



HEALTH & SAFETY REQUIREMENTS FOR CONSTRUCTION CONTRACTORS

**AT
SSR INTERNATIONAL AIRPORT**

(Third Edition)

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Health & Safety Requirements for Construction Contractors

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Introduction

This booklet has been prepared for contractors who carry out construction work at the airport for AML in order to enable all work to be carried out efficiently and safely.

The content of this booklet represents good practice and should fully meet the requirements of all types of construction work. It shall be applicable for works carried out by AML and those operating within AML owned premises.

Contractors in the employ of airport occupiers are reminded that they must strictly adhere to all safety regulations relevant to the approved works that are in force at that time. Furthermore, the Occupational Safety and Health Act of 2005 requires persons in control of “premises” to ensure, so far as is reasonably practicable, that the premises are safe and without risks to health.

This document contains information relevant to both the main contractor and sub-contractors as well.

Whilst occupiers of AML owned premises and their contractors are directly responsible for the safety of their own employees, in some instances, for example during major refurbishment, the occupiers contractor may well become the controller of the premises and therefore take up extra duties towards persons using the premises who are not his employees.

For the purposes of booklet, the term AML representative shall generally mean the AML Project Manager. However, dependent on the nature of the activity, the term may also refer to other AML employed or delegated persons, more specifically the Safety & Health Officer. Where a main contractor is appointed they may also be acting as AML representative during the construction process. For the purposes of this document, occupiers are referred to as the AML representative.

AML Project Manager and/ or Safety & Health Officer shall have unrestricted authorization to access at any time to any AML contract sites to inspect and audit compliance under these procedures. They are empowered to withhold a process if it has been assessed to have high risk level. These power and authority will normally have been included in the Conditions of Contract of the project concerned.

(1) General safety requirements

- 1.1 *Health and safety management*
- 1.2 *Contractors' safety policy document*
- 1.3 *Safety management-general*
- 1.4 *Project induction brief*
- 1.5 *AML directives*
- 1.6 *Inspection of the worksite*
- 1.7 *Alcohol and drugs*
- 1.8 *Smoking*
- 1.9 *Radios*
- 1.10 *Non English speaking personnel*
- 1.11 *Competence and training*
- 1.12 *Contractors appointed persons*
- 1.13 *Tool box training*
- 1.14 *Security*
- 1.15 *Limitations of access- terminal areas*
- 1.16 *Site notice boards*

1.1 Health and safety management

The contractor should note that he is responsible for the safety of on-site operations.

The contractor must, throughout the progress of the works comply with his duties under the Occupational Safety and Health Act of 2005, and all other relevant legislation.

Where no specific legislative requirements exist the contractor must comply with guidance provided by relevant Codes of Practice or industry standards as a minimum. The contractor shall also comply with all relevant airport directives.

The contractor shall be responsible for ensuring compliance with this document throughout the project, including the activities of his appointed sub-contractors, consultants or temporary visitors.

The contractor should submit the following to the client with his tender.

- Company safety policy document
- General safety procedures document
- Method Statement of Works inclusive of an Outline health and safety plan
- Details relating to prohibition notices issued over the previous five years

Post award of contract and prior to any activity commencing the contractor must submit the following:

- Construction health and safety plan
- Risk assessments and method statements

This applies to all construction activities regardless of size or value.

2 Contractors' safety policy statement

This should set out the policy of the company and define its objectives. The document is expected to describe the following:

- Senior management's values and beliefs
- Safety and its relationship with business performance
- Safety objectives and how they contribute to business objectives
- A commitment to progressive improvement
- Legal requirement defining minimum level of achievement
- Employee participation
- Effective safety communication
- The director responsible for safety
- Commitment to support the policy with adequate financial and physical resource
- Provision of necessary expert advice
- Regular review of policy
- Signed and dated by director or chief executive

1.3 Safety management – general

The contractor shall provide details of an effective safety management system. The procedures will be fully documented and available for inspection.

The system shall take account of all aspects of safety including those of sub-contractor operations, third party activities and particularly covering inspections, audits and effective remedies. This should include for example, defining duties and responsibilities of managers and supervisors, provision of safety training, co-ordination of safety with other contractors, communication of the safety policy to staff, inclusion of relevant safety conditions to sub-contractors, method of reviewing policy and procedures and arrangements for dealing with common construction hazards.

How the contractor intends to comply with their safety policy statement should be contained in their management system.

A health and safety plan is required on all projects. This is a set of safety management procedures applicable to construction and intended for use on the project. It should be based on statutory requirements and the contractor's experience. The document will have sufficient detail to be used as a working site reference for the management of safety and shall include planning and organisation, the nomination of appointed persons with safety responsibilities, action in emergencies, working environment requirements, safety consultation, access and transport, plant and equipment maintenance, safety training initiatives and any other relevant safety aspects.

1.4 Project induction brief

All personnel employed on the project are to attend an induction brief prior to commencement on site. Each individual contractor is responsible for ensuring all his employees attend the project brief.

The main contractor shall be responsible for the site induction.

The induction brief must cover the following topics as a minimum:

- Project description
- Health & Safety Legislation –employers/employees duties
- Project management structure and lines of responsibility
- Project specific hazards and measures in place to control them
- Project specific safety arrangements and rules
- Welfare arrangements
- Emergency procedures
- Relevant local safety requirements identified from this document
- Fire awareness – extinguishers etc.
- Security procedures

The main contractor shall be responsible for maintaining accurate records to verify that all current employees have attended an induction. The contractor may be required to produce the attendance record for inspection by the AML representative.

An information card on safety will be made available by the AML representative and each employee shall be issued with a copy to be carried at all times. Local airport rules must be followed. Any person brought onto the site as a temporary visitor and who has not attended the induction shall be fully supervised by a competent person at all times and a record maintained.

1.5 AML Directives

Typically these documents will contain specific Safety Instructions relevant to work carried out within the airport boundaries. It is the duty of the AML representative and the main contractor to ensure that those directives relevant to the works are fully adhered to. The following types apply: (See Appendix B for full details).

- Safety alerts
- Safety notices
- Engineering instructions
- Operational safety instructions
- AML safety standards
- Fire safety standards for AML buildings
- Airport security notices

The above will be made available to all contractors by the AML representative.

1.6 Inspection of the worksite

The contractor shall provide regular inspections of the worksite by competent, professional health and safety personnel with direct reporting of unsatisfactory conditions to the senior site management and the AML representative. In addition to this, the contractor shall nominate a competent person who will inspect the workplace each working day and keep a register to record that this has been done. The register may be inspected from time to time by the AML representative.

The contractor shall allow the AML representative to periodically inspect his site, site offices, and working and storage areas. The contractor will carry out, at his expense reasonable requests deemed to be necessary as a result of such inspections. Such inspections shall not relieve the contractor of his responsibilities.

1.7 Alcohol and drugs

No alcohol shall be consumed by contractor's personnel on airport premises (this shall include all airport bars) or on any of the work sites, at any time. Those persons reporting for duty and believed to be under the influence of alcohol shall be refused entry.

The use of illegal drugs on AML projects is prohibited. Any person suspected of being under the influence of drugs will be reported to the authorities.

It is the contractor's responsibility to ensure all his employees are made aware of this requirement and to enforce compliance. Failure to comply with these requirements will result in the immediate removal of the offending employee from the contract. Repeated non-compliance with this requirement will lead to the offender's employer being excluded from the airport.

1.8 Smoking

Contractors shall not be permitted to smoke at the airport except within accommodation provided by the contractor, specifically for smoking.

1.9 Radios

In accordance with the airport regulations no person shall operate or use a radio transmitter or receiver which may affect the operation of any communication or navigation system at the airport. Reference shall be made to airport directives. Details of radios which the contractor may wish to use must be submitted to the AML representative for approval.

1.10 Non English speaking personnel

The contractor shall ensure that all non English speaking or non English employees fully understand the site safety requirements and their duties covering safety health and welfare whilst on site. This shall include any emergency procedures such as fire drills. The language needs of non English speaking personnel must be adequately catered for during induction, other training and supervision.

1.11 Competence and training

The contractor shall ensure that all employees (including sub-contractors) are adequately trained to carry out their particular duties or tasks. A number of registration schemes are supported by AML and it is required that appropriate certificates are provided (or an approved alternative) to the main contractor on commencement of work on site. These certificates shall confirm that the employee is:

- Fully trained
- Competent
- Authorised.

1.12 Contractors appointed persons

Persons responsible for the co-ordination or management of the following activities:

- Project risk assessment
- Task risk assessment
- Noise
- Scaffolding
- Lifting appliances
- Excavations
- Temporary works
- Crane co-ordination
- Hoists
- Cartridge appliances
- Abrasive wheels
- Gas detection equipment
- First aid
- Fire and emergencies
- Hot works

1.13 Tool box training

Tool box safety talks training is required to be used by the contractor to maintain high levels of safety awareness and to advise employees of changing circumstances as the project progresses. They should be given by a competent person on relevant topics in an environment that will ensure good audience reception and allow discussion of any points raised. Typical topics may include:

- Risk assessment and method statements specific to the work
- Use of hand tools and power supplies
- Use and availability of personal protective equipment
- Management, supervision and employees duties
- COSHH (Control of Substances Hazardous to Health)
- Project specific emergency procedures
- Manual handling
- Fire training
- Learning points from accidents/incidents

It is expected that tool box talks be included on a monthly basis and a tool box talks register be maintained by the contractor. Signatures of those attending must be obtained and kept for inspection.

1.14 Security

The contractor shall comply with the requirements of all airport security notices.

1.15 Limitations of access-terminal areas

It is essential that AML operational personnel managers, engineering staff and terminal management are kept informed at all times of the location and type of work under way in their areas of responsibility. Therefore, site agents/supervisors must notify the AML terminal management upon commencement and completion of work.

1.16 Site notice boards

All construction projects which have barriers or hoarding constructed must have a notice board on the front entrance to indicate the following:

- Main contractor
- AML project manager
- Terminal duty manager/ Airfield manager (if applicable)
- Other sub contractors

Both normal and out of hours telephone numbers must be stated.

(2) Protection of personnel

- 2.1 *Risk assessment*
- 2.2 *Protection against noise*
- 2.3 *Protection against fire*
- 2.4 *Hazardous substances and materials*
- 2.5 *Effects on neighbouring occupancies*
- 2.6 *Asbestos*
- 2.7 *Accidents and emergencies*
- 2.8 *Personal protective equipment (PPE)*
- 2.9 *Physical disabilities*
- 2.10 *Safety harnesses*
- 2.11 *Welfare facilities*
- 2.12 *Potable water systems*
- 2.13 *Re-use of metal drums*
- 2.14 *Frangible surfaces*
- 2.15 *Work involving radioactive substances*

2.1 Risk assessment

The objective of risk assessment is to identify project related hazards and develop methods to deal with those hazards.

Before any work commences on site the principal contractor shall nominate a competent person to be responsible for coordinating risk assessments of all operations where risk is foreseeable and ensuring that appropriate control measures are established and incorporated into safe systems of work. This person will be an appropriate senior line manager from the main contractor. The contractor shall use these safe systems of work as the basis for health and safety method statements. All method statements shall be developed in a reasonable time to allow co-ordination of hazardous works by the main contractor. These assessments shall be in writing and shall include but not be restricted to the following activities:

- Major construction elements
- General public and third party safety
- Location of site access/egress
- Construction vehicle movements on and off site
- Construction vehicle, machinery & equipment hazards within the site
- Vehicle/pedestrian segregation
- Temporary services distribution
- Siting of static plant and equipment
- Scaffolding
- Trench/ground works
- Hazardous chemicals
- Services clearances
- Construction materials
- Storage, use and disposal of substances hazardous to health
- Control of Substances Hazardous to Health Regulations
- Noise
- Working at heights
- Excavations and underground services
- Manual handling

- Use of portable hand tools
- Emergency procedures including evacuation routes
- Fire
- Materials storage
- Site hoardings
- Contaminated ground

All risk assessments shall be reviewed and revised as necessary to accommodate any changes in methods of working, plant, equipment, material and/or site development.

Copies of each risk assessment shall be made available to the AML representative for review. Review by the AML representative will not relieve the main contractor of his responsibility at safety law i.e. to eliminate or deduce all risks to as low as is reasonably practicable.

Where a control measure indicates that a method statement is required, the method statement must include safety and be provided to the AML representative in advance of the activity. Adequate time must be allowed for such method statements to be completed.

Where site conditions require a change to the agreed method statement, these must be reviewed and amended.

2.2 Protection against noise

The main contractor shall comply fully with the requirements of the applicable noise at work regulations and BS5229 Code of Practice for Noise Control on Construction & Demolition sites and any information/directives given by the AML representative.

The contractor shall ensure that particular attention be given to the following control measures:

- Assessment shall be carried out by a competent person to quantify the level of noise generated as a result of certain activities such that the workforce can be adequately informed and instructed and control measures implemented where appropriate.
- All diesel plant (and petrol plant where permitted) used for the purpose of the works shall be fitted with effective exhaust silencers and shall be maintained in efficient working order. The specification of plant and equipment shall include consideration of noise such that all plant shall be of the sound reduced type fitted with properly lined and sealed acoustic covers which shall be kept closed whenever the machines are in use.
- Machinery used intermittently shall be shut down in the periods between work or throttled back to a minimum. All pneumatic tools shall be fitted with means to reduce noise to the minimum possible.

The contractor must also warn his employees of the hazards of aircraft noise. Ear protection shall therefore be made available to employees. Contractors are reminded that they are responsible for providing and ensuring the use of suitable hearing protection by their employees and their sub-contractors.

2.3 Protection against fire

▪ General

When calling the emergency services the contractor is to follow the requirements of local airport directives.

Contractors must conform to the requirements of the existing regulations.

Fire risk assessments and emergency procedures shall be discussed with the AML representative and the fire safety officer. Fire precautions shall be agreed prior to commencement of works.

The main contractor shall co-ordinate and prepare the fire safety arrangements in the form of a fire safety plan.

The contractor must allow for any visits that AML Rescue and Firefighting Service may make to inspect the site and building to verify that fire precautions are adequate. The contractor shall comply with any reasonable request made by AML Rescue and Firefighting Service.

The contractor shall ensure that all statutory fire precautions as outlined in Airport Directives are complied with at all times.

▪ Hot works

Hot works are any activity resulting in the use/creation of naked flame, heat or sparks. Section 5.2 of this document also refers to hot works.

All boilers, cauldrons and hot mixers used on the site shall be handled strictly in accordance with the manufacturers' instructions. They shall be sited away from general traffic, in a position agreed with the AML representative and fitted manometers.

Proof of maintenance of the boilers to appropriate standards shall be made available to the AML representative as requested. Liquid propane gas containers shall be at least 3 m from all burner equipment.

Where boilers, gas containers and certain other materials are used on roof areas, they may need to be located on fire proof spreader plates.

Adequate means of extinguishing fires as detailed in the hot work permit shall be provided by the contractor, to the approval of the AML representative. Appropriate extinguishers shall be sited adjacent to boilers, cauldrons and hot mixers.

All contractors must ensure that all site staff are adequately briefed and instructed on fire safety arrangements for the site and may be required to present written proof of training and instruction given.

Planned fire evacuation drills are carried out at regular intervals in AML premises (at least every 6 months), and all on-site personnel must participate.

The use of petrol driven plant (excluding staff cars) or equipment shall be prohibited at all locations on the site unless written permission is granted by the AML representative.

All combustible materials shall be stored on site in a position and in a manner approved by the AML representative.

2.4 Hazardous substances and materials

▪ General

The contractor shall ensure that risk assessments have been undertaken by a competent person for all products intended for use during the works. Written procedures for the handling, application, storage and disposal of hazardous products must be prepared. The main contractor must co-ordinate all such risk assessments.

The AML representative (or the main contractor acting on his behalf) must be informed in writing of all substances intended for use on site which are classified as toxic, very toxic, corrosive, flammable, highly flammable or explosive.

The spillage, storage, use and transport of “hazardous materials” must conform to airport directives.

▪ Design and Planning (Risk hierarchy)

Where hazardous substances have been specified the designer and principal contractor must evaluate to see if:

- They are strictly necessary for the process
- They can be substituted for a safer alternative substance
- An alternative method or process can be used to eliminate or reduce the hazard.

If it is not possible to adequately eliminate or control exposure to a hazardous substance then the main contractor must ensure that suitable and sufficient personal protective equipment is provided to all affected employees and that they are adequately instructed on how, why and when it is to be used. The potential effects to other persons must also be considered by the main contractor.

▪ COSHH Assessments (Control of Substances Hazardous to Health)

A COSHH assessment should be conducted for all appropriate substances and activities resulting in fumes, dust etc. The assessment shall cover the safe use, handling, storage and disposal of substances or by products resulting from activities.

All personnel shall be informed of any potential health hazards associated with any substance they may use or handle. The contractor shall ensure that correct use is made of the appropriate safety equipment provided by him.

All personnel shall have access to the COSHH assessment which shall have access to the COSHH assessment which shall be available in the event of any contamination that requires first aid medical treatment or fire fighting.

2.5 Effects on neighbouring occupancy

The contractor’s materials risk assessment, selection procedure and exposure control measures must adequately consider the possible effects of process by-products such as fumes, sprays, noise, traffic or dust etc. both on and off the site.

2.6 Asbestos

A risk assessment should be conducted in order to determine the likelihood of asbestos being present. Should the contractor discover a material that he suspects may contain asbestos, he shall immediately notify the AML representative.

NO ATTEMPT MUST BE MADE TO REMOVE THE MATERIAL

It shall be left undisturbed until further instructions are given by the AML representative. In addition, notices warning others of the presence of the asbestos must be clearly posted.

2.7 Accidents and emergencies

The contractor shall provide sufficient first-aiders and adequate accommodation for first aid facilities as may be required.

The contractor shall report all accidents to the enforcing authority in accordance with Section 6 and 85 of Occupational Safety & Health Act (2005). Any such accident or dangerous occurrence including property damage shall also be reported to the AML representative. Outside normal working hours the airport duty manager shall be notified of the incident immediately.

All serious or potentially serious accidents/incidents are to be thoroughly investigated by the main contractor and written reports produced indicating remedial actions. The contractor shall give a copy of all reports to the AML representative.

Emergency plans must be kept by the main contractor. These must include action in the event of major incidents. Contractors must notify the main contractor or AML representative immediately following a major incident. This will include fatalities, legally reportable accidents, legally reportable dangerous occurrences and accidents or incidents which result in damage or disruption to the airport facilities.

All legally reportable accidents/incidents or danger occurrences must be notified immediately to:

- Airport Safety & Health Officer
- The AML project manager

An accident/incident reporting procedure is required to be kept by all main contractors. The notification must be followed up by completing a preliminary investigation report within 48 hours. This must be completed by the principal contractor or contractor.

2.8 Personal protective equipment (PPE)

The contractor shall ensure that risk assessments are carried out to identify those aspects of the work for which PPE is to be prescribed. The contractor shall select PPE appropriate to the work hazards identified. Adequate arrangements are to be made for the storage, cleaning, maintenance and replacement of PPE.

Once a risk has been identified for which PPE has been prescribed and selected the contractor must take all reasonably practicable steps to ensure that it is used correctly by the relevant persons. This will require the provision of information, instruction and training to staff.

Specific site rules should be adopted and enforced for general items of PPE such as safety helmets, safety footwear with steel toe caps and high visibility clothing. Once such rules are in place, appropriate signage must be used and effective enforcement carried out. Failure to comply may result in offenders being removed from the site.

High visibility clothing shall be worn by all personnel when in all airside areas and in the vicinity of moving plant or vehicles. Banksmen shall wear distinguishing clothing when performing their duties.

Re-assessment of all PPE provided shall be made at regular intervals as methods of working or working conditions change to ensure that the appropriate PPE is being used.

2.9 Physical Disabilities

The contractor shall ensure that where his employees have any form of physical disabilities they are not employed to carry out tasks which may, for that reason, unduly endanger them or any other employee or third party. The contractor shall ensure he has a record of all employees who have a physical disability.

2.10 Safety harnesses

The contractor shall make safety harnesses and suitable training available for all employees who work where there is a risk of falling more than two metres and a safety barrier, or cover, or crawling boards cannot be practically provided.

2.11 Welfare facilities

The contractor shall provide, erect and maintain as required by the contract such adequate accommodation for messing, toilets, smoking, drying clothes and for first aid and allow full use of such accommodation to all persons employed on site whether employed by the contractor or otherwise. Public restaurants are not to be used by contractors.

The contractor shall construct any temporary site accommodation and offices in accordance with the Fire Certificate, special premises requirements as instructed by AML competent person.

Birds are a potential major hazard at the airport. The contractor must take steps to ensure that kitchen and canteen waste is stored and disposed of in such a manner that it will not attract birds or vermin. Where a contractor has noted the presence of birds, rodents or insect pest then the AML representative must be notified.

2.12 Potable water system

Unless by prior written agreement of the AML designated competent person, contractors shall not interfere with any potable water systems. All work to such systems must be carried out by competent persons in such a way as to avoid contamination of the system and be left in good order on completion of the works.

2.13 Re-use of metal drums

Serious danger exists from cutting into empty metal drums. Metal drums are not to be re-used without adequate purging and gas freeing procedures being strictly followed.

2.14 Frangible surfaces

Frangible surfaces adjacent to or within any works shall be made inaccessible by means of suitable barriers and adequate signage.

2.15 Work involving radioactive substances

Radioactive sources may need to be brought onto site for non-destructive testing or road construction purposes (radioactive densimeters or nuclear gauges).

Contractors must comply fully with the requirement of the sections 79 and 80 of OSHA 2005, and the work must be carried out with the full knowledge and consent of the project manager.

Over exposure to ionising radiation may occur if unsuitable working techniques are followed and therefore stringent precautions are required.

- Appointment by the employing contractor of a radiological protection adviser and an on site radiological protection supervisor to ensure compliance with local rules.
- Local rules-setting out a description of the work, procedures to be followed and emergency procedures.
- Site radiography is only to be carried out by suitably qualified persons.
- Maximum protection via shielding wherever possible (for barriers otherwise) is provided to reduce risks to all on site. Suitable storage of any radiological equipment is also required.

The main contractor will have responsibilities to ensure all of the above is arranged even if a specialist sub contractor is employed.

Notification to the Ministry of Health and/or Ministry of Labour may be required depending on the type of work involved.

(3) Plant and equipment

- 3.1 *Contractors general plant and equipment*
- 3.2 *Testing, commissioning and maintenance of temporary plant and services*
- 3.3 *Cartridge appliances*
- 3.4 *Electrical equipment*
- 3.5 *Cranes, hoists, platforms etc.*
- 3.6 *Liquefied petroleum gas, bottled gas and highly flammable liquids*
- 3.7 *Scaffolding*
- 3.8 *Aluminium access scaffolding*

3.1 Contractors general plant and equipment

All equipment provided shall be suitable for the use for which it is intended. The contractor shall ensure that site plant and equipment is inspected and thoroughly examined at regular intervals by person(s) who are appropriately skilled and authorised to do so and that records of such inspection/examinations are maintained in a register which may be available for examination by the AML representative upon request.

When selecting equipment the contractor shall take into account the working conditions, potential site hazards and airport operations.

3.2 Testing, commissioning and maintenance of temporary plant and services

As with all other aspects of construction or installation work the contractor is required to conduct risk assessments and develop measures to eliminate or adequately control risk. The contractor shall appoint an authorised person who will be responsible when appropriate for issuing a permit to work prior to any commissioning or maintenance operations.

All plant and equipment shall conform to current European Union/British Standards/Relevant Mauritian Standards. Documentary evidence shall be supplied and copies passed to the AML representative.

Prior to any plant, equipment or service being placed into use the contractor shall ensure that it is safe for the plant, equipment or service to be energised. The contractor shall ensure that the plant, equipment or service is not used for purposes other than those it has been specifically designed for.

All moving plant shall have an audible warning that operates automatically when in reverse and a flashing yellow hazard warning beacon.

The contractor shall provide a banksman whenever plant or equipment is being moved in the vicinity of other personnel or where there is a possibility of personnel being in the area or when the operator does not have a clear view around his item of plant or vehicle shall be notified to the AML representative.

3.3 Cartridge appliances

All cartridge appliances (such as HILTI, SPIT etc.) brought for use on site must be priorly declared and approved by AML representative.

Cartridge appliances are only to be used by properly trained persons who shall possess a certificate stating which tools they are competent to use. All tools and cartridges shall be stored in a secure place when not in use and a register kept to control their issue.

High velocity cartridge tools are not permitted.

3.4 Electrical equipment

Electrical distribution installations provided on site are to comply fully with the requirements of the latest edition of the IEE Wiring Regulations (BS7671).

Supplies to portable, electrical powered tools and temporary site lighting, where practicable, must be reduced to 230 volts or less. The contractor shall ensure that only equipment designed for operating at the supply voltage is used on site.

Where supplies greater than 230 volts have to be used the need must be fully justified and supported by a full method statement before permission is obtained from the AML representative. The tool shall be protected by a residual current circuit breaker (RCCD) and regularly checked and documented by a competent person.

The contractor shall ensure that all tools and distribution equipment including cables, plugs etc. Are complete and examined for signs of damage or wear prior to use. Trailing of cables across operational or public areas is not permitted.

Worn or damaged equipment shall not be used. Any non compliant equipment found on site will be immediately removed; all costs associated with this action will be the responsibility of the contractor.

230V distribution equipment and cable covers, including lighting festoons, must be routed and adequately supported to avoid creating hazards on site or damage to the cable or equipment.

N.B. Work on LV and HV Electrical Equipment is subject to permit to work systems.

3.5 Cranes, hoists, platforms etc

The contractor shall ensure that all lifting equipment complies with existing regulations. A current copy of the Examination and Insurance Certificates shall be kept on site and made available.

Each item of lifting equipment shall be marked with its safe working load (SWL) which shall not be exceeded and also with its unique identification marks.

All lifting equipment shall be maintained in a safe condition, and when it is not in use stored as safely as possible. The contractor shall ensure that lifting equipment and plant is tested, inspected and examined at specified intervals by an insurance company inspector who is trained and authorised to do so and that records of the examination are

maintained in the relevant statutory register kept in a designated place and that copies are available for the AML representative to view upon request.

Any lifting equipment showing signs of wear or damage to safety critical parts shall be taken out of service immediately.

Only an authorised banksman shall give approved signals in accordance with BS7121, to crane or plant operators. The contractor shall ensure that the crane or plant operator accepts signals only from an authorised banksman shall be readily identifiable.

The contractor shall ensure that all items of plant, machinery and equipment and their component parts are marked with their weight in a clearly distinguishable fashion. Lifting points shall be incorporated into the appropriate design.

Lifting tackle, ropes etc. shall be of an approved type to the relevant British/European/Mauritian Standard. Any chain or strap etc. used for restraining load shall not be used if showing signs of wear or damage.

The contractor shall ensure that any temporary access platforms shall be securely attached or fixed and have hand rails, intermediate guard rails and toe boards to prevent persons or materials falling from the platform. If the platform is attached to hydraulic or rope operated plant then in the event of a hydraulic or rope operated plant then in the even of hydraulic power failure a fail- safe device shall be fitted to the item of plant.

3.6 Liquefied petroleum gas, bottled gases and highly flammable liquids

None of the above shall be taken into an airport building without the permission of the AML representative.

LPG and other bottled, flammable gases stored within the airport boundaries shall be stored in compliance with British HSE Guidance Note CS6 "Storage and Use of LPG on Construction Sites".

3.7 Scaffolding

All scaffolding must be erected by competent persons. Scaffolding exceeding six metres high must be certified by a competent Scaffolding Supervisor before putting in use.

Traditional steel tube and fitting scaffolds erected on AML sites MUST have a visible method for identifying the following:

- Date of erection – and by who
- Owner-name/contract number
- Safe bearing load-in tonnes
- Date of last inspection-and by whom
- Method of notifying "out of use"

This information must be provided on all access points and be readily visible and legible. Systems such as "Scaftag" or similar shall be used.

3.8 Aluminium access scaffolds

Where a site has aluminium tower access equipment in use on site, at least one person on site must be trained to Pre-assembled Access Scaffold Manufacturers Association (PASMA) standard and hold a certificate.

(4) Working Site

- 4.1 *Site fencing, hoarding, barriers*
- 4.2 *Access for emergency services*
- 4.3 *Site access, vehicles and pedestrians*
- 4.4 *Excavations and openings*
- 4.5 *Confined spaces*
- 4.6 *Working at heights*
- 4.7 *Housekeeping*
- 4.8 *Waste arisings*
- 4.9 *Demolition*
- 4.10 *Skips*

4.1 Site fencing, hoarding, barriers

The contractor shall provide and maintain the site fencing/hoardings or barriers around all work areas. As site boundaries are modified during progress of works hoarding or barriers must be reinstated before work recommences.

There shall be no overspill of construction work or materials outside the designated work areas. Where work sites interface with vehicle routes, or where construction vehicles will be manoeuvring within the site, the hoarding is to be protected against vehicular displacement.

The contractor shall follow the engineering instructions issued by competent person at AML. The use of hazard tape as a means of defining worksite boundaries is not acceptable.

Particular attention shall be given to preventing unauthorised access on site. In public areas the standard of site security, fencing and barriers must be adequate. **The prevention of access by children is of paramount importance.**

Hoardings with entrances in public areas should be provided with lockable doors.

Hoardings which function as a partition between a construction site and an occupied operational building are to be specified to thirty minute fire rating, including all fire stopping.

Fully detailed plans of the proposed site boundary, the type of hoarding/barrier specification, location of access/egress points for staff, vehicles and emergency services must be submitted to the AML representative and agreed upon, prior to commencement of any works.

4.2 Access for emergency services

Areas must be set aside for the access of fire fighting equipment or other similar appliances including ambulances. These areas shall be maintained, kept clear of obstruction at all times and marked/signed accordingly.

4.3 Site access, vehicles and pedestrians

Airside driving by contractors will only be permitted to individuals who have been trained, examined and issued with a permit through the procedure specified within the airport directives. (Please refer to AML manual *Airside Safety Driving Code*).

In accordance with the requirements of airport directives, the contractor shall only propose drivers who can meet the medical requirements for normal colour vision.

When airside, vehicles may only be parked within the confines of a site compound.

The contractor shall ensure that he maintains safe routes for the access and egress of pedestrians and vehicles to all areas of work and that all personnel are made aware of these routes. These routes shall be level, free from obstructions and positioned on well consolidated ground.

Separate, safe access must be provided for pedestrians traffic onto the site.

4.4 Excavations and openings

All excavations and openings shall be fully maintained including adequate structural support, access, egress and provision of fences and handrails.

Lights shall be used to mark the edge of excavations and openings at night. These lights shall not conflict with airport runway landing lights.

Additional hazards which shall be considered when excavating in the vicinity of fuel pipelines or fuel storage tanks are the presence of kerosene or methane in the ground from spillage and leaking pipes and tanks.

Service clearance should be sought from AML before any excavation is commenced.

All work within 3 metres of 11kv and 415v cables MUST be hand dug and where reasonably practicable the services must be isolated.

The employees at the workplace MUST be provided with a drawing or sketch, together with a method statement for the work.

4.5 Confined spaces

Through the project approval and risk assessment process, the contractor and AML representative must consider any confined space work which may be necessary.

When excavating in contaminated ground there is the danger of a build-up of toxic and/or flammable gases or fumes in the excavations. This could result in explosion or asphyxiation and steps to avoid such a risk shall be taken.

Contractors are responsible for the supply of all safety equipment including all portable gas detection devices, escape breathing apparatus, harnesses and other escape equipment which must be in good order.

Contractors must be familiar with the system of clarification, the appropriate procedures that apply and follow and approved written safe system of work in order that danger both to themselves and others is avoided. A Permit to Enter will be required.

Contractors staff who enter a confined space must be formally trained to AML Standards detailed in the above engineering instructions and hold an up to date certificate of competence.

4.6 Working at heights

A safe working platform with secure edge protection, intermediate guard rails and safe means of access shall be installed wherever practicable. In instances where this cannot be achieved alternative arrangements must be made to prevent persons or materials falling to the ground.

Crawling boards and similar safety equipment shall be used on fragile roof surfaces.

It is mandatory that adequate control measures shall be included to ensure that tools or materials cannot fall, or barriers are to be erected to keep people away from areas where overhead work is being carried out.

The contractor shall ensure that fixed scaffolds and mobile scaffold towers comply fully with all statutory requirements before and during use.

4.7 Housekeeping

Housekeeping on sites must be maintained to the highest standard possible at all times. In particular, the storage of materials and site waste arisings must be managed efficiently in order that work may progress unimpeded. The contractor shall inspect the working site daily and take immediate appropriate action where unsatisfactory housekeeping conditions are apparent.

4.8 Waste arisings

The contractor shall be responsible for the safe disposal of waste arisings from construction activities under his management and for ensuring that disposal is carried out in accordance with the legislation relevant to the waste category involved.

Waste materials likely to present a hazard to site personnel shall be disposed of immediately in an appropriate manner.

The main contractor shall be responsible for any damage or contamination caused by waste on site and shall bear the full cost of any remedial measures that the responsible authorities or the AML representative may direct. **Drainage systems shall not be used for the disposal of liquid waste.**

The contractor shall ensure that all operations are carried out in accordance with best environmental practice in strict compliance with the Environmental Protection Act 1991.

4.9 Demolition

Before work commences the site must be surveyed by the contractor, a risk assessment, method statement and a safe method of working reviewed with the AML representative. The site of the demolition activity is to be enclosed by a close-boarded hoarding at least 2-4 metres high, or other means agreed with the AML representative.

Where the work is in or adjacent to operational areas, steps must be taken to minimise and contain the effects of smoke, dust, noise and vibration which may arise from the work. The contractor shall obtain prior approval from the AML representative of his proposed method of complying with this obligation.

Severe space restrictions will apply to most airport work sites and the contractor must arrange regular, possibly daily, removal of spoil. Redundant materials and debris to avoid dangerous accumulations or obstructions.

When specifying skips for the containment and removal of debris the contractor shall consult with the AML representative.

A copy of the demolition method statement shall be available ON SITE and all operatives must have received instruction of its content.

4.10 Skips

Closed skips shall be used airside and at all times where there is a risk of wind blown debris.

(5) Methods of work

- 5.1 *Permits to work and authorisations*
- 5.2 *Hot working*
- 5.3 *Site welding*
- 5.4 *Working in the vicinity of airport fire mains*
- 5.5 *Protection and maintenance of overhead and in ground services and mains*
- 5.6 *Working on or in the vicinity of aviation fuel mains within the airport*
- 5.7 *Working on or in the vicinity of high temperature hot water*
- 5.8 *Work on fire alarms*

5.1 Permits to work and authorisations

The contractor shall ensure that when working within the airport location, all permits to work or authorisations have been obtained from the AML representative for the type of work covered by the following:

- Protection and maintenance of services within the airport boundaries
- Working on HTHW systems
- Working in the vicinity of the airport fire mains
- Protection against fire
- Hot work permit
- Excavation and openings
- Confined spaces
- Electrical equipment (LV and HV)
- Airside Works Permits, where appropriate
- Fire alarm systems and/or sprinkler systems isolation

5.2 Hot working

Hot working includes any work involving naked flames, heat or sparks.

Prior to any hot work being carried out within the airport boundaries a hot work risk assessment shall be completed by the contractor.

On completion of the risk assessment a hot work permit can be requested by the contractor.

This permit will be requested from the authorising authority. On completion of the work the permit must be returned to the AML representative for cancellation.

If the operation is carried out in an external airside area, both a hot work permit and an airside works permit are required.

Any hot work required outside the airport boundaries shall be carried out as if within the airport boundaries, with the exception that it shall be the responsibility of the contractor to issue and cancel the hot work permit.

All operatives carrying out such work must hold in their possession a copy of the issued hot works permit.

5.3 Site welding (requirements other than hot works)

The contractor shall ensure that any welding operations are screened or carried out in such a way as to prevent the flashes from this process being seen by pilots in aircraft on the taxiways or adjacent parking aprons, and to protect other operatives and persons immediately adjacent to the operation, from the effects of arc eye.

On completion of any welding works the area must be carefully inspected by the contractor (for up to one hour) to ensure that the risk of secondary burning is eliminated.

Welders may be exempt from wearing high visibility jackets during the welding activity. However, if they are working airside and/or adjacent to plant or vehicles the contractor **MUST** provide other control measures to safeguard against injury risk from not being seen.

5.4 Working in the vicinity of airport fire mains

The contractor must comply with the requirements of the current AML engineering instruction “Procedures for Work on Fire Services Mains and Hydrants” when working on or near or where construction works may affect the fire main system at the airport.

5.5 Protection and maintenance of overhead and in-ground services and mains

There is a considerable network of underground/overhead services at the airport and particular care is necessary to avoid damage to or risk from overhead electricity and telephone lines, gas, water and fuel mains, drains and other services.

Local service clearance procedures must be followed for any proposed excavation works, in accordance with the current AML Engineering Instructions. A permit to excavate will also be necessary.

Services clearance should be sought from AML before any excavation is commenced.

All work within 3 metres of 11kv and 415v **MUST** be hand dug and where reasonably practicable the services must be isolated.

The employees at the workplace **MUST** be provided with a drawing or sketch together with a method statement for the work.

In the event of any damage to mains or services, the contractor shall immediately make the area safe and notify the AML representative and owner of the service.

Before commencing any excavations outside the airport boundaries, the contractor shall contact all service companies to establish the location of buried services. Such works as necessary shall be carried out in accordance with the relevant service companies procedures. Documentary evidence verifying the services clearances shall be made available to the AML representative upon request.

5.6 Working on or in the vicinity of aviation fuel mains within the airport

The contractor shall take note of all fuel mains and shall draw to the attention of all employees working on or adjacent to fuel mains containing petroleum products the absolute necessity of ensuring that rigorous safety standards are maintained at all times.

The contractor shall ensure that all persons are aware of and observe the appropriate airport bylaws.

When working on or next existing fuel mains, the contractor shall only work in accordance with a method statement and permit to work which is approved by both the AML representative and the relevant fuel company.

The authorisation of the AML representative and the owner of the fuel main must be obtained before any electrical equipment or internal combustion engine is used or any operations likely to produce sparks are carried out, while any fuel mains in the vicinity of the works carry product. If permission is given the contractor shall comply strictly with all safety regulations and any special restrictions imposed by the AML representative and the owner of the fuel main.

5.7 Working on or in the vicinity of high temperatures hot water (HTHW) systems

The contractor shall conform to the requirements of the current AML Engineering Instruction entitled "HTHW, MTHW and Steam Installations Permit to Work Procedures" when engaged in working on, near or where construction works affect the airport HTHW, MTHW or Steam Installations. All work must be carried out by competent persons.

5.8 Work on fire alarms

Before commencing work in an operational building the Contractor shall take note of the location of fire alarm devices and cabling. Where isolation of essential fire alarms is required then the Authorisation to Work shall be obtained.

Failure to follow the above mentioned working procedures on operational fire alarm systems could result in installation faults or isolation of parts of the installation which may be an offence under the Occupational Safety, Health and Welfare Act of 1988.

Working practice in the vicinity of operational fire alarm circuits (usually fire alarm cables have red outer sheath) must avoid risk of cutting, crushing or excessive pulling of these cables. Failure to put in place reasonably safe practices and methods to protect operational fire alarm circuits may violate Regulations. AML reserve the right to recover from the Contractor the cost of repair to damaged fire alarm systems arising from the Contractors work.

(6) Airside safety requirements

- 6.1 *Airport operational safety instructions*
- 6.2 *Protection and safety during flying operations*
- 6.3 *Airside accidents*

6.1 Airport operational safety instructions

The works shall be carried out strictly in accordance with all relevant airport operational safety instructions. Copies may be obtained from the AML representative.

The AML representative shall ensure that the contractor possesses a copy of all appropriate documents and shall obtain a signed receipt from the contractor.

6.2 Protection and safety during flying operations

Flying and ground movement of aircraft is likely to take place near most AML occupied buildings. The contractor shall comply with the instructions of the AML representative regarding movement of his lorries, constructional plant etc., so as to prevent interference with air or other traffic using the airport. Full compliance with all relevant Operational Safety Instructions is an absolute requirement.

In complying with the instructions of the AML representative regarding flying and traffic control arrangements the contractor shall provide flagmen and warning signs and operate schemes for the control of traffic or as may be required by the AML representative.

In addition to this the contractor's attention is drawn to the following hazards:

- **Vehicles** – Care shall be taken on airside roads as road marking are not always clear and routings may be changed. References shall be made to airport operational safety instructions.
- **Noise**- See protection against noise
- **Blast** – Contractors' employees shall be warned of the dangers of aircraft blast, particularly those working in close proximity to aircraft. The contractor shall take all necessary steps including posting of lookouts to prevent injury to his employees.
- **Visibility**- Additional caution shall be exercised in reduced visibility conditions. Special instructions for working in poor visibility are contained in airport operational safety instructions.
- **Litter**- Aircraft engines can suffer serious damage ingesting foreign objects, a problem know as foreign object damage (FOD). The contractor shall take all necessary measures to keep sites tidy and prevent rubbish and debris from blowing away. Reference shall be made to airport operational safety instructions.
- **Tabards**- Contractors' employees shall wear yellow tabards with retro-reflective content, at all times when working outside in airside areas. The Contractor shall conform to the requirements of the relevant airport safety notice on this subject.

- **Site Lighting-** The contractor shall ensure that any site lighting provided for works during hours of darkness will be positioned and directed so as not to represent any hazard to airfield operations. These matters require consultation and subsequent permission from the airfield planning department and AML representative.

6.3 Airside accidents

All airside accidents involving serious injury to personnel or any damage to aircraft, vehicles, plant (including loading bridges) and structures shall be reported to AML in the specified manner. Reference shall be made to airport operational safety instructions.

(7) Appendices

Appendix A Safety related documents

Appendix B Accident/incident report

Appendix C Contractor's Declaration

Appendix A

Safety Related Documents

The following list contains AML safety related documents which may be relevant to construction sites.

Title

- Apron Safety Manual
- Procedures for Airside works (General Conditions)
- Fuelling Procedures
- Airside Safety and Driving Code.

N.B. It is the duty of both the AML representative and the main contractor to ensure full adherence to the requirements contained in these documents.

Appendix B

Accident/incident report

Notwithstanding the provisions of OSHA 2005, this form must be completed by the contractor following a major incident on an AML project. It must be sent to the AML project manager within 24 hours of the major incident.

Day Date..... Time.....

Location (include project name)
.....
.....

Incident summary
.....
.....
.....
.....
.....

Details of injuries or damages (if known)
.....
.....
.....
.....

Action taken (include notifications made).....
.....
.....
.....
.....

Action planned (i.e. investigation by whom)
.....
.....
.....

Please attach a list of contact names and telephone numbers for the parties involved.

Signed **Date**

Print name **Telephone No**

Appendix C

Appendix C

Contractor's Declaration

The undersigned, being duly appointed by Airports of Mauritius Co Ltd ("AML") as a contractor to undertake.....

hereby undertakes, warrants and represents:

(A) that all contractors, employees of contractors and sub-contractors retained to perform work for AML shall at all material times duly comply with the duties incumbent upon a contractor and/or its agents, representatives, officers, staff, or *préposés*, as set out in the Occupational Safety and Health Act 2005 (OSHA 2005) & any Regulations made under this Act.

(B) that all such persons referred to in paragraph (A) shall also adhere to AML directives laid down in a booklet "*Health and Safety Requirements for Contractors*", more specifically to the following:

- a. Provide details of an effective safe work system.
- b. Ensure that all employees (including sub-contractors) have completed safety and health induction training before providing services.
- c. Submit records of such training as and when required.
- d. Be aware of the safety and health hazards and exposures inherent to their business process.
- e. Nominate a competent person to be responsible for co-ordinating risk assessments of all operations and establishing appropriate control measures.
- f. Copies of such risk assessment shall be made available to AML upon start of work.
- g. Report to the Manager any injury, dangerous occurrences or any near misses that is notifiable in accordance with the Occupational Safety and Health Act (OSHA 2005) occurring in the premises of AML/AML
- h. Allow Safety & Health representatives to periodically inspect his site, site offices and storage areas.
- i. Make sure that no contractor activities endanger other personnel on site.
- j. Provide all necessary equipment and tools, including Personal Protective Equipment, required for safe completion of required tasks. Ensure a budget for the provision and maintenance of such PPE.
- k. Accept that failure to comply with safety and health requirement, including failure to correct unsafe practices and conditions, are sufficient grounds for AML to require work stoppage or termination of the contract agreement.
- l. A copy of the AML "Health and Safety Requirements for Contractors" shall be in the possession of the contractor at any point in time.
- m. Comply with all legal requirements as laid in OSHA 2005 and Regulations made under it.

Declaration of Contractor

I hereby have read and understood the foregoing and by signing hereunder bind
..... in my capacity of authorised representative/signatory in relation to the
terms and conditions set out in the present declaration.

Signed by or on behalf of:

Name of authorised representative:.....

Capacity in which acting:.....

Date: