

HEALTH AND SAFETY GUIDELINES



Health and Safety Guidelines
For The Maintenance Works

April, 2015

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ABBREVIATIONS

ACM	Asbestos Containing Material
DoE	Department of Environment
DoL	Department of Labour
H& S	Health and Safety
HCS	Hazardous Chemical Substances
LEC	Lesotho Electricity Company
MSDS	Material Safety Data Sheet
OHS	Occupational Health and Safety
PCBs	Polychlorinated biphenyls
WASCO	Water and Sewerage Company

DEFINITIONS

Asbestos Containing Material (ACM) –

A material that contains detectable asbestos according to internationally and regionally recognised standards

Competent Person –

A person who is trained and capable of recognizing existing and predictable hazards in the workplace and has the authority to take corrective action and/or stop work.

Confined Space -

(defined as a wholly or partially enclosed space not designed or intended for human occupancy and which hazardous atmosphere could develop as a result of the contents, location or construction of the confined space or due to work done in or around the confined space

Danger:

Means anything that may cause injury or damage to persons or property.

Employee:

Means any person who is employed by or works for any Purchaser and who receives or is entitled to receive any remuneration or who works under the direction or supervision of an Purchaser or any other person.

Hazard

Is something with a potential to cause injury, harm or illness. This include chemical substances, plant, live electricity, work practice or procedure.

Hazard Identification:

A systematic identification and documentation of existing or expected hazards to the health and safety of persons, which are normally associated with the type of construction work being executed or to be executed.

Health and Safety Plan:

A plan, which addresses hazards, identified and includes safe work procedures to mitigate, reduce or control the hazards identified.

Imminent Danger –

An imminent danger is defined as a condition or practice that (1) could reasonably be expected to cause death or serious physical harm to Service Provider personnel, local communities or visitors or (2) has or may cause an uncontrolled release of hazardous or otherwise regulated material to the air, water or soil.

Incident. Any unplanned event resulting in, or having the potential for injury, illness, damage or other loss

Lead-Based Paint (LBP) –

A paint containing at least 0.7 milligrams of lead per square centimetre (0.7 mg-Pb/cm²) of surface area or 0.5% lead by weight.

Material Safety Data Sheet (MSDS) –

A document supplied by a manufacturer that describes the ingredients, health hazards and means of protection related to a hazardous material.

Medical Surveillance:

Means a planned programme of periodic examination (which may include clinical examinations, biological monitoring or medical tests) of employees by an occupational health practitioner or, in prescribed cases, by an occupational medicine practitioner.

Method Statement:

A document detailing the key activities to be performed in order to reduce as reasonably as practicable the hazards identified in any risk assessment.

Near-miss

Is an incident where no one is injured, but which could have been more serious

Project Manager (PM) –

The individual responsible for coordinating and accepting the Service Provider's work. The PM is the primary conduit of information between the Service Provider and LMDA's Management, and employees responsible for this work should have an awareness of H&S regulations, permits, plans and policies.

Risk assessment

The process of determining the potential of a hazard to cause injury or illness and the potential severity of the injury or illness or damage

Risk

Is the likelihood that illness, injury or even death might result because of a hazard

Site Inspector/Client Site Agent (CSA) –

The individual responsible for routine monitoring of Service Provider's activities on the site is the Site Inspector. This individual routinely visits the site; monitors progress, identifies situations that do not comply with terms of the Contract.

1.0 INTRODUCTION AND BACKGROUND

The Lesotho Millennium Development Agency (LMDA) was established through the Millennium Challenge Account – Lesotho Authority (Continuation) Legal Notice No. 151 of 2013 to finish off projects that were incomplete at Compact End Date (CED) under Millennium Challenge Account Lesotho Authority (MCA-Lesotho). The mandate of LMDA was further extended to include Compact II development and maintenance of health care facilities until December, 2016. The scope of work includes:

Hard facilities maintenance;

Soft facilities maintenance;

Information and telecommunications, and;

Environment and waste management.

1.1 Guiding Principles

Service Provider should implement preventive and protective measures to ensure safety of the workers, visitors and general public e.g.

Eliminating the hazard through replacement of hazardous input or process by a less hazardous one;

Controlling the hazard at source through engineering interventions such as isolation, machine guarding, acoustic insulation, etc;

Hazard minimisation through system designs, administrative or institutional control measures such as training on safe work procedures, lock-out and tag-out, limiting exposure, workplace monitoring, etc;

Providing appropriate personal protective equipment in conjunction with training on use and maintenance.

1.2 Purpose and Scope

This guidance document has been prepared by the LMDA. It is intended to define the health and safety (HS) responsibilities of all parties involved in the implementation of the Health Maintenance Programme. These guidelines apply to Service Provider' activities that may impact the safety and health of employees and other persons whose activities are intertwined with those of the Service Provider. The information provided in this document should be used by assist all parties concerned i.e., LMDA and Service Provider in the identification of construction hazards and facilitate communication among stakeholders. The Service Provider, in particular, should use the guidelines as a reference material for relevant health and safety information while working on Health Maintenance Programme. It should however be appreciated that this document does not absolve Service Provider from carrying out risk assessment that informs their site specific health and safety plans.

The document is therefore intended to address those H&S issues that are likely to be encountered during the course of the Programme.

This guidance document applies to all Service Provider and sub-Service Provider that are involved in Health Maintenance Programme.

2.0 INSTITUTIONAL AND REGULATORY FRAMEWORK

2.1 Institutional arrangement

LMDA will be implementing the Health Maintenance Programme on behalf and collaboration with the Ministry of Health. LMDA oversees the implementation of the Programme throughout the country. In respect of environmental, health and safety aspects of the programme LMDA has established an Environmental and waste Management section whose responsibilities have been outlined below. In addition to the EWM section there is a Project Manager and site client Agents whose duties have also been elaborated on in below sub-sections. The best practice requires that the Service Provider should self-regulate. In this regard, relevant officers from the side of the Service Provider as well as their duties are discussed below.

2.1.1 LMDA-EWM Section

LMDA-EWM has the following general responsibilities:

The Section is responsible for overseeing all environmental and health and safety compliance activities

It handles compliance with applicable safety and health regulations and standards

Reporting of incidents to all partners

2.1.2 Safety and health officer

In accordance with section 97 of the Labour Code of 1992, the Service Provider shall employ a safety and health Officer that have appropriate qualifications and familiar with the work being performed. The Safety and health Officer shall among others initiate measures for the protection of health and prevention of accidents, carry out inspection to ensure that safety rules and regulations are observed. Depending on the work load, a deputy safety and health officer may be appointed. The two should be fluent in English and Sesotho.

Safety Representatives

It is the responsibility of a Service Provider to ensure health and safety of employees at work. Safety representatives will act as channels through which priorities of the management are conveyed to the workers or vice versa. It is this consultative process and cooperation that make health safety policy and plans work. The representatives will constitute a health and safety committee. Safety and health representative shall have the following functions: -

Identify potential hazards, risks and potential incidents at the workplace;

Make representation to the Service Provider and to the health and safety committee on matters relating to safety and health at the workplace;

Carry out systematic inspection of the workplace including any substance, machinery and health and safety equipment at the workplace at a frequency to be agreed upon with the Project Manager. However, the minimum standard is once per month.

Carry out internal health and safety audits with the view to advising the management on proactive measures of dealing with incidents;

Participate in the investigation of incidents; and,

Partake at meetings of the health and safety Committee. Health and Safety Committee

In accordance with section 98 of the Labour Code order of 1992, the Service Provider shall establish a health and safety Committee whose chairperson shall be the Service Provider's representative. The Committee shall meet as the frequency not greater than 1 month (This might not be necessary, given the nature of work). The main duties of the HS committee include among others the following:

Participate in development and implementation of programmes to protect employee's health and safety;

Establish programmes to improve employee's health and safety training;

Monitor effectiveness of safety programmes and procedures; and,

Participate in all health and safety investigations

2.1.3 Appointments by Service Provider

The following table gives examples of appointments to be done by the Service Provider. It is expected that the Service Provider will keep records of proof of appointments.

APPOINTMENTS
1.Purchaser Representative
2. Health and Safety Representative
3. Health and Safety Committee Members
4. Incident Investigator

6. First Aiders (Include training certificates)
8. Fire Fighters
9. Risk Assessors
10. Construction Supervisor
11. Assistant Construction Supervisor
12. Fall Protection Competent Person
14. Formwork/ Support Work Competent Person
15. Excavation Work Competent Person
16. Demolition Work Competent Person
17. Scaffolding Competent Person
18. Construction Vehicle and Mobile Plant Competent Person
19. Electrical Installation Competent Person
20. Stacking Competent Person
21. Fire equipment Competent Person
22. Confined Spaces Competent Person
23. Safety Officer
24. Traffic Safety Officer
25. General Machinery Competent Person
26. Lifting Machines Operators

The competency of each of appointed competent persons from 10 to 26 must be provided and should include knowledge, training, experience & qualifications specific to the appointment.

No work involving any of the listed appointments may be performed without the knowledge and approval of an appointed competent person.

The competent person shall be responsible to determine the level of supervision required for each activity.

The Project Manager must be informed of any changes made to the above appointments.

2.1.4 Duties and Responsibilities

Project Manager shall:

Design quality management systems

Design maintenance quality requirements for works

Ensure implementation of quality management systems

EWM Ensure implementation of H&S contract requirements in liaison with the manager.

Ensure regular assessment of qualitative and quantitative risk assessment for all the project.

Client Site Agent (CSA) shall:

Be knowledgeable concerning H&S items that occur on projects that the CSA is responsible for;

Ensure that all planned projects involving new construction; renovations comply with applicable permits;

Ensure that pre-existing hazards at work site are communicated to the affected Service Provider prior to the start of work.

Communicate observed or suspect H&S concerns to LMDA

Notify the Service Provider of any observed or reported H&S concern, and request corrective action.

Immediately notify the LMDA if the Service Provider fails to correct an identified imminent danger.

Note deficiencies and corrections in the project log and report instances of continued non-compliance to LMDA. Keep LMDA informed of the status and resolution of identified deficiencies.

Ensure that Service Provider are following the H&S requirements specified in the contract as well as in this guidance document.

Follow up on corrective actions for reported deficiencies from regulatory inspections.

Obtain necessary H&S awareness training to equip them with knowledge in respect of common environmental permit requirements and safety and environmental hazards associated with construction and renovation projects.

Inspect and monitor Service Provider and sub-Service Provider project activities to ensure Service Provider' compliance with H&S requirements.

Notify the Project Manager and the Service Provider of any observed or reported H&S concern, but do not prescribe corrective action.

Report uncorrected imminent dangers to the Project Manager

The Service Provider shall:

Foster a Culture of Safety in the work force from commencement of the Project;

Comply with all H&S contract requirements as well as applicable national laws;

Provide all safety and personal protective equipment (PPE) required to complete the contracted scope of work. PPE equipment must meet or exceed the requirements of the appropriate a regulatory agency (Department of Labour);

In the event of an incident, ensure that copies of Material Safety Data Sheets are immediately available for all hazardous chemicals and products that will be brought onto site;

Process all hazardous waste generated under the project. All hazardous waste containers must be closed, labelled to identify the container contents and in good condition;

Ensure the supervisor on-site is well trained on H&S activities and regulations in the performance of the work;

Be familiar with the contents of this guidance document as it applies to the contracted scope of work;

Provide a copy of the firm's safety and health plan;

Develop and review lockout – tag-out procedures when working on controlled equipment and sites;

Ensure that procedures for confined spaces are communicated to the workers as appropriate;

Coordinate the movement of any equipment/processes that must be relocated as a consequence of the work.

Provide H&S training for the Service Provider employees dealing with H&S management

Respond to complaints regarding Service Provider's activities that may impact the safety of employees, visitors and the public at large or that are deemed imminent dangers.

In accordance with the project contract, the Service Provider will be held liable for all damage to personal and real property as a result of the Service Provider's negligence to provide appropriate protective measures.

The Service Provider shall keep the work area, specifically walking and working surfaces, clean and free from debris and trash which could cause slipping and tripping hazards. Tools, materials, dirt, concrete, metal, insulation, paper, etc. should be promptly cleared and disposed of by the Service Provider. All debris should be disposed of each day, off site or in a Service Provider's supplied rubbish bins.

The Service Provider will be responsible for coordinating all sub-Service Provider on site.

Provide proof that Service Provider's H&S Plan has been approved, implemented and maintained.

Provide proof that Service Provider is registered with an insurer.

Provide a comprehensive & updated list of all Service Provider's workers on site, also indicating the type of work being done

2.2 Regulatory Framework

The following legal instruments shall apply on all H&S matters:

The Road Traffic Act No.8 of 1981

Labour Code Order, 1992

Welding and cutting regulations, 1996

Noise and spray painting regulations, 1996

Construction safety regulations, 2002

Labour Code (Amendment) Act, 1997

Labour Code (Codes of Good Practice), 2003

Chemical safety regulations, 2003

Labour Code (Amendment) Act, 2006

Labour Code (Amendment) Act, 2010

Labour Code (HIV and AIDS at workplace) Guidelines 2010

Workman's Compensation Act (amendment) No. 13 of 1993,

Environment Act of 2008

Public Health Order No. 12 of 1970,

In addition to national laws, foreign laws/international conventions could be used in order to address gaps in the domestic legislation. It should however be appreciated that litigations will be done within the confines of national laws. The international best practice and foreign laws will remain administrative.

3.0 HEALTH AND SAFETY REQUIREMENTS

The following information is provided to assist Service Provider in recognizing hazards that may occur in conjunction with Service Provider projects; facilitate communications between Service Provider, and Project Manager regarding construction H&S issues; and to minimize risks that construction activities may impose on workers, visitors and the site environment.

3.1 Risk assessment

Risk management plays a vital role in ensuring safer and healthier work environment and in assisting Service Provider meet their legislative requirements. Service Provider are expected to ensure a safe and hazard free workplace for workers, visitors and the local communities by making sure that appropriate procedures are in place for dealing with identified hazards in an efficient and timely manner. Risk assessment is done in order to inform health and safety plans for Service Provider. Such plans are expected to be prepared by Service Provider and be submitted to the Purchaser 28 days prior to construction. All risk assessments should cover at least the following:

Movement of construction vehicles under all weather conditions

Movement of construction vehicles on steep inclines and on bad rural roads

Protection of members of the public affected by construction activities

All work near overhead power lines and underground cables

Locating underground cables/existing services

Hand excavation of trenches

Mechanical excavation of trenches

All work carried out inside trenches, including compacting, pipe laying, backfilling etc

Temporary stockpiling and removal of excavated material

Transporting material

Demolition work

Work at heights

Erection / dismantling of scaffolding

Work involving the use of tower / mobile cranes (if used)

Working with hand tools

Working with jack hammers

Working with portable electrical tools

Snake bite management

Traffic

Precautions against lightning

Precautions against working in adverse weather conditions (snow, rain and heat)

All health hazards that can be present during any of the above activities and should include dust, gases, fumes, vapours, noise, extreme temperatures, illumination, vibration and ergonomic hazards due to any of the above activities.

3.2 Health and Safety Plans

A typical health and safety plan mentioned above should among others contain the following: -

Background to the project

Institutional arrangement

Appointments

Roles and responsibilities

Legal framework

Purpose

Risk assessment, mitigation

Safe work procedures (covering all activities to be carried out)

Emergency plan

Monitoring and Auditing (frequency and indicators)

Records keeping

Reporting

3.3 Demolition: Preparatory Operations

Coordinate utility and mechanical service modifications with relevant authorities (LEC, WASCO, Econet-Lesotho) in advance of work.

Provide public pedestrian protections such as barrier fences and sidewalk sheds in accordance with relevant national laws; and coordinate vehicle traffic control in collaboration of local traffic department or local authorities

Identify potential hazardous material conditions at the site. When potential hazardous conditions are apparent or suspected, testing shall be performed and the hazard eliminated before demolition starts. Possible hazardous material includes, but are not necessarily limited to: asbestos-containing materials (ACMs), lead-based paint (LBP), polychlorinated biphenyls (PCBs) in lamp ballasts, mercury in fluorescent lamps and thermostats, recoverable refrigerants, caustics, corrosives, metals, and petroleum products.

3.4 Site Access and Use

All sites must have controlled access to limit unauthorized individuals from entering the construction or renovation area. Large projects within a defined boundary, such as a new building site, must be fenced. Smaller sites within or in the vicinity of buildings must have temporary fencing, barricades. Building doors and roadways may not be blocked without the approval of the Project Manager or Site Inspector. The use of parking lot space must be pre-approved by the management of the facility being renovated/maintained.

3.5 Transfer of Flammable Liquids to Containers, Equipment, and Vehicles

All small quantities (20litres or less) of flammable liquids must be stored in an approved safety can in approved storage areas at the project site. Equipment refuelling must be accomplished by using vehicles and hoses that are maintained, inspected and in good condition. All vehicle engines must be turned off during refuelling activities. Using fuel pumps for refuelling Service Provider equipment is prohibited. Fire extinguishers (9kg. minim) must be provided in the immediate area of the refuelling and chemical storage areas. The refuelling area should be on concrete slab and have bunds.

3.6 Confined Space Entry

If a Service Provider is performing work that requires a confined space entry, the Service Provider must provide employees who are trained and qualified. The Project Manager must inform the Service Provider of identified confined spaces they may encounter as part of the project.

3.7 Excavation Safety

All excavations on property must be performed in accordance with applicable H&S regulations (shored, sloped, shielded, barricaded, acceptable egress, etc.). The Service Provider is responsible for providing a "Competent Person" at every excavation site. This individual must be capable of identifying existing and predictable hazards in the surroundings or working conditions which are unsanitary, hazardous, or dangerous to employees, and who has the authorization to take prompt corrective measures to eliminate them. Also he/she must be able, through experience or training, to determine the suitability of equipment or materials used for support systems, shield systems, and other protective systems. Prior to starting the actual excavation, the Service Provider must ensure that all underground utility installations in the area (such as electrical, phone, sewage and water,) have been identified.

3.8 Hazardous Materials

Material Safety Data Sheets for all chemical compounds used at the work's site should be immediately available on-site or at a convenient location where it can be provided within 1 hour of an incident. Service Provider employees should carefully read container caution labels and be able to provide information concerning the hazardous materials they are using or storing.

When using chemical compounds, especially volatile products, appropriate precautions should be followed as stated on container labels. As necessary, proper ventilation should be established prior to their use. The Project Manager may require modification of existing ventilation systems or restrict work to specific days/times to minimize occupants exposure to chemical.

Containers of chemicals and hazardous materials brought on site by a Service Provider must be stored secure areas; labelled with the manufacturer's original label and remain closed, except when removing material from the container. The storage area used must be secure and not be located where a release could cause a hazard to other building activities. As a general rule, no employee is to be allowed to handle hazardous substances without appropriate training and risk assessment.

Compressed gas cylinders should be clearly labelled to identify their contents and chained or otherwise secured to a fixed object, such as a wall, to prevent them from falling and releasing their contents.

Disposal of chemicals or hazardous materials via sinks, drains or ground disposal is prohibited. Nothing should be poured down building floor drains or storm drains including, but not limited to, paints, solvents, detergents, glycols, and oils/fuels.

3.9 Hazardous Waste

LMDA requires that materials or substances classified as hazardous or regulated waste in terms of the Environment Act, 2008 and other related laws be handled carefully and be disposed of in an environmentally sound manner. Examples include, but are not limited to: paints, thinners, glues, solvents, gas cylinders, fluorescent tubes, batteries, Asbestos Containing Material (ACM), oils/fuels and corrosives. Cross border shipments of hazardous and regulated waste must observe relevant national and international legal instruments e.g. Basel Convention. Hazardous waste generated by the Service Provider will be the Service Provider's responsibility. Storage facility for a hazardous waste must be secured and be marked with the words Hazardous Waste and a description of the waste, and the date waste was first placed in the container. All containers must meet national and international standards for storage of such waste.

Existing facilities with ACM should develop an asbestos management plan which clearly shows the locations where it ACM is found and more importantly its characteristics e.g. friable or non-friable. The same plan should have procedures for among others accessing the locations and controlling releases.

Fluorescent lamps are to be removed from fixtures with care and placed in special cartons. It is worth noting that these lamps contain mercury and that they are not broken, releasing toxic mercury dust and vapour into the environment. The Service Provider should coordinate the removal and disposal of these materials with DoE.

Batteries containing heavy metals must not be placed in trash containers. The Service Provider should collect these batteries for proper disposal or recycling.

3.10 Asbestos

According to the Environment Act, 2008, second Schedule thereof, asbestos in all its forms has been banned in Lesotho. However, there is no clear procedure for handling ACM on/in existing buildings as well as asbestos containing waste emanating from maintenance works.

Service Provider shall therefore follow MCC requirements for Management, Abatement and Disposal of Hazardous Wastes of April, 2013 (pgs 7- 20). Below are the general precautions to be taken by the Service Provider.

Asbestos removal from buildings or pipelines is the responsibility of the Service Provider to properly remove and dispose as required by their contract and applicable regulations. The Service Provider is to coordinate the removal and disposal activities with DoE. The following precautions are to be taken by the Service Provider: -

An inspection of building materials for the presence of asbestos and lead hazards must be conducted prior to initiating renovation and demolition activities;

Make workers aware that they will be handling asbestos and train them to carry out the task safely;

Friable ACMs that is likely to be disturbed should be removed prior to renovation or demolition of a structure;

Keep everyone who does not need to be there out of the work area;

Take care not to generate dust and keep the material wet, whenever possible;

Wear appropriate protective equipment

Avoid use of high speed power tools as they can lead to generation of dust

Workers should be discouraged from taking protective equipment that was worn during removal of asbestos home

3.11 Spills and Releases

Regulatory agencies require containment and remediation of all spills or releases of hazardous materials, including fuels, oils and anti-freeze. Service Provider who spill, or detect a release, of a hazardous material on property must report it immediately to Project Manager. Clean-up costs resulting from a spill or release caused by a Service Provider are the Service Provider's responsibility. Depending on the substance and quantity, the Service Provider may notify regulatory agencies- DoE. Clean-up and restoration of the contaminated area must be performed to regulatory and acceptable levels. The Project Manager will coordinate analytical testing to determine the extent of the contamination and the acceptable clean-up level. DoE at its discretion, may elect to conduct the clean-up and charge associated costs to the Service Provider or allow the Service Provider to conduct the clean-up based on the material released and site conditions.

If the Service Provider conducts the clean-up, proper documentation, including manifests, for the disposal of the hazardous material, contaminated soil, and any

other materials contaminated during the spill or release must be provided to the Project Manager.

3.12 Fire Protection/Life Safety

The following fire protection and life safety requirements apply to all construction sites:

Corridors, stair enclosures and exits must remain clear at all times in occupied buildings. Storage is not permitted in corridors, stair enclosures and exits.

All compressed gas cylinders must be transported, used and stored properly. All cylinders (full or empty) must be secured in place at all times.

Storage of flammable and combustible liquids must be clearly marked with appropriate signage

Fire extinguishers must be accessible and easy to use

Fire and emergency alarms that are audible and visible should be provided

Open burning should be prohibited

Smoking is not permitted in the buildings at any time

3.13 House keeping

It is the responsibility of all workers to ensure that their work area is kept clean and free from hazards including those that have a potential to cause slips and trips.

3.14 Safety of general public/pedestrians

It is the Service Provider's responsibility to ensure that people that pass near the construction sites are not injured by the construction works. The following measures should be put in place by the Service Provider: -

Construction sites must be effectively fenced / cordoned off in all work areas.

Access to all construction sites must be controlled both during and after hours.

All excavations are to be fenced / barricaded to prevent access by public/pedestrians.

Work must be planned in such a manner as to ensure that the minimum amount of trenches are left open after hours or during weekends.

No trenches in which water has accumulated may be left open.

3.15 Visitors

It is expected that visitors will come to sites for various reasons. Service Provider are therefore expected to devise method of informing visitors and other persons entering the site of hazards prevalent on site and providing personal protective equipment and identity cards to visitors and non-employees. There should also be a visitors' register. A sign should also be provided directing all visitors to report to the site office

3.16 Traffic and Road Safety

Given long travel distances between various project sites, increased traffic at road intersections and constrictions due to excavations along and across road networks, accident(s) is one of the significant risks that Service Provider will be faced with. In addressing this risk, the contract may among others, consider the following measures:

Strict enforcement of road safety act, 1981, requirements (safety belts, fire extinguishers in cars, observance of speed limit, etc.). The latter could be divided into categories depending the conditions of the road – gravel, dirt, bitumen, etc.

Inspection of vehicles before undertaking trips. (A relevant checklist should be developed)

Establish speed limits on site e.g. 15km/h

Drivers for heavy equipment should undergo medical surveillance

Frequent rests for drivers

Banning the use of cell-phone while driving

Banning smoking in Service Provider's vehicles

3.17 Working at Heights

The Service Provider is expected to carry out risk assessment on the basis of which a fall prevention and protection plan is to be developed. The plan is to include:-

Proper use of ladders and scaffolds by trained workers;

Installing guardrails at the edge of fall hazard area;

Use of fall prevention devices or fall protection devices such as full body harnesses in conjunction with shock absorbers e.g., lanyards of self-retracting inertial fall arrest devices attached to a fixed anchor

Appropriate training in use and integrity of the PPE

Securing, marking and labelling covers for opening in floors, roofs or walking surfaces

Inclusion of rescue and recovery plans and equipment to respond to workers after an arrested fall

Providing a Competent Person at the job site where fall hazards exist.

3.18 Alcohol and substance abuse

Workers should not be under the influence of alcohol or illegal substances during working hours. Service Provider should devise strategies for dealing with substance abuse.

3.19 Biological hazards

Renovation/maintenance works are likely to expose workers to raw sewerage containing life threatening pathogens e.g. hepatitis, amoebae, dysentery bacteria, etc. The Service Provider is expected to exercise due caution when maintaining hospitals and health centres as the possibility of workers coming into contact with raw sewerage is high. The following measures could help in lowering the risks:-

Avoid or Minimise releases through engineering or administrative controls e.g. limiting number of workers likely to be exposed;

Use biocides/disinfectants to reduce the risk of infection; and,

Wearing appropriate PPE

3.20 HIV/AIDS

Service Provider are expected to develop their own HIV/AIDS policy with commitment from top management. In addition, the Service Provider are required, to develop and implement HIV/AIDS management programme covering both employees and local communities.

3.21 Trafficking in Persons (TIPs)

Trafficking in person has been identified as risk in construction projects. LMDA requires a commitment from Service Provider that they will not engage in or allow TIP, and that they will report any suspicion of TIP incidents. This requirement has been incorporated in all contracts for construction projects. Service Provider are, in turn, expected to devise strategies for dealing with trafficking in persons. Such strategies are, at the minimum, expected to address awareness raising on TIPs, preventive measures and penalties for offenders, if it is their employee. During project implementation, LMDA-EWM staff will be involved in auditing measures that have been put in place by the Service Provider.

3.22 Environmental Stressors

The risk to the health of workers is a function of the work environment. As conditions deviates from those that are generally accepted as comfortable, the higher is the risk to the health of workers. Heat stress results from exposure to high temperatures while stress associated with cold is normally experienced in winter, especially in the highlands of Lesotho. The assessment of risk to workers' health should take into account both personal (body activity, the amount and type of clothing, duration of exposure, etc) and environmental factors (ambient temperature, radiant heat, wind velocity, rain or snowfall,). Some of the actions to be taken by Service Provider include:

Pre-selection medical examination;

Restriction of exposure by allowing for rest periods that will afford them a chance to replace bodily fluids;

Use of appropriate protective clothing; and,

Training on precautions to be taken.

3.23 Area signage

Appropriate signage must be erected and both Sesotho and English should be used wherever possible. Issues that require signage include: - Hazardous areas (electrical rooms, compressor rooms, etc)

The signs to be used should be in accordance with international standards.

3.24 Noise

Noise is considered a major factor in loss of hearing. In this regard Service Provider shall, at the minimum, comply with following requirements:

No employee should be exposed to a noise level greater than 85dB(A) for a duration more than 8 hours per day without hearing protection. No unprotected ear should be exposed to a peak sound pressure level (instantaneously) of more than 140 dB(C);

A Service Provider is expected to enforce hearing protection in any on the situations mentioned above;

Engineering solutions such as use of acoustic insulating materials, isolation of source of noise should be explored where feasible, and;

Periodic medical hearing checks should be performed on workers that are exposed to high levels of noise.

3.25 Electrical

Exposed or faulty electrical equipment such as cables; cords hand tools pose a serious risk to workers. The following actions are to be undertaken by the Service Provider:

Marking all energised electrical devices and lines with warning signs;

Conducting detailed identification and marking of all underground electrical wiring prior to any excavation work;

Protecting power cords and extension cords against damage from traffic by shielding or suspending traffic through areas where cords are located;

Double insulating/grounding all electrical equipment used in areas that are or may become wet using appropriate ground fault interrupter protected circuits;

Locking out and tagging out devices during service or maintenance; and,

Establishing a buffer zone around or under high voltage power line

3.26 Eye Hazards

The Service Provider should ensure that workers: -

Use machine guards, or splash shields or face and eye protection devices e.g. glasses with side shields, goggles or full face shield

If discharges pose a risk to passer-by or transient worker, extra guarding or proximity restrictions should be implemented

3.27 Welding/Hot work

Welding produces an extremely bright light and sometimes obnoxious fumes. The bright light can seriously injure the worker's sight while the fumes could lead to serious chronic diseases. The Service Provider is therefore expected to :-

Ensure that appropriate eye protection is provided e.g. welder goggles and or full – face eye shield for all workers and those assisting them

Precaution should be taken to avoid generation of fire

3.28 Lighting

Workplace should, as far as possible, receive natural light and where need arises be complemented with sufficient artificial illumination. The Service Provider is expected to demonstrate:

How lighting will be ensured/ provided where daylight is not sufficient and /or after hours are worked;

How the emergency lighting of adequate intensity would be installed and automatically activated upon failure of the principal artificial light source to ensure safety during shut-down and evacuation; and,

Proof of illumination levels of artificial illumination equipment.

3.29 Workers Welfare

Sanitary Facilities

Suitable and sufficient sanitary facilities and washing facilities be provided at readily accessible places. The standard that is often used is 1 toilet for 30 workers Both gender groups should have separate facilities. All the facilities should be kept clean in order to minimise occurrence of disease vectors. Washing facilities should have both cold and hot water and towels or any other item to be used for drying.

Drinking Water

Adequate supply of water that meets WHO standards should be provided. A water dispenser may be provided as a secondary supply.

Change house

Adequate facilities should be provided for storing worker's clothes and PPE. The facilities should be easily accessible and should also ensure privacy of the user

4.0 TRAINING/INDUCTION

All Service Provider' employees should obtain training about Health and Safety (HS) issues relevant to the types of projects they are engaged in. The envisaged training should either be provided internally by the Service Provider or be provided by a private company, The following topics may be covered: Risk assessment, health and safety awareness, hazardous chemicals and waste management, Environmental Hazard and Safety Awareness related to Construction; HIV/AIDS training; Trafficking in persons; Health and safety inspections and auditing; Incident reporting, emergency preparedness, spill prevention and spill management, noise, hygiene awareness, communication protocol, etc.. Tool box talks are to be done on daily basis and they should target health and safety issues specific to each day's work.

Attendance registers must be kept as proof of training provided

All new employees should receive induction pack from relevant person. The pack should include a copy of health and safety policy

5.0 EMERGENCY

Regardless of Service Provider's vigilance in ensuring compliance with H&S requirements, some unavoidable emergencies do sometimes occur. The Service Provider must be prepared to deal with such situations. An emergency plan is therefore required. Such a plan outlines actions to be undertaken by those responsible including Service Provider, first aiders and also provides emergency phone numbers (police, fire brigade, hospital, clinic, Department of Labour, LMDA, Department of Environment, etc.).

5.1 Service Provider Responses

Upon hearing a fire alarm, the Service Provider should stop all work and evacuate as necessary. This includes ceasing all welding and burning activities, shutting off all equipment (electrical, and motorized) and extinguishing all sources of ignition.

The Service Provider's supervisor or crew leader should take a head count to ensure that all contract personnel are accounted for. The Service Provider personnel should remain within a safe distance of the area they evacuated until the "All Clear" is announced and been instructed to return to work.

The site manger should ensure that employees with disability have an able bodied person appointed to assist them during emergency situation. They should both be provided with information and be trained on evacuation procedure.

5.2 Accident/Incident Reporting

If a person is seriously injured or the Service Provider becomes aware of a fire, explosion, fatality, or other serious incident, the Service Provider should immediately notify the Purchaser through agreed upon channels. The notification must be done within 24 hours. In addition to notification, the Service Provider is expected to submit a preliminary report within a week, with a detailed report being submitted within 28 days of the occurrence of a reportable incident. In the event that media has developed interest in the event, press releases should be coordinated with the Purchaser.

All reported occupational accidents, diseases, dangerous occurrence and incidents and near misses should be investigated by a competent person. An independent investigation would help in ensuring objectivity of the investigations. At the minimum an occupational disease or accident report should contain the following:

Introduction

Objectives of investigation

Methodology

Investigations

Findings

Conclusions and Recommendations

5.3 First Aid

The Service Provider should ensure that acceptable first aid can be provided at all times. Appropriately equipped first-aid stations should be easily accessible.

First aid stations/rooms should be equipped with gloves, gowns and masks for protection against direct contact with blood

Eye-wash stations and or emergency showers should be provided close to all workstations

All sites should have written emergency procedures in place for dealing with cases of trauma or serious injury or illness until the patient is transferred to an appropriate medical facility

A Service Provider should have at least 1 first aider per 50 workers

First aiders shall have a certificate demonstrating that they have completed and passed a training course and are registered with appropriate authorities

6.0 MONITORING, AUDITING AND REPORTING

6.1 Regulatory Agency Inspections/Auditing

Monitoring can be done internally or by a third party (law enforcement agents or consultant engaged by the client). A monitoring programme for Health and safety should verify the effectiveness of prevention and control strategies as outlined in the Health and Safety plan. The programme should include: -

Safety inspection and testing- regular inspection (checklists for internal inspection and auditing should be developed by the Service Provider)

Surveillance of the working environment

Surveillance of workers' health

Training

Reporting including accident reporting system (H&S issues should be included in the overall monthly, quarterly and annual reports)

below gives a list of issues/items to be inspected and the frequency at which such inspections are to be carried out.

ACTIVITY	FREQUENCY
Form work / Support work	Daily, prior to any shift
Excavation Work	Daily, prior to any shift, after rain or blasting or after unexpected fall of ground
Scaffolding	Daily, prior to any shift, after rain or blasting.
Material Hoist	Daily
Construction Vehicles and Mobile Plant	Daily
Temporary Electrical Installation	Weekly
Stacking	Weekly
Fire Extinguishers	Bi – Monthly

Ablution Facilities	Weekly
Ladders	Weekly
Incident Register	As Required
Fall Protection Equipment	Daily
Portable electrical tools	Weekly
Suspended Platforms	Daily
Accommodation of traffic	Daily
Fire-fighting equipment	Monthly

Service Provider' sites are subject to inspection by safety and environmental regulatory agencies for compliance with applicable regulations and permit conditions. In all cases, the Service Provider should immediately inform the Project Manager if a regulatory agency conducts a site visit; provides the results of the inspection and the schedule of corrective actions the Service Provider will take to remedy deficiencies, as applicable.

6.2 Auditing

On the basis of monitoring/inspection data H&S audits are normally done. They too could be done internally or by a third party. LMDA is going to carry out second party audits of works on 6-monthly basis.

6.3 Compliance Issues

It is expected that H&S measures are going to be diligently enforced and that cases of non-compliance will be dealt with swiftly.

Health and Safety instructions will be issued for all non-compliance identified;
and,

The Service Provider shall be required to sign receipt of the instructions issued.

6.4 Reporting

A Service Provider shall prepare and submit, to the Project Manager, a monthly/quarterly/annual report containing at least the following:

Identification/name of project under construction.

Total staff employed at each construction site

Distance travelled

Number of person hours

Number of incidents and near misses that have occurred

Copy of incident investigation report

Copy of internal health and safety audit

The report outlined above will be part of overall monthly/quarterly/annual reporting by the Service Provider.

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