

NESPAK NIGERIA LIMITED

HEALTH, SAFETY, ENVIRONMENT & SECURITY POLICY

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INTRODUCTION

NESPAK NIG LTD. HSES PLAN sets out specific objective, strategies and targets to ensure that all activities are planned and executed in such a way as to comply with our corporate policy. Our policies include:

- Avoid injury and preserve the health and safety of our employees, those of sub-contractors and any member of the public that may be affected.
- Minimize environmental impact in the areas we operate.
- Maintaining strict safety procedures that conform to present industrial standards as well as enhancing our public relation in the community in which we operate.

We make the plan to achieve our safety management's policy and then identify specific action for our staff. Our aim is to enable our staff, sub-contractor staff and entire workforce to achieve a safe and accident free working condition within the work place.

HSES PLAN

Our HSES plan is aimed at the following:

1. Ensure that our performance meets standard of our clients at all times our services are utilized.
2. Ensure that we clearly define our achievable tasks and targets by improving performance with our competent personnel.
3. Improve, focus and interaction with the companies and communities in which we operate.
4. Improve occupational health and enhanced security awareness.
5. Introduce concept of safe management in all aspect of our activities.
6. Ensure that all staff complies with our HSES policy and plan.
7. Ensure that all staff, wears the appropriate personnel protective equipment (PPE) in any stage of the work.
8. Ensure that the right equipment / tools must be used for works.

HSES PROCEDURES

Our HSES procedures are to:

1. Ensure that both our staff and that of sub-contractors obtain specific job plan and permit before commencement any job.
2. Identify, update and participate in subsequent safety reviews.
3. Ensure that all staff follow procedures when executing a job to meet with our customer's and client's standards.

HSES PLANS / PROGRAMMES

We use clearly defined plans and programs to implement the safety policies by:

1. Periodic evaluation of the safety policy and programs by the safety manager in conjunction with renowned safety consultants.
2. At the end of periodic evaluation, necessary adjustments are made to suit the prevailing industrial safety standards.
3. Safety meeting is held once a week after the normal working hour for at least one hour.
4. Regular hour safety training for employees is done with strict adherence to policy form and as basis for employee appraisal.
5. Violation of policy by any person is brought to the notice of management for necessary action. Awards are given on quarterly basis to deserving employees.

REFERENCES BY INDIVIDUAL TASK

1. Ensure that our HSES action plan is disseminated and understood by both our and that of our sub-contractors staff.
2. Analyse in detail, major equipment failures and propose means to avoid reoccurrence.
3. Organize Pre-mobilization meeting inspection on all our sub-contractors.
4. All sub-contractors are to provide their HSES policy and plan.

We have utilized this plan for all projects that we have executed in the past and it is still our plan for the period 2015.

WORK METHOD AND SAFETY SCHEDULE

Power facilities upgrade job has been one of the major areas of specialization of NESPAK NIG LTD. Over the years, we have developed and improved on our methods for all of our work.

We commence our job by surveying the environment for the works; locate the temporary site offices (in most cases based on client's approved space) and personnel accommodation. This is usually followed by mobilization of personnel and equipment to site. The actual construction works follows schedules. The details of these schedule are elaborated in work programmed.

MOBILIZATION TO SITE

Material handling (loading / off-loading of equipment, tools, cable / accessories etc.) into the vehicle will include:

1. Only NESPAK NIG LTD supplied vehicle shall be used to convey material to the material stockyard where they shall be off loaded into the site.
2. During loading / off-loading, the vehicle engine shall be switched off and only workers involved in these activities shall be allowed within the area.
3. Manual method of loading / off-loading the material shall be adopted. Small material / equipment (weight less than 100Kg) shall be carried by two or more persons at the opposite side depending on the size of the item.
4. All cable work involving armoured shall be loaded / off loaded by forklift etc.
5. Workers involved in these operations must have their personnel protective equipment (hard hat, hard gloves, safety boots, coverall, work-vest etc.)
6. Only one supervisor shall be in charge of directing the loading / off-loading operations.
7. After loading / off-loading, all material / equipment shall be properly stacked.
8. The safety officer shall take charge of the on / off -loading of his safety equipment.

PERSONNEL TRANSPORTATION

Drivers must observe all regulatory signs and speed limits. They must insist on compliance with all safety measures. Seat belts must be worn and vehicle must not move until all personnel are safety seated.

In addition to the above, it shall be noted that:

1. No work shall be carried out on site in the absence of the site supervisor / foreman.
2. All personnel must be safety conscious.
3. Medical fitness of all personnel shall be taken into consideration.

LIFTING

All personnel on site shall be instructed on lifting procedures as stipulated below to avoid injuries.

1. Always seek help to lift load that are too heavy and bulky for handling.
2. Bend your knees to pick up any object, no matter the size. Lift with your legs, and not with your back.
3. Do not use your back as a "Crane". Bending down from the hips to pick up an object means your back is being used as a crane. This can cause 10x more strain than lifting with your leg.
4. Keep your back straight. A straight back shows the head, the spine, back muscles and internal organs are in correct alignment, thus reducing the chance of pulled muscles or hernia.
5. Space your legs for good balance; get a firm grip on weight before attempting to carry.
6. Take good breath prior to lifting. This helps to support the spine.
7. After lifting, to change direction, turn the entire body and not the waist.
8. Use full palms with hand gloves, WHEN NECESSARY and not fingers when carrying.

OPERATING EQUIPMENT

When assigned to task involving the use of crane, forklift and other load carrying trucks, personnel shall abide by the following rules:

1. Only physically qualified and thorough trained personnel shall operate these equipment.
2. Forklifts shall be checked daily to ensure proper functioning of all components e.g. breaks, steering etc.
3. Forklift shall not be overloaded - know the capacity.
4. When forklift is loaded, employee shall not stay under because of sudden failure on machines.
5. Hardhat, hand gloves, eye goggles, safety boots and well fitted coveralls are recommended to be worn when operating forklifts.
6. Shackles should be tight enough on any lifting material.
7. No one shall ride on lifted trucks.
8. Never operate a lift truck with wet or greasy hands or shoes.
9. Be aware of the position of your fork tips when the truck is in motion. Be alert to prevent striking of anything with fork tips.
10. Never have you indulged in horseplay while operating a fork lift truck to be pushed or towed by another. Notify the authority when fork refuses to move.
11. Never use your truck to push or tow another. Never allow your truck to be pushed or towed by another. Notify the authority when fork refuses to move.

12. Never attempt to lift a load with one fork-ensure proper positioning of load on both forks.
13. Always travel with loads near the operating surface and upright lifted back, to cradle your load. Never lift or lower the load while your truck is in motion.
14. Never smoke or allow anyone to smoke in battery area or fuel contained areas.
15. After using forklifts, park properly, lower fork to floor, toll upright forward, place directional control on neutral, apply parking break, remove ignition key and block driver wheels to prevent accidental roll.

FIRE

All personnel shall be cautioned on ways to avoid fire. The cautioning shall be on the following:

1. Know your work area. Keep it clean, identify flammable materials.
2. Do not leave oily or paints soaked rags on floors
3. Ensure flammable liquid e.g. Naphtha, thinner etc. is securely kept.
4. Avoid using sprays, paint etc. near an open flame
5. Mops, rags and other combustible materials should not be placed for drying near engine exhaust or other sources of ignition.
6. Hydrogen gas is generated when storage batteries are recharged. Battery rooms and battery recharging area may contain explosive concentration of hydrogen gas. Keep sources of ignition away.

HAND TOOLS

This job calls for the use of hand tools. These tools must be properly used and maintained to prevent the risk of accidents.

It's evident to state that hand tools result to approximately 10% of all compensation injuries because of:

1. Misuse of the tool
2. Use of a defective tool inherent accidents from the use of these tools include the loss of eyes and vision, puncture wounds, severed fingers and broken bones.

This serves as a guide when using hand tools:

- Select the proper tool for the job, e.g. using pliers instead of spanner, using a wrench instead of a hammer etc.
- Using a tool in the right manner e.g. not using a screwdriver on an object in the hand etc.

- Maintaining tool in good operating condition, wrenches with worn jaws, chisels with “mushroom” head etc. can cause accident.

ELECTRICAL SAFETY

Although majority of the work is a passive electric circuits and precaution for use of hand tools, which are prevalent on this job, has been handled, personnel shall still be seriously instructed on electrical safety. This shall be very useful during pre-commission testing and commissioning.

The following safety precautions shall be adopted when working with or around electrical equipment.

1. Only qualified and authorized personnel shall work on electrical systems.
2. All electrical equipment shall be properly grounded
3. Treat all equipment as it were energized.
4. Check both the insulation and electrical cords of equipment at regular intervals
5. De-energize electrical to overloading circuits, proper fuses should be used for replacement
6. All tools must be properly insulated
7. Do not wear metal jewellery.
8. Reconnect all grounding cable by energizing system
9. Avoid working on electrical circuits or equipment while clothing or shoes are wet, or while hands or feet are wet
10. When working on switch box, distribution board, stand to one side rather than in front.

RIVER TRANSPORT

Transportation to and from water locations of project personnel shall be done with flying boat. This boat must be in good order.

- The engines must be certified sound by an experienced boat engineer and the boat shall be the dual engine type
- The boat driver must possess a boat-driving license and must have a reasonable experience and knowledge of the waters
- There must always be two boat drivers, one on standby while the other steers the boat.
- The boat driver shall always be of sound mind and health before undertaking any journey.
- Drinking while driving the boat is not allowed

- Passengers are advised against distracting the driver or making conversations with him while on a boat ride
- The boat must not carry more passengers than is stipulated by the manufacturers and every passenger must be comfortably and safely seated before the boat drives off
- Every passenger must be well kitted in life jackets and buoys.
- House boats shall be kept very clean and no slippery item such as banana peels shall be left on the floor of the boat.
- Personnel are strongly advised against sleeping in the boat while on a ride
- It is not advisable to eat while on a boat ride to avoid seasickness
- This transportation shall always be in daylight to avoid accidents resulting from darkness and unclear vision.
- The boat must be well anchored at the shore before passengers will alight and this should be done in an orderly manner, one person at a time. Climbing into the boat from any other side is not allowed
- Goods; equipment and work items shall be transported via tugboats and barges.
- Safety shall be maintained also in form of transportation.
- The barge should not be overloaded and passengers are not allowed in the tugboat.

SAFETY AUDITS

This is a comprehensive description of the activities that will be carried out by the Safety Officer at the site on routine basis.

The activities will be carried out on Daily basis, Weekly basis, every fortnight and Monthly.

Daily:

The daily activities shall constitute the followings;

1. Pep talk/Tool box meeting
2. Checking of workforce PPEs
3. Lining of Assignment/use of appropriate tools
4. Signing of appropriate safety documents (if required) e.g. permit to work (PTW)
5. Display of safety warnings/signals at appropriate locations.

Weekly:

The weekly activities shall constitute the following:

1. Safety Report (internal)
2. Safety Drills
3. Loss Time Injury (LTI) records
4. Good Housekeeping, etc.

Fortnightly:

The following activities shall be carried out every two weeks;

1. Safety Meetings
2. Safety Audit
3. Job Safety Analysis (JSA)

Monthly:

The following activities shall be carried out on a monthly basis;

1. Safety Report- Business Owner
2. General Checks on Equipment/Materials
3. Update Projects Safety Records, etc.

Safety Training

This shall be the systematic development of persons' attitude, knowledge and skills in order to adequately and safely perform a task or job.

Therefore, the **object of all safety training** is to:

1. Improve attitudes in the form of cost and safety awareness.
2. Pass on knowledge of the basic fundamentals of accident prevention.
3. Increase and perfect skills necessary to implement safety systematizing these basic fundamentals.

The safety adviser shall liaise with Personnel Manager based on written safety records, but it can be safely assumed that existing material will not provide all the information necessary. Therefore the following sources should be investigated:

Internal:

From within the Company

- Records, documents, past rating and accidents statistics
- Direct interviews and observations of employees

External

- Industrial training boards
- Employers association
- Client training centers/schools
- Factory in separate/fire authority
- Red Cross Organization

Safety Committees

The following committees will be established and recognized by management and workers alike:

- The Advisory Committee- will operate on a tripartite basis and shall operate as a higher level of safety policy making. They shall comprise or representatives from the inspectorates, trade union and personnel department.
- The Consultative Committee- this shall be responsible for specific health and safety problem. It shall be their duty to gather the available expertise together, and then decide on a course of action.
- The Recommendation Committee- this has the authority to discuss problems to recommend to management appropriate course of action. It may not have authority to see that its recommendations are in fact adopted.
- The Executive Committee- a Senior Manager with the authority to ensure that decision reached by the committee is implemented shall chair this. It may be a budget to finance its day-to-day business.
- The Promotion of co-operation between managements and employees in matters affecting health, safety and welfare.
- Instigating, developing and carrying out measures deemed necessary to ensure health and safety at work.
- Studying accident and health statistics and trends
- Examining safety inspection/audit reports and making recommendations for correction or improvement.
- Assist in the development of safety rules and practices
- Maintain a watching brief on safety training and publications.

Accidents Reporting and Investigation

All accidents should be reported as soon as possible but management must gather factual information in order to prevent recurrence by accurately determining the causes and contributing factors.

The term 'accident' includes, in this context, near miss events as well. Since there are the precursors of future potential actual injury or property damaged accidents, a reporting system will be established to record all relevant information relating to the accidents.

Considerations should be given to:

- What information needs to be recorded?

- Methods of informing Managers, Supervisors, Safety Representatives, etc, of accident details.
- The type of form for different levels of investigation depending on the nature of the accident.
- Methods of initiating accident investigation

Accident Investigation

The primary purpose of any accident investigation should be to gather information to determine with a view to preventing recurrence. It should not have as its primary objective, the determination of 'scapegoat'. Blame may indeed be apportioned, but that will be determined by proper consideration of the facts and contributory causes in due course.

All accidents should be investigated, including first aid and near miss events. Accidents may be investigated by:

- The immediate Supervisor and/or Safety Representative
- Department Manager and Safety Representative
- Safety Officer
- Management team/panel
- Statement by injured person

When questioning witnesses, be firm, friendly and fair.

Manual Handling

Improper handling of goods and material is the biggest single cause of accidents in the work place. Injuries sustained during lifting and handling operations do not wholly or exclusively involve injury to the back; they also include strain and sprain injuries to other parts of the body, injuries to feet and hand such as cuts, abrasions, bruising and fractures to toes and fingers.

Safe, and efficient, lifting relies not on brute force but on the application of the correct techniques.

- Keep the back straight. It is necessary to bend forwards this should be achieved by bending forwards from the hips without curving the spine. The action 'tucking' the chin in when putting down or when bending the knees in order to get into a 'lifting position' helps to keep the spine straight.
- Use the leg muscles, rising from a squatting position holding the upper part of the body erect.
- Keep the load close to the body to maintain your own stability. If a load has an uneven weight distributions always try to get the 'heavy end' against the body
- Keep the elbows close to the side making them 'hang' naturally from the shoulders if possible to avoid placing unnecessary strain on the upper arms and shoulders.
- Use a 'palm' grip with the edges or corners of the load well into the roots of the fingers.

- Position the feet about the width of the hips and shoulders apart, with one foot forward and facing in the direction of the intended travel. Avoid lifting and turning movements as they can cause loss of balance or injury to the spine.

Temporary Works Procedure

Numerous work situations within the construction industry call for some temporary support e.g. excavation support and false work. In order to achieve safe standards of temporary work. It is imperative that it be properly designed, installed and inspected.

Three formal appointments should be made:

- Temporary Works Designer: The person for designing the temporary works and for having the design checks.
- Temporary Works Supervisor: A person responsible for ensuring that the temporary work is installed in accordance with the design.
- Temporary Works Coordinator: A person responsible for the co-ordination of the other appointments.

* These appointments must be made in writing.

Earth Works

When working in excavations there is a severe risk of fall of earth. Such falls often result in fatal or serious injury. In order to evaluate the precautions necessary, it is imperative that a thorough investigation be made to establish prevailing grounds and ascertain the presence of any underground services. The latter should be positively located and their position marked.

Excavations

1. A complete person must supervise all work on, or in, excavations
2. Drawings of all services must be obtained and a check instituted to ensure that where necessary all services have been exposed or marked.
3. Plan a safe method of operation to ensure safety of timber men and work force
4. Trench frames, or other suitable methods, must be used to ensure the safety of timber men where trenches are in excess of 4ft. (1.20m) deep.
5. All excavation in excess of 4ft (1.20m) must either be:
 - a. Properly supported. The system of support must be designed, taking into account the loads imposed by ground conditions and any further loads due to the proximity of plant, roadways, buildings, etc.

- b. Benched, i.e. cut to form steps such that a line from the top of the bench to the bottom of the excavation should be equal to the batter required.
 - c. Battered. Almost all soils can be excavated to a safe batter. Provided that sufficient space is available (i.e. clear of trees or structures above or below ground) and accidents resulting from the collapse of properly designed and executed battered excavations are rare in water logged ground, some system or de-watering will be necessary to improve stability; test are usually needed to show whether or not the ground is capable of being de-watered.
6. Where excavations are supported, adequate care must be taken to ensure that they conform to standard.
 7. Excavations must be inspected each morning prior to work. Persons must not be permitted to work beyond the protected area of an excavation or in close proximity to the bucket of any excavator.

LIFTING APPLIANCES

Accidents involving lifting appliances feature regularly in construction accident statistics. Those involving cranes are, in the majority of cases caused by driver error, therefore, the necessity of having trained competent drivers cannot be over stressed.

Tower Cranes

1. All tower cranes other than mobile tower cranes are supplied and erected on site, and must be `overloaded` tested on site prior to being used.
2. An appropriate load radius chart or diagram, load on site prior to being used.
3. The operator must be checked for competency, and where the operator is not in possession of a current eyesight test certificate of fitness, arrangements should be made to have these examinations carried out and repeated annually.
4. It is imperative that where a deriver during any operation cannot keep the load in full view at all times, a competent banks man suitably depressed with a reflective jacket or sleeves must be in-charge of all operations.
5. All conditions where the movement of a load may be affected by wind, trail ropes should be fitted and used.

Work Over Water

When persons are required to work adjacent to, or over water, there is an obvious risk of drowning. Steps must, therefore be taken to:

- Prevent falls of persons into the water.
- Provide adequate rescue and first aid facilities.

During construction operations the edge of any working place from which a person could fall into water and drawn, must be provided with guardrails and the toe boards.

Lifebuoy fitted with approximately 90ft. (27.432m) of buoyant rope must be positioned at the water edge at intervals not exceeding 150ft. (45.72m)

If any person can fall more than 30ft. (5.096) into water additional rope must be added to the lifebuoy to compensate for any additional increase in height.

Platforms must be kept clear of unnecessary material and at all times clear passage way of not less than 25 inches (640mm) of oil, seaweed, sea gull droppings, etc., on platform.

RESCUE AND WORKING BOATS

- All rescue craft must be seaworthy and maintained in a satisfactory condition.
- Any craft used for the carriage of persons must be at least 14ft. (4.2m) long.
- All floating platforms must be fitted with guardrails and all work
- Boats having a deck level with gunwales shall be fitted in a likewise manner.
- No overloading of any craft is permitted and minimum of 18 inches (460m) free board must always be maintained.
- All craft must be fitted with a notice specifying the maximum number of persons, or maximum load to be carried. Every effort must be made to ensure that craft remains on an even keel at all times.
- Where rescue boats are required during the hours of darkness, suitable spotlights must be fitted.
- Rescue boats must be manned continuously during the period that any persons are working over the water. When not patrolling, they must be started once every six hours and fast run for a period of not less than ten minutes, to ensure that the engine is maintained in good working order. Depending on the type of craft and circumstances prevailing it may be necessary to have a boat manned by two persons during rescue operations.

WELDING AND CUTTING.

- Electric areas and gas flames both produce ultraviolet and infrared rays, which have a harmful effect on the eyes and skin, Safety wares must be used.
- Arc welding operation should be isolated so that other workers will not be exposed to either direct or reflected rays. Walls, ceilings and other inner surfaces of workshop should have a dull finish.
- Arc welding stations should be enclosed in booths if the size of the work permits. Booths should be designed to permit the circulation of air at the floor level.

Fire Protection

- It is advisable to require written permit to work and hot work permits issued by the welding supervisor before welding or cutting operations are started in hazardous locations.
- If it is necessary to weld or cut close to wood construction or near combustible material which cannot be removed or protected, a small fire hose, water pump tank extinguishers against class B and C fires should also be located.
- A fire watcher equipped with suitable fire extinguisher should be stationed at or near welding or cutting operations to see that sparks do not lodge in floor cracks or pass through floor or wall openings. The fire watch should be continued at least thirty minutes (30 minutes) after the job is completed to make sure that smouldering fires have not started.

Hazardous Locations:

Welding and cutting operations should not be permitted in or near rooms containing flammable or combustible vapours, liquids or dusts, or on or inside closed tanks or other containers, which have held such materials until all fire and explosion, hazards have been eliminated. Ventilation should be frequent and gas testing monitored at intervals.

Welding in Safety

- For work above 5ft. Use a platform with railings or safety belt or lifeline.
- Respiratory protection should be worn and a safety harness with attached lifelines for work in confined spaces such as tanks and pressure vessels. A similarly equipped helper whose duty is to observe the welder or cutter and affect rescue in an emergency should tend the lifelines.
- Take special precautions if welding or cutting in confined space. Disconnect the power on arc welding or cutting units and remove the electrode from the holder.
- Turn off the torch valves on gas welding or cutting units. Shut off gas supply at a point outside the confined space and if possible remove the torch and hose from the area.
- After welding or cutting is complete mark "Hot Metal" or post a warning sign to keep away workers from heated surface.
- Follow safe housekeeping principles. Keep tools and other tripping hazards off the floor – put them in a safe storage area.

Fire Prevention

- No smoking area will be clearly defined, including areas where flammable liquids or substances are used.
- Adequate separation will be made between non-smoking and other areas.
- Chemicals / flammable liquid stored clearly marked 'No smoking' highly flammable liquids.

- Chemicals / flammable liquid containers kept in the approved store when not in use.
- Safe container for the movement of small quantities of chemical / flammable liquids.
- Where necessary, adequate earthing facility will be fitted.
- Earthing connections will be maintained in good conditions.
- Adequate precautions to prevent spillage entering drains.
- Safe disposal procedures for flammable and dangerous liquids / compounds.
- Personnel must know their evacuation drill.
- Fire alarms adequate.
- Fire alarm points kept free from obstruction.
- Sufficient portable fire equipment.
- Statistical record or fire incident for the last year.

PROPER JOB ANALYSIS (PJA) PROPER JOB PROCEDURE

The PJA and PJP are based on unified job concept, that is, that all elements of a workers job such as quality, production, safety and health are inseparable.

A job can be defined as a defined sequence of steps of activities that a person engages in to perform a work task or assignment.

The Job Analysis

1. Determine the job to be analysed. Section may be based on past loss experience, the potential for loss of injury, probability of recurrence or a new job not previous done.
2. Break the job into steps. A step is one part of the job where something happens to advance the work involved.
3. Determine any potential for down grading or accident.
4. Make an efficient check. Questions related to such a check would include:
 - a. What is its purpose?
 - b. Why is it necessary?
 - c. When and where will it be done?
 - d. Have all standards been met?
5. Develop any necessary control procedures, permits, locking out systems, protective equipment, etc.

PERSONAL PROTECTION:

The company's objective is to prevent all accidents. While every effort will be made to prevent all accidents, it is recognized that some staff in their normal work activities, is daily exposed to a good degree of hazards capable of causing injuries. The company will do all possible to provide suitable and adequate personal protective equipment to minimize injuries to staff arising from foreseeable hazards.

Every employee must, however, bear in mind that the personal protective equipment issued cannot and do not prevent accidents. It is the responsibility of every employee to direct his effort at the prevention of accidents by keeping all the safety rules, regulations and practices recommended by the company.

Every employee issued with personal protective equipment must wear them at all times while working in areas where they are exposed to the hazards for which the protection is provided.

Personal protective equipment shall include but not limited to:

- Safety shoes / boots.
- Hard hats / Safety Helmet.
- Coveralls, Aprons, Leggings, Gloves etc.
- Goggles, Shields, Masks, etc.
- Life jackets / work vests.

And other requisite protective devices depending on the nature of work.

Personal protective equipment shall be properly maintained in good condition and use shall be mandatory.

OPERATIONAL SAFETY

Preparation for Site Mobilization:

This must be carefully planned at least one week to the start of a given project. The equipment required would be listed and checked for their state of repair and the provisions for safety. Personnel shall be medically examined and certified fit by a doctor in client's approved clinic. A site safety plan should be written.

Safety Equipment

Select and make ready for the site job the following:

- Safety shoe / boots.
- Hard hats.
- Goggles, shields
- Respirators and dust filters.
- Portable fire extinguishers
- Caution signs
- First aid box and register etc.

Safety at job site:

Route to site will be planned and inspected. During the movement of equipment and materials to site, precautions must be taken to get to site safely.

If the journey is by watercraft, all personnel must wear life vests when traveling. No passenger shall be carried on open vans; such as tippers, trailers open back of a pick-up van etc. All road signs must be obeyed.

Safety Conduct on Site jobs:

To avoid accidents and injuries, every staff is expected to maintain safe conduct on site jobs. Every job will be carried out in accordance with recommended job.

Operators:

These shall be above 18 years of age and must be familiar with the operation and maintenance of the machine. Every worker must attend safety briefing before commencing job.

Safety from the job:

The procedure for moving equipment shall be followed in moving equipment, materials and personnel back to base. On arrival at base, all equipment and materials shall be safely unloaded following the procedure laid down for offloading.

All equipment shall be in their designated areas, checked, serviced and preserved ready for the next job.

TRANSPORTATION

Air - helicopters:

Always obey and follow the instructions of the Air Quarter Master and the pilot during chopper flights.

Bear the following in mind, always:

- Approach the aircraft only when asked to so by the crew.
- Follow the lead of the Quarter Master when embarking on disembarking.
- Always arrive well ahead of time to enable you attend passenger safety briefing prior to take off.
- Fasten your seat belt while seated in the craft and throughout the flight. Only unfasten when you have landed.
- Rig up your life jacket, as you may be required during flight.
- Do not jeopardize the safety of others and aircraft by your actions or in actions.
- Do not take dangerous cargo into the aircraft.
- Do not tamper with the aircraft's doors.

Road - Vehicles:

- Do not operate any vehicle unless you are licensed to do so.
- Ensure your vehicle is in top mechanical condition always.
- Report all faults as soon as detected. Don't manage.
- Always wear your seat belt.
- Inspect your vehicle daily
- Stay within posted speeds to prevailing conditions
- Be courteous to other road users.
- Do not insist on your right –of-way
- Give due consideration to pedestrian and cyclists.
- Keep your vehicle lights in service conditions.
- Reduce speed at night to enable you see objects in the road ahead.
- Always carry up to date statutory papers each time you are on the road.
- Check your tyre for correct pressure.
- Keep your mirrors clean correctly adjusted
- Always hold the steering firmly with both hands
- Avoid backing as much as possible. Get help if you must back
- Always obey traffic signs
- Avoid distraction of all types.

FIRST AID

First aid is the first help or assistance given at once to the injured person or to those taken suddenly ill before taking victim to hospital.

Objective of First Aid.

- To save life
- To prevent further injury
- To avoid deterioration from recovery

Qualities of Good First Aid

- Observant
- Resourceful
- Sympathetic
- Gentle
- Cheerful

Principles of First Aid

- Do first things first, quickly, quietly, methodically without panic.
- Give artificial respiration if pulse is on and breathing has stopped.
- Stop bleeding if necessary
- Guard against or treat for shock by moving the patient as little as possible and handle him gently
- Do not attempt too much – do the minimum that is essential to save life and prevent the condition from worsening
- Do not allow people to crowd around as fresh air is essentially.
- Do not remove clothes unnecessarily:
- Arrange for the removal of the casualty to the hospital as soon as possible.

Bandage Use by First Aid:

Triangular bandage is the most useful bandage for first aid because it is easily made or improved. Use a reef nut to secure of the bandage.

Asphyxia Emergency Resuscitation

Loss of Breathing and blockage of air passage could result to lack of oxygen ASPHYXIA.

Causes:

- Choking – tracheae is blocked
- Smothering – Mouth/Nose covered with pillow, plastic bag, etc.
- Hanging – trachea blocked with tight wires, ropes or cloth.
- Strangulation – Neck being twisted
- Drowning – Water enters the lungs
- Electrocutation – current (electric) passes to the body
- Suffocation – smokes or flames into lungs

Signs and Symptoms

- Weakness and Dizziness.
- Difficulty in breathing.
- Weak and irregular pulse.
- Consciousness in gradually lost.
- First may occur.

Treatment

1. Remove the cause from the casualty or casualty from cause
2. Lay the casualty down in comfortable manner/position – see recovery position
3. Allow free air passage by:
 - a. Clearing the nose, mouth and throat of foreign bodies.
 - b. Guarding against the tongue from blocking the throat.
 - c. Loosen tight clothing around the neck, chest and waist.

Treat for Shock.

1. Apply artificial respiration.
2. Send the casualty to the hospital.

Resuscitation:

- Kiss of life method
- Lay the casualty on the back
- Tilt the head backwards from the forehead to ensure a clear airway passage
- Pinch the nose with some hand with which the forehead was tilted.
- Get the mouth open at once and remove foreign body including false teeth
- Blow firmly and gently into the casualty mouth
- Release your mouth and hand after each blow.
- Watch the chest rising and falling during the process
- Continue the exercise until the casualty recovers or until medical personnel arrives.

Wounds:

A wound is an abnormal break in the continuity of the tissue of the body, which permits the escape of blood externally or internally and may allow the entrance of germs causing infection.

Wounds may be classified as follows:

1. Incised or clean cut – caused by sharp object and may bleed profusely
2. Lacerated or torn – traumatic. Edges of wound are irregular
3. Confused or bruised – caused by blow from blunt instrument fall against a hard object/surface or by crushing.
4. Puncture or Stab – caused by sharp pointed objects/instrument.
5. Abrasion wound – peeling away of surface skin due to rubbing skin against rough surface
6. Gunshot wound – bullet causing small entry associated with extensive injury with a large exit wound.

Signs and Symptoms of Wound.

- Pain
- Bleeding
- Tenderness
- Shock
- Discoloration

Treatment

- Stop bleeding
- Wash away from the wound with soapy water (antiseptic)
- Cover the wound with dry clean dress

- Treat for shock
- Refer to the hospital

Sprain and Dislocation

Sprain:

Caused by over stretching of ligaments or tendons without displacing the bones

Dislocation

Similar to sprain but bones is displaced at joints

Signs and Symptoms of Sprain and Dislocation

Sprain:

Swelling, immobility and pains

Dislocation:

Swelling, severe pains, deformity and immobility.

Treatment

Sprain:

Rest affected area, apply pressure bandage and surround the area with good layers of cotton wool.

Dislocation:

- Do not attempt to replace the bone in its original position
- Support the limb in most comfortable position
- Send casualty to hospital immediately.

Burns/Scalds

Burns are caused by:

- Dry heat such as fire, flame contact with hot objects or exposure to sun.
- Electricity such as electric current or by lightning
- Friction: Contact with revolving wheel (brush burn), rope or wire

* Scalds are caused by most heat, such as boiling water steam, hot oil etc.

Signs and Symptoms

- Pain
- Swelling
- Blistering
- In severe case shock

- Oozing from the burned surface.

Treatment:

The basic aim of first aid is to reduce the local effect of heat to relieve pain, to prevent infection of the affected part, to replace lost fluid and lessen shock and call for medical help immediately.

- Remove any obstacle such as rings, bangles, belts, cloths or boots before the effected part start to swell
- Lay the casualty down
- Cover the injured part with clean sheet dressing, if it burn of the face, it may be necessary to cut a mask with a hole for breathing.
- Immobilize a badly burned limb.
- Give a small cold drink at frequent intervals to badly burned casualty if conscious.
- Do not break any blisters
- Treat for Shock
- Send your casualty to the doctor/hospital.

SECURITY

The incorporation of security system in the HSES plans and objectives of the company is highly commendable, to improve on the safety of personnel and property in the company. In order to maintain a high standard of security system in our field of operation, main yard and other working sites, the company has decided on the following steps:

1. To employ full-time security personnel/agents to monitor the entire security of plants and equipment within all working areas and offices.
2. To ensure that any personnel on any specific area of operation have the appropriate identification card with him and to show identifications.
3. To ensure that all entries to the working sites and offices are well monitored by use of tag system or signing of security register
4. The company shall provide adequate security lights surrounding it especially at night.
5. There will be provision of emergency alarm system in inform personnel at any emergency including fire out break and robbery.
6. All security personnel shall be trained on emergency and contingency procedures to follow during an emergency.
7. Security as Department in Management shall be fully represented during HSES committee meetings.
8. The head of security shall head sub-committee meeting on security.
9. All security personnel shall be certified fit for the job with security experience for some years.
10. Induction course HSES shall include the security workers.

11. Important matters associated with the security of the company shall be treated in HSES meeting in house and at sites with set down procedures to implement them.
12. All security personnel shall be properly informed on what to do in case of armed robbery
13. The company shall register with the police public relation committee meetings in its area and shall be attended by the head of security on his representative.
14. All security personnel shall be inducted to work as safety officers by highlighting on the inherent hazards surrounding the working environment and security of lives and properties.
15. All plans and program associated to the security of this organization shall continue to be monitored and deliberated on in future as progress and improvement are achieved.