PROCEDURES

- 2.1 Plant Manual
- 2.2 Procedures
- 2.3 Safety Case
- 2.4 Audit programmes
- 2.5 Incident Report
- 2.6 Accident Report
- 2.7 PTW Manual
- 2.8 PP Policy
- 2.9 Plant Authorization

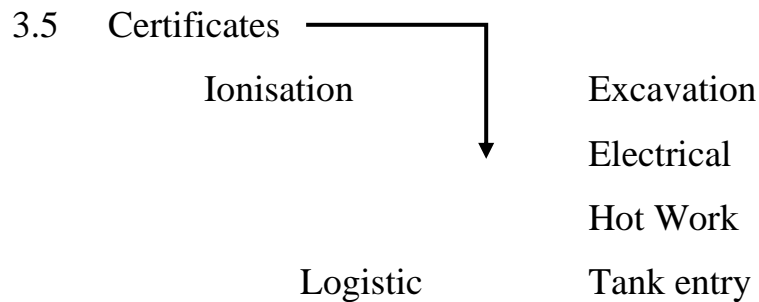
3.0 PERMIT TO WORK

- 3.1 Tool Box

3.2 Audit

3.3 Method Statement

3.4 Permits



4.0 COMMUNICATION

4.1 Process + Plant details

4.2 Report end of shift

4.3 Report end of work cycle/contract

4.4 Changes to plans / procedures / work

5.0 INDUSTRIAL HAZARDS

5.1 Working in Petroleum storage depot

5.2 Radiation

5.3 LSA

5.4 Shot blasting

5.5 Painting

5.6 Asbestos

5.7 Hydrocarbons

5.8 Processes

5.9 Gases

5.10 Radiant Heat

5.11 Noise

5.12 Pollution

5.13 Hydrotesting

5.14 Water Jetting

5.15 Foam

SAFETY GOALS

In line with MAO policy and safety programme to achieve ZERO LTI and / or the minimum injury / damage to the Company's property and personnel, the company has set safety objectives and targets:

Objectives:

- To maintain ZERO LTI
- To maintain ZERO Fire Incident
- To maintain a healthy work force
- To improve-safety awareness amongst employees
- Reduce near-miss and incident records
- To promote harmonious relationship with local community.

Safety Targets:

- ZERO LTI (Attain 500,000 MAN-HRS without LTI).
- Conduct Unsafe Act audits during yearly operation.
- Report and document 20 near misses.
- Maintain vehicle/truck safety record at very high standards.
- Train sufficient staff on basic fire fighting, first aid and unsafe act auditing.

- Zero spillage.
- Organize safety drills.
- To hold fair safety meetings during the year.
- Issue a new revised safety hand book to all employees.
- Improve safety awareness to achieve ZERO equipment loss.
- Reduce property damage incidents including offices and other accommodation areas.
- Reduce alcohol abuse.
- Maintain safety in office areas.
- Maintain good quality of office work environment.