

DMCC Health, Safety and Environment (HSE) Industrial Manual

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1.0 INTRODUCTION

Most countries including the UAE have legislation relating to HSE and the protection of workers. It has become a fundamental responsibility of employers to ensure that workers are not harmed during the course of their employment. HSE management systems and programs are designed to cover permanent employees, any outsourced or contract workers, and members of the public (such as visitors and local communities) who may be impacted by a company's operations.

A preventative HSE culture can deliver substantial productivity benefits. These include reductions in injuries, illnesses and consequently sick days, insurance claims, premiums and regulatory fines, improvements in staff motivation and performance. By contrast, poor management of HSE has the potential to undermine a company's reputation and commercial performance. Most importantly, it directly increases the risk of work place injuries, illnesses and fatalities.

The requirements set out within this HSE manual identify and encompass the working behaviours and safe working practices that are mandatory for any industrial unit within the DMCC Free Zone.

The manual complies with the requirements set forth by the applicable local laws and regulations of Dubai and the United Arab Emirates. This document is live and will be monitored, measured and updated for continuous improvement.

1.1 Purpose

DMCC understands its moral and legal obligation to HSE, and its obligation to limit the impact of industrial works and operations on the environment. The purpose of this manual is to provide practical guidelines and a framework for all employers operating from industrial premises within DMCC Free Zone, thereby assisting their preparation for establishing and implementing systems for the management of HSE aspects of their commercial/work activities.

This manual will assist in improving the overall management and coordination of HSE to eliminate or reduce accidents, ill health and the occurrence of incidents detrimental to the environment.

This manual will also ensure that that all industrial activities are carried out in a manner that guarantees, as far as is reasonably practicable, the safety of employees, any risk to the general public and property damage, whilst minimising any adverse environmental effects which may arise.

The main objectives of this manual can be summarised as follows:

- Provide guidance and assistance for the implementation of a safe system of work for control of safety, and environmental issues in relation to industrial units located within the DMCC Free Zone.
- Ensure that industrial activities do not adversely impact the environment within the surrounding areas of the DMCC Free Zone.
- Work in compliance to DMCC Rules and Regulations, Dubai and UAE legislation and to establish industry best practice.
- To prevent accidents and personal injury arising out of, linked with or occurring in the course of industrial working activities. This is achieved by minimising, as far as is reasonably practicable, the causes of hazards inherent in the working environment.

2.0 INDUSTRIAL ACTIVITIES AND HSE RISKS

An industrial unit within the DMCC Free Zone is defined as, but not limited to any unit or factory which is involved with jewellery manufacturing, processing, refining and cutting, polishing etc.

These activities have specific types of HSE risks as outlined below, which are present in the diamond and gold jewellery supply chain:

Gold Processing and Refining

Gold metal processing and refining may expose workers to risks including:

- Molten metal, electro-magnetic radiation and other high temperature sources;
- Exposure to toxic chemicals including hydrochloric acid and chlorine fumes;
- Exposure to rotating plant and equipment such as pumps, crushers and dryers, and to mobile equipment.

Cutting and polishing

Cutting and polishing risks include dust inhalation, eye strain and poor posture leading to back and shoulder problems, long working hours and accidents with machinery.

Specific examples include:

- **Lack or misuse of personal protective equipment (PPE):** Goggles, rubber gloves, boots, respirators, and dust masks may all be needed at different stages of production;
- **Locked emergency exits:** Some factories have all their doors, including the emergency exit doors, locked. The main reason is to avoid theft and/or higher insurance premiums. This practice is a breach of Dubai Civil Defence (DCD) Regulations;
- **Unsanitary working conditions:** In polishing factories, large amounts of dust may be produced. Factories that do not have proper ventilation systems in place risk contributing to serious or fatal respiratory problems;
- **Exposure to chemicals:** There is often a lack of training on chemical substances and protective measures for workers.

Jewellery Manufacturing

Similar issues are associated with jewellery manufacturing, including PPE and emergency exits, toxic fumes and chemicals (for example, cadmium used in solders for gold manufacture or silica dust from the casting process), eye strain, lack of machinery safety, and unhealthy working conditions.

Trading, service industries and retail

General workplace risks apply to this part of the supply chain. These include, for example, slips and trips, manual handling, workstation ergonomics, basic hygiene or transport. More specifically, there can be risks from occupational overuse problems such as repetitive strain or eye strain from the handling of products.

3.0 COMMITMENTS AND RESPONSIBILITIES

This manual is aimed at ensuring that all DMCC licensees/ industrial unit owners/tenants (employers) identify all HSE hazards, risks and environmental impacts related to their activities within the DMCC Free Zone, prior to issuance of their license, during the renewal process and if a new activity is introduced to their operation. Once identified, these hazards, risks and environmental impacts are to be mitigated with appropriate control measures to suitably manage and prevent any incidents or accidents occurring. Employers remain legally responsible for conformance to all aspects of Dubai and UAE legislation and international industry best practices in respect of ensuring the health and safety of all employees, visitors, members of the public, and adjacent buildings or property that may be effected from their activities.

Each employee is responsible for his own health and safety and for the people around him. It is therefore of paramount importance that each employee fully understands all HSE Rules and Standards and specifically those HSE Rules and Standards relevant to the work they perform.

3.1 Responsibilities of the Employer

All industrial units shall have and demonstrate a suitable and sufficiently documented HSE Plan, sufficient to the scope of their work incorporating Dubai and UAE legal requirements, DMCC Rules and Regulations and this HSE Manual, which shall be applied from the date of commencement of, and for the duration of their work. The HSE Plan shall be approved by a DMCC approved consultant and submitted to DMCC Property on request. Employers shall be responsible to ensure compliance with the HSE Plan.

Employers shall take the necessary steps to ensure cooperation between all other parties to enable each of those parties to comply with the provisions of the HSE Plan. Employers shall ensure that a copy of the plan is to be available on request to any consultant, employee, inspector, sub - contractor, DMCC or any other authorities on request.

Every employer shall ensure that a health and safety file; which shall include all documentation required in terms of the provisions of this requirement, is opened and kept on the premises and made available to a consultant, Inspector, DMCC or any other relevant authority upon request.

Employers shall maintain HSE standards and systems as necessary to comply with Dubai and UAE legal requirements, DMCC Rules and Regulations, this HSE Manual and any other requirements set out by DMCC from time to time.

Employers shall appoint competent safety and first aid staff or a certified third party safety consultant approved by DMCC in line with the requirements set out within this manual, Dubai and UAE legal requirements. Employers will provide adequate employee training as is required to enable employees to carry out their tasks which may include suspension of any work which is deemed a hazard to people or property. Employees must be made aware of existing or potential dangers to health and safety from work activities and provide written instructions regarding the protection measures that need to be taken.

Employers will ensure their employees work in a manner specified by Dubai and UAE legal requirements ensuring the use of personnel protective devices designed for their safety are in use at all times. The employer must take all precautions necessary to protect the employees from any occupational illness and conduct periodic medical examinations to ensure workers are not effected by their work activities.

3.2 Responsibilities of the Employee

Employees will take all reasonable steps to eliminate or minimise risk to themselves and to others from the use of chemicals in their work place. Employees should take care of their own health and safety and that of other individuals who may be affected by their acts or omissions in the workplace, as far as possible and in accordance with their training and with instructions given by their employer. Employees should make proper use of all devices provided for their protection or the protection of others and should immediately report to their supervisor, any situation which they believe could present a risk, and which they cannot properly deal with themselves. Each employee will agree to undertake a medical examination to screen for occupational illness which could be caused by the work activities.

3.3 Responsibilities of the HSE representative

The employer must appoint an individual to co-ordinate the management of health and safety for their organisation. This individual (or individuals in some cases) is referred to as a competent person.

It is up to the individual with overall responsibility for health and safety (the employer) to arrange for the appointment of a competent person who shall act primarily as health and safety co-ordinator within the workplace. However, appointment of this competent person does not remove any potential liability that may arise for directors, senior management and board members or line management who retain direct responsibility for managing health and safety in respect of their work activities.

The competent person may have any one of a variety of titles e.g. safety manager, safety advisor, safety officer etc. The competent person maybe internal or hired through an external safety consultant who have been approved by DMCC.

Important considerations

The role of the competent person may vary from organisation to organisation with some having a high level of control and accountability, to others where the safety officer has a monitoring role and no more. In many organisations, particularly small enterprises the internally appointed competent person will also have the support of external sources of expertise to assist them with fulfilling the competence needs.

Examples of Functions

Some examples of typical functions which could be assigned are:

- Carrying out regular hazard inspections and reporting the findings to senior management
- Organising safety audits and advising on safety management systems
- Identifying training needs of employees, identifying appropriate training courses, as well as additional competence requirements
- Advising management of action which needs to be taken to reduce occupational risks
- Keeping records of examinations, tests, inspections, accidents, including illnesses, and dangerous occurrences, emergency exercises
- Increasing safety awareness within the company by regular staff and management briefings
- Ensuring safety procedures are in place and being followed by employees
- Investigating accidents, occupational illnesses and dangerous occurrences
- Building up an information base which will allow the company to keep abreast of health and safety requirements and to ensure that all appropriate information is passed on to employees
- Participating in and ensuring that an effective consultation mechanism is maintained within the organisation for health and safety
- Liaising with DMCC and other authorities on health and safety issues

A competent person is defined as:

“Having regard to the task he is required to perform and taking account of the size or hazards of an undertaking or establishment in which he undertakes work, the individual possesses sufficient training, experience and knowledge appropriate to the nature of the work to be undertaken”.

There is no one course available that ensures competency of an individual to be the competent person for an organisation. For a low risk environment an individual without any background in health and safety would require as an absolute minimum a basic training course that includes common hazards, safety management and ideally a Nebosh certificate.

For higher risk environments an accredited Diploma in Safety & Health at Work is required. Specialists and high risk activities may require additional qualifications or training in the specialist field relevant to the tasks involved.

4.0 HSE LEGAL REQUIREMENTS

This HSE Manual sets out the principle rules and regulations applicable within the DMCC Free Zone. Although these regulations apply to all those involved in industrial activities there are other mandates, laws and regulations that will also have application. This manual must be read in conjunction with those other mandates, laws and regulations, amended or introduced from time to time:-

Those mandates, laws and regulations as a minimum will include but not be limited to:

- Federal Law 08 1980
- Federal Law 24 1999
- Ministerial Order 32 1982
- Cabinet Resolution 37 2001
- Local Order 61 1991
- Local Order 11 2003
- Dubai Municipality Codes of Practice
- Dubai Municipality Technical Guidelines
- UAE Civil Defence Fire and Life Code

4.1 Certificates / NOCs

Prior to conducting industrial operations and for the purpose of Industrial Annual Fitness Certificate (IAOFC) inspections necessary for the DMCC licence, other Authority approvals/NOCs are required.

Those NOCs as a minimum will include but not be limited to:

- Dubai Civil Defence Certificate
- Dubai Municipality Environmental NOC / Permit

Employers will require DMCC NOCs for certain activities.

Those activities as a minimum will include but not be limited to:

- Night Works
- Storage of Hazardous Substances
- Use of Hazardous Substances

5.0 HEALTH, SAFETY AND ENVIRONMENTAL PLAN

The HSE Plan is a legally required document which must be submitted to DMCC for review, on request, and once approved by a DMCC approved consultant. The HSE Plan is a specific document and it is required to be developed and tailored to contain the relevant work activity related information, HSE management issues, policy, arrangements, control measures and an overall safe system of work for performing the industrial activities in a healthy, safe and environmentally friendly manner. The HSE Plan must align with the guidance set-out within this manual and in accordance with Dubai and UAE legislation.

It must include details associated with, but not necessarily limited to the following:-

5.1 Company Information

The information as a minimum will include but not be limited to:

- The company name and company licence number of reference
- The company contact information
- HSE Plan version and date of issue
- Signatures of the reviewer and approver
- Name of DMCC liaison officer and contact Information
- Consultant name and contact Information (if required)

5.2 Company Description

This section of the HSE Plan should include a brief overview about the scope of work

This section of the HSE Plan should include information regarding the following:

- Location
- Scope
- Working hours
- Overall and planned activities
- Environmental baseline
- NOCs, Permits and Licenses required

5.3 Objectives and targets

The HSE Plan will show the HSE targets which have been set out by the employer and his management. These objectives should be 'SMART' and related to the scope of work.

5.4 Roles and responsibilities of personnel

The HSE Plan should give a detailed outline of key personnel whilst defining clearly their responsibilities. The HSE Plan must be updated in accordance with any changes in the workplace. The relevant roles may include but not be limited to:

- Managing Director
- General Manager
- Individual in Charge
- HSE Personnel
- Supervisors
- Male Nurse/First Aiders
- Fire Arrangements
- Fire Marshalls
- Fire Training

5.5 HSE management

- Policy and management commitment
- HSE arrangements
- Environmental commitments
- Promotion and motivation
- Safe work practices and procedures
- Safe systems of work and permits
- Machinery and equipment
- Work place audits and inspections
- Emergency response
- Training
- Meetings
- Accident/incident investigation and lesson learned
- Risk management and mitigation controls
- Statistical reporting, recording and trend analysis
- Occupational health and medical provisions
- Fire and fire prevention
- Environmental impacts and waste management
- Storage, transport and handling of dangerous substances

6.0 HEALTH AND SAFETY REQUIREMENTS

Employers must at all times be aware of not only their legal obligations but also of their moral obligation and duty to preserve life and to keep their workplace accident/incident free. This can be easily done by managing HSE, implementing safe systems of work and by providing information, instruction and training to the workforce.

DMCC reminds all employers of their legal duty to comply with all Dubai and UAE legislation, DMCC Rules and Regulations and the conditions set out within this manual.

6.1 Safe Working Practices

Employers shall establish and implement their methods for maintaining safe working practices and safe systems of work for performing their activities in the work place. This can be achieved through various plans, procedures, permits or safe systems of work depending on the activity.

Safe working procedures can be submitted within the HSE Plan.

Typical examples of activities that require safe systems of work are listed, but not limited to the below:

- Fire Safety
- Emergency Response
- Electrical Safety
- Safe use of Gas
- Hot works
- PPE
- Management of Substances Hazardous to Health
- Machinery and Equipment

6.2 Machinery and Equipment

6.2.1 General

Employers shall ensure all items of machinery and equipment necessary to perform the work are maintained and in good order.

All third party inspections of machinery and equipment will be undertaken as required by an inspection body approved by DMCC.

DMCC and their nominated representative reserves the right to inspect items of machinery and equipment brought into the work place by the employer. Should any DMCC employee or their representative form the opinion that any item is inadequate, faulty, unsafe or in any other way unsuitable for the safe and satisfactory execution of the work for which it is intended, they shall advise the employer, who shall immediately remove the item and replace it with a safe and adequate substitute.

Employers shall ensure that all machinery, equipment, power and hand tools brought into the workplace are:

- Appropriate for the type of work to be performed
- Approved, inspected, tested, numbered and tagged (if appropriate) in accordance with HSE statutory regulations and DMCC requirements, before importation into the workplace
- Properly maintained in accordance with manufacturer's recommendations/preventative maintenance scheme
- Fitted with appropriate guards and have clear signs for safe use
- Placed on register and checked at least monthly and or more frequently as required

6.2.2 Registers

Employers shall be expected to:

- Set up an initial set of registers
- Complete the register for each piece of machinery, tools and equipment brought into the workplace
- Maintain a complete, continuous and comprehensive inspection and service history in these registers
- Ensure regular inspections are conducted and recorded for all tools and equipment by a competent person
- Have a suitable and sufficient colour code system in place to allow for monitoring

6.2.3 Extraction / Scrubbers

- Industrial units should have individual scrubber units connected to the centralised system for the use of hazardous chemicals and as an exhaust for any furnace.
- Local exhaust is prohibited. All units should be connected to the buildings centralised exhaust system.
- The employer must periodically carry out maintenance on the scrubbers so they are fully operational at all times.
- All individual scrubber systems should have a chemical dosing system which should be properly checked and maintained by the employer.
- The maintenance records should be kept within the unit for inspection at any time by DMCC or any other authority.
- Flexible or non-fire rated pipe, connecting the exhaust of the furnace to the buildings centralised exhaust system is strictly prohibited.
- All exhaust pipe connections should be of a high density pipe type and fire rated when used for connecting the furnace/individual scrubber to buildings centralised exhaust system.
- All exhaust pipe connections to buildings centralised exhaust system should not be more than 1.5m.
- All the exhaust fans above the ceiling should be checked and maintained every quarter with the power to the exhaust being switched on twenty four (24) hours a day
- The Buildings fresh air system should not be closed.

6.3 Access and Egress

Employers must implement necessary precautions to allow for safe access and egress for employees and visitors. Machinery must not come into unnecessary contact with individuals. Access and egress must be defined by clear signs and segregation. Emergency routes must be identified and kept clear at all times. All access and egress points must be kept free of rubbish, waste and stored items with suitable and sufficient illumination and warnings of entrances and exits. All emergency doors shall not be locked at any time. Common areas shall be free of rubbish, waste, stored material and be kept in an acceptable condition at all times.

6.4 Work place Signs

Employers will provide the necessary signs in English, Arabic and in the most common language used by employees to warn of the potential workplace hazards and to prevent accidents. Signs must conform to international standards, Dubai and UAE legislation and contain distinctive colours which shall be used to identify different hazards.

6.5 Electrical Safety

The employer will take the necessary steps to prevent hazards and risks through any electrical works or equipment. All individuals working with electrical equipment shall wear suitable and sufficient personal protective equipment (PPE) to eliminate the risk from shock or burns. Training shall be given to individuals working near electricity in the use of suitable fire extinguishers, no water should be around electricity works at any time. Prior to maintenance operations the electrical current shall be disconnected using a lockout tag-out system.

All electrical appliances being used in industrial units should be inspected by a competent person. Equipment shall be tagged with an inspection tag and colour coded if the equipment is deemed fit for use. Any equipment which does not display the inspection tag or colour code should be immediately removed. Electrical wires shall be suitably managed to protect them from damage and any defective or corroded wires should be immediately replaced. The electrical circuit shall not be overloaded as this may result in the risk of fire.

Necessary protective devices such as earth leakage circuit breakers, must be provided in the electrical circuit to avoid shocks and all fuses and circuit breakers in panels clearly marked. All requirements of electrical installation and safety regarding machines, equipment and electrical apparatus being used shall be applied in the form of a safe working procedure, produced by the employer with suitable and sufficient risk assessment for individual electrical works.

6.6 Personal Protective Equipment (PPE)

Personal protective equipment (PPE) refers to protective clothing and other garments such as gloves, protective footwear, helmets, goggles and ear plugs, all of which are designed to protect individuals from exposure to job related occupational hazards.

PPE is mandatory where the risk to health and safety has not been adequately controlled by all other means in the hierarchy of hazard control.

All employers shall assess and identify the processes requiring a specific type of PPE in accordance with statutory requirements.

To be effective, PPE must be;

- Appropriate for the risks and hazards involved and the conditions where the exposure to the risk may occur.
- Take account of ergonomic requirements and the state of health of the individual who has to wear it.
- Be capable of fitting the wearer correctly after adjustment.
- Be effective in preventing or adequately controlling the risks without increasing the overall risk.

The following is the mandatory PPE that must be used:

- Face mask, apron, gloves and goggles when working with chemicals.
- Steel toed footwear.
- Gloves suitable for the task.
- Coveralls.
- Eye protection when working with machinery

Employers shall establish the requirements of various types and use of PPE for safe execution of the activities and ensure that an adequate supply of PPE must be made available for employee requirements. Adequate stock levels must be maintained. Employees must be trained on the proper use, care and maintenance of PPE. Signs should be posted in the workplace wherever it is necessary to use PPE. These signs serve as a useful reminder to workers of the kind of PPE that should be used.

6.7 Hot Works

Hot work processes have been identified as tasks creating a variety of hazards in the workplace.

Employers will develop and implement a safe working procedure and provide guidelines on the minimum standards to be adopted to manage the level of risk and to ensure compliance to Dubai and UAE legislation. This includes the documenting of specific controls to be implemented to minimize the risk of electrocution, fire and explosions.

Only qualified, suitably trained and approved personnel shall carry out hot work.

If there is a potential for the outbreak of fire, consideration should be given to the use of a firewatcher. Fully operational fire extinguishers shall be accessible within easy reach of the hot work area. Equipment must be inspected before use and shall be in good condition

Hot work shall not be carried out without appropriate PPE. I.e. face shield, safety glasses, gloves, apron, long sleeve shirt and long trousers. Good ventilation in the work area is of primary importance for the safe performance of this type of work.

6.8 Hazardous Substances

Employers shall not carry out any task liable to expose any of its workers to hazardous substances unless a suitable and sufficient assessment of the risks and mitigating steps are taken to meet HSE regulatory requirements. Control measures by engineering methods such as scrubber systems connected to the buildings exhaust ventilation and the use of appropriate PPE are to be implemented. Health surveillance and monitoring for employees working directly with hazardous chemicals must be undertaken periodically by the employee.

It is the responsibility of the employer to comply with all Dubai and UAE legal Requirements, DMCC Rules and Regulations and the conditions set out within this manual, in order to assure safety in the use of chemicals at work.

The major focus of such measures which provide for safety of employees are, in particular:

- The handling of hazardous chemicals
- The storage of hazardous chemicals
- The transport of hazardous chemicals, consistent with all Dubai and UAE legal Requirements
- The disposal and treatment of hazardous chemicals and hazardous waste products, consistent with Dubai and UAE legislation

When receiving chemicals from suppliers, employers should ensure that such chemicals have been classified and:

- Such chemicals are marked
- Hazardous chemicals are labelled
- Chemical safety data sheets for hazardous chemicals are provided
- Stored ,Secured and Transported Properly

If employees are potentially exposed to chemicals that are hazardous to health, they must be safeguarded against the risk of injury or disease from these chemicals. There should be no exposure which exceeds international exposure limits or other exposure criteria for the evaluation and control of the working environment, established by DMCC or any other authority, or by a body approved or recognized by DMCC or any other authority in accordance with Dubai and UAE legislation and/or international standards.

Control measures to provide protection for employees could be any combination of the following:

Good design and installation practice:

- Totally enclosed process and handling systems

- Segregation of the hazardous process from the operators or from other processes
- Plant processes or work systems which minimize generation of, or suppress or contain, hazardous dust, fumes, etc., and which limit the area of contamination in the event of spills and leaks
- Partial enclosure, with maintained scrubber systems connected to the buildings exhaust system
- Sufficient general ventilation

Work systems and practices:

- Reduction of the numbers of employees exposed and exclusion of non-essential access
- Reduction in the period of exposure to workers
- Regular cleaning of contaminated walls, surfaces, etc
- Use and proper maintenance of engineering control measures
- Provision of means for safe storage and disposal of chemicals hazardous to health
- Personal protection (where the above measures do not suffice, suitable PPE should be provided until such time as the risk is eliminated or minimized to a level that would not pose a threat to health)
- Prohibition of eating, chewing, drinking and smoking in contaminated areas
- Use of signs and notices
- Adequate arrangements in the event of an emergency
- Chemicals known to have carcinogenic, mutagenic or teratogenic health effects should be kept under strict control

6.8.1 Material Safety Data Sheets (MSDS)

A material safety data sheet (MSDS) is a document that gives detailed information about the nature of a chemical, such as its physical and chemical properties, health, safety, fire and environmental hazards of a chemical product.

In addition to giving information about the nature of a chemical, an MSDS also indicates how to work safely with a chemical and what to do if there is an accidental spill. All hazardous substances shall be received and transported with an accompanying MSDS from the vendor. A register of all relevant MSDS shall be maintained and kept up to date. The MSDS shall be available with the chemical in the workplace and understood by the employees using the substances.

MSDS are designed for:

- Employees who may be exposed to hazardous materials
- Emergency personnel (for example, firefighters), who may have to clean up a spill or release.

MSDS must contain the same basic kinds of information, such as

Chemical Identity:

- Name of the product
- Manufacturer's Information: Name, address, phone number and emergency phone number of the manufacturer
- Hazardous Ingredients/Identity Information.
- Since chemicals are often known by different names, all common (trade) names should be listed
- The Permissible Exposure Limit (PEL) for each hazardous ingredient must be listed.
- Physical/Chemical Characteristics: Boiling point, vapor pressure and density, melting point, evaporation rate, etc
- Fire and Explosion Hazard Data: Flash point, flammability limits, ways to extinguish, special firefighting procedures, unusual fire and explosion hazards
- Reactivity Data: How certain materials react with others when mixed or stored together

- Health Hazard Data: Health effects (acute= immediate; chronic= long-term), ways the hazard can enter the body (lungs, skin or mouth), symptoms of exposure, emergency and first aid procedures
- Precautions of Safe Handling and Use: What to do in case materials spill or leak, how to dispose of waste safely, how to handle and store materials in a safe manner
- Control Measures: Ventilation, type of respirator/filter to use, protective gloves, clothing and equipment, etc
- At your workplace: All employees must have easy access to them
- The employer must request them from the distributor that sold the materials; workers can also request them

6.8.2 Storage and handling

All handlers of hazardous substances shall be trained on the safe handling, storing, transport and use as well as the disposal and containment procedure in the event of an accidental spill.

Hazardous materials and waste are required to be stored in a manner that reduces the risk of worker exposure, spills, fires, or explosions. A safe working procedure and hazardous substances assessment must be completed by the employer.

A hazardous substance storage facility is to be placed on site and is to be controlled by a competent individual, lockable and ventilated.

6.8.3 Record Keeping

Record keeping is an essential element of the work practices which provide a safe use of chemicals.

Records should be kept by employers on measurements of airborne hazardous chemicals.

Such records should be clearly marked by date, work area and plant location.

The following are some elements which deals with record-keeping requirements.

- Personal sampling measurements, including the exposures calculated, should be recorded.
- The employees and the competent authority, should have access to these records.

Besides the numerical results of measurements, the monitoring data should include, for example:

- The marking of the hazardous chemical
- The location, nature, dimensions and other distinctive features of the workplace where static measurements were made; the exact location at which personal monitoring measurements were made, and the names and job titles of the workers involved
- The source or sources of airborne emissions, their location and the type of work and operations being performed during sampling
- Relevant information on the functioning of the process, engineering controls, ventilation and weather conditions with respect to the emissions
- The sampling instrument used, its accessories and the method of analysis
- The date and exact time of sampling
- The duration of the workers' exposure, the use or non-use of respiratory protection and other comments relating to the exposure evaluation
- The names of the individuals responsible for the sampling and for the analytical determinations.

Records should be kept for a specified period of time but no less than five years.

6.8.4 Information and Training

Correct instruction and quality training are essential components of a successful hazard communication programme.

These include the following:

- Employees should be informed of the hazards associated with chemicals used at their workplace
- Employees should be instructed about how to obtain and use the information provided on labels and chemical safety data sheets
- Employees should be trained in the correct and effective use of the control measures, in particular the engineering control measures and measures for personal protection provided, and should be made aware of their significance
- Employers should use chemical safety data sheets, along with information specific to the workplace, as a basis for the preparation of instruction to employees, which should be in writing if appropriate
- Employees should be trained on a continuing basis in the working systems and practices to be followed and their significance for safety in the use of chemicals at work, and in how to deal with emergencies

The extent of the training and instruction received and required should be reviewed and updated simultaneously with the review of the working systems and practices.

The review should include the examination of:

- Whether employees understand when protective equipment is required, and its limitations
- Whether employees understand the most effective use of the engineering control measures provided
- Whether employees are familiar with procedures in the event of an emergency involving a hazardous chemical
- Procedures for the exchange of information between shift workers.

6.9 Manual Handling

Gloves are to be worn when handling materials manually. Prior to handling any object an inspection must be undertaken to decide how it will be grasped or tied and how to avoid hot surfaces, sharp edges and splinters.

Employers will train their employees in the use of lifting equipment and notify them of the hazards of slipping, rolling, falling and pinching. Furthermore, a qualified individual must be present during any lifts, to not only ensure proper preparation and safe execution, but also clear communication with the operators of the lifting equipment.

7.0 FIRE PREVENTION, PROTECTION AND CONTROL

The employer shall proactively organize and manage his work place at all times to prevent the risk of fire so far as is reasonably practicable.

The employers' fire prevention program must be in place for the workplace and fire safety awareness shall be cultivated among employees. Fire safety training shall be conducted. Fire detection and alarm systems must be installed in specific areas within the buildings and should not be tampered with or modified without prior approval from Dubai Civil Defence. Fire detection systems should be periodically inspected by a Dubai Civil Defence approved third party and kept well maintained at all times.

Fire points shall be established and equipped with fire extinguishers. These shall be clearly marked. This critical equipment shall be tested on a regular basis and subjected to regular preventive maintenance system checks to ensure that the system remain fully operational at all times.

The correct use of fire protection equipment shall be explained to employees as part of the induction program along with fire safety rules and regulations.

Emergency response teams shall be formed and trained to handle emergencies. The employer is responsible for establishing and monitoring appropriate fire prevention and protection, personnel escape and emergency response arrangements in the workplace.

Fire protection / prevention systems shall include designation of fire marshals for each industrial unit.

Drills shall be conducted on a regular basis in order to test the efficiency of the emergency response plan and to familiarise employees with emergency escape routes and procedures.

General Fire Prevention Measures:

- Procedures which are to be followed when fire occurs, shall be written in Arabic language, English language and other most common language on site, and shall be displayed at entrances and exits, and near telephone sets. These procedures shall include important telephone numbers and details on how to evacuate the building correctly
- Employees shall be designated and trained on what they shall do in case of a fire in the work place
- Regular training on basic measures in respect of firefighting shall be provided to all employees in the workplace as is required by Dubai Civil Defence. This will ensure that employees are able to operate and use firefighting equipment correctly
- All employees shall be trained on steps to be taken should an emergency occur, how to safely evacuate the building and the location of the assembly points
- Smoking is prohibited and signs are to be placed in areas around the workplace
- Locking of fire doors at any time is prohibited
- All routes and passageways shall be maintained free of any obstacles
- If a fire occurs the employer must report it to DMCC as per the reporting procedure in this manual
- The employer must produce a report highlighting the root cause and corrective and preventive actions which must be submitted to DMCC in the event of any fire occurring

8.0 OCCUPATIONAL HEALTH AND WELFARE

Employers shall establish an adequately equipped facility for the treatment of minor injuries and provide primary care for more seriously injured personnel until emergency transportation arrives.

The medical emergency response plan shall be described in the HSE plan, and shall be displayed in the workplace and informed to all personnel. Employers will complete regular drills for emergency response which are relevant to their works.

Employers will ensure that all personnel have completed occupational health screening as required by Local Order (61) of 1991 in an approved Dubai Municipality clinic and will have their cards available at all times.

Employers will provide health and welfare facilities/services aimed at ensuring that workers do not have their health put at risk as a result of the conditions under which they are required to work. This will include matters such as temperature in the workplace, ventilation, lighting, toilets, washing facilities, change rooms, mess rooms, halls, pest control, etc.

Workplace environmental and health hazards shall be identified and risks assessed.

The employer shall ensure that all personnel assigned within the industrial units to carry out works shall be medically fit.

Employers shall provide access to adequate on-site health and medical facilities, including clearly marked first aid provisions and trained first-aid personnel, and have appropriate procedures in place for transportation to local medical facilities in the case of a medical emergency.

Employers must consider making educational materials on personal health and wellbeing available to employees

9.0 EMERGENCY EVACUATION PLAN

An emergency evacuation plan that encompasses the requirements of DMCC and other local authorities must be included in the HSE Plan and should be displayed within the unit, and understood by employees. It should clearly highlight points of exit, emergency contact details and the identity first aiders. The procedures by which individuals within the building will egress during emergency situations should also be described in detail. An assembly point must also be identified on a plan and be part of the emergency evacuation procedure.

Formal evacuation events shall be notified to the DMCC HSE, prior to the events taking place. Consideration for personal situations which may affect an individual's ability to evacuate must be taken into account, including alarm signals that use both aural and visual alerts, and also evacuation equipment such as sleds, pads, and chairs for non-ambulatory people. Proper planning will implement an all-hazards approach so that plans can be reused for multiple hazards that may exist.

The Emergency evacuation plan should be documented and tested in the form of drills. Emergency drills must be conducted periodically and DMCC will witness emergency drills when required. Evacuation plans to respond to these emergencies should be documented and tested on a quarterly basis.

Knowledge gained from tests or actual incidents should be used to review and improve emergency procedures.

Concerns about product theft during emergency drills can be addressed by planning drills in advance and holding them after all product has been safely secured.

Evacuation routes and exits should be prominently displayed.

Emergency exits and evacuation routes must comply with Dubai Civil Defence requirements.

The sequence of an evacuation can be divided into the following phases:

1. detection
2. decision
3. alarm
4. reaction
5. movement to an assembly point

10.0 RISK MANAGEMENT

The employer shall identify hazards and potentially hazardous work operations.

For each work operation identified involving a previously identified hazard, the employer shall conduct a risk assessment, which shall:

- Describe the operation to be performed in the sequence of the basic job steps;
- Identify the hazard or potential hazard; and
- Describe how the hazard shall be managed.

During the period of the works, the employer or the employee may identify additional hazardous operations.

For each such newly identified hazardous operation, the employer shall prepare a revised risk assessment as described above. The risk assessment should be in line with method of work activities.

10.1 Job Specific Hazards

The employer will identify specific job-related hazards, including hazardous materials and prepare emergency plans and standard operating procedures applicable to the work being undertaken. The employer will make all reasonable efforts to ensure that the information provided is complete and correct.

10.2 Risk Assessment

Every employer performing industrial activities shall before the commencement and during any work activities, ensure a risk assessment is performed by a competent individual.

The risk assessment shall form part of the health and safety plan to be applied in the work place and shall include at least:

- The identification of the risks and hazards to which individuals may be exposed to;
- The analysis and evaluation of the risks and hazards identified;
- A documented plan of safe work procedures to mitigate, reduce or control the risks and hazards that have been identified;
- A monitoring plan; and
- A review plan.

The employer shall ensure that a copy of the risk assessment is available on site for inspection by an employee, DMCC and any other relevant local authorities. The employer shall ensure that all employees under their control are informed, instructed and trained by a competent individual regarding any hazard and the related work procedures before any work commences, and thereafter at such times as may be determined in the risk assessment.

The employer shall ensure that all personnel are informed regarding any hazard as stipulated in the risk assessment before any work commences, and thereafter at such times as may be determined in the risk assessment.

No employer shall allow or permit any employee or individual to enter the work place, unless such employee or individual has undergone health and safety induction training pertaining to the hazards prevalent in the work place at the time of entry. The employer shall ensure that all visitors undergo such health and safety inductions whilst also being provided with the necessary PPE.

11.0 ACCIDENT / INCIDENT INVESTIGATION AND REPORTING

Reporting of injuries and dangerous occurrences:

- Reporting accidents and ill health at work is a legal requirement.
- This information enables the employer to identify where and how risks arise and to investigate serious accidents.
- The employer should inform DMCC immediately and submit a detailed accident report for all incidents, as per the DMCC incident investigation and reporting procedure.

11.1 Definitions

Major incident

An incident, including a security incident, involving any of the following:

- Fatality or permanent total disability
- Multiple permanent partial disabilities
- Extensive damages
- Serious impact on company reputation
- Extensive adverse attention
- Environmental incidents with significant negative impact
- Significant adverse reactions from other authorities, media or the general public

Dangerous Occurrence HIPO

A Dangerous Occurrence HIPO is a high potential near miss occurrence that under slightly different circumstances could easily have resulted in a major incident.

Serious Incident

An incident, including a security incident, involving any of but not limited to the following:

Serious Injury

- Medical treatment within 48hrs of exposure to a substance
- Immediate medical treatment as an inpatient in hospital
- Loss of distinct part or organ body, incl. amputation
- Loss of consciousness and/or requiring resuscitation
- Serious head injury
- Serious eye injury, incl. temporary loss of sight
- Separation of skin from any underlying tissue, such scalping or de-gloving
- Electric shock
- Spinal injury
- Fracture other than to fingers, thumbs or toes
- Employee being absent for more than 6 days
- Second or third degree burns
- Inhalation, ingestion or skin absorption endangering health
- Substantial damages - cost of damage exceeding AED 500,000 /-

Dangerous Occurrence

An incident without injury or damage which involves any of but not limited to the following:

- Explosion or fire
- Collapse of equipment
- Machinery damage
- Collapse of a building / structure
- Escape / leakage of flammable substances
- Escape / leakage of hazardous substances
- Electrical contact
- Struck by (falling/flying object, moving machinery)
- Caught between (moving parts of machinery/objects)

Significant Incidents

An incident, including a security incident, involving any of but not limited to the following:

- Fracture of the fingers, thumbs or toes
- Any injury resulting in work restriction
- Significant damages costing above AED 100,000 /-
- Minor impact on company reputation
- External medical attention for more than 24 hours
- Reportable environmental incidents
- Reactions from other authorities or the general public

Minor Incidents

A recordable incident, including a security incident, involving any of but not limited to the following:

- Minor injuries which can't be treated by first aid
- Any near miss
- Damages in excess of AED 10,000 /-
- External medical attention for less than 24 hours
- Recordable environmental incidents

Slight Incidents

A recordable incident, involving any of but not limited to the following:

- First aid treatment
- Damages in excess of AED 1,000 /-
- Any other recordable occurrence

11.2 Incident Classification

| Categories | HARM TO PEOPLE | ASSETS DAMAGE | NEAR MISS |
|-------------|---|--|--|
| Level | | | |
| Major | Fatality or permanent total disability multiple permanent disabilities | Extensive damages - in excess of 2,000,000 AED | Hi Po dangerous occurrence with potential of: major harm or loss catastrophic impact on reputation extensive adverse attention |
| Serious | Single permanent partial disability Lost time incident (LTI) | Substantial loss in excess of 500,000 AED Any incident related to serious occurrences | Dangerous occurrence with potential of: Serious harm or loss |
| Significant | Restricted work case | Substantial loss in excess of 100,000 AED | Occurrence with potential of: Significant harm or loss |
| Minor | Medical treatment case | Damages in excess of 10,000 AED | Occurrence with reasonable potential of: reportable harm or loss |
| Slight | First aid case | Damages in excess of 1000 AED | Any other occurrence |

11.3 Notification and Communication Process

| Time frame | Immediate | Within 24 hours | Within 3 days | Within 10 days | Monthly Reporting |
|-------------|---|--|--|--|----------------------------|
| Level | | | | | |
| Major | Reportable notification to DMCC by phone 04 4232999 | Notification report | Investigation report and review meeting with DMCC | Updated report and action plan | Monthly statistical report |
| Serious | Reportable notification to DMCC by phone 04 4232999 | Notification report and first aid report | Investigation report and medical certificate | Updated report, action plan and review meeting with DMCC | Monthly statistical report |
| Significant | Reportable notification to DMCC by phone 04 4232999 | Notification report and first aid report | Investigation report. Medical certificate | Action plan and meeting upon request by DMCC | Monthly statistical report |
| Minor | Recordable report on request | Notification report on request | Investigation report. Medical certificate on request | | Monthly statistical report |
| Slight | Recordable report on request | To be recorded | To be kept on record | | Monthly statistical report |

Further contact details for any non-emergency are: email ccc.jlt@dmcc.ae, HSE@dmcc.ae or phone 04 4232999

11.4 Sharing Lessons Learned

Sharing key findings and lessons learned with a wider audience is fundamental in order to allow other industrial units/personnel to avoid similar accidents by taking targeted action.

The employer will submit a report containing details of the lesson learned to DMCC within 7 days of the incident investigation completion.

With a brief description of:

- What happened and the actual/potential loss
- Key contributing factors/critical factors
- Direct and system causes
- Corrective actions
- Key lessons learned

12.0 SAFETY WARNINGS, NOTICES AND FINES

DMCC has a process for warnings and violations for HSE issues within the DMCC Free Zone. If a HSE violation occurs a warning with financial penalty may occur.

If an employer's HSE performance is unacceptable to DMCC, a formal warning system will be used.

The warning system is as follows:

- 1) Step One - Observations issued by DMCC from an inspection with potential fine for serious breaches
- 2) Step Two - Improvement notice and financial penalty
- 3) Step Three - Prohibition notice and financial penalty
- 4) Step Four - Termination of licence

A total of three (3) HSE warnings in any twelve month period will result in further sanctions being implemented by DMCC.

Should any failure to adhere to prescribed standards be discovered during any HSE inspection, the employer responsible for the deficiencies will be notified verbally at the time and sent a HSE violation notice within 3 days of the inspection taking place.

Should the HSE report issued from DMCC not be addressed and responded to within 7 days, the employer will face a financial penalty and improvement notice.

DMCC will complete a repeat inspection within two weeks after issuing the HSE report if the second inspection reveals the same repeated observations, a prohibition notice and further financial penalty will be issued. If a prohibition notice is issued no work can continue until all fines are paid, the work place has been rectified to a suitable safe condition and the prohibition notice officially lifted by DMCC.

Once a fine is issued payment must be made in the time frame given in order to avoid further action which may result in termination of the licence. No fine that has been issued will be rescinded or reduced by DMCC. The fine tariff is contained within this manual.

13.0 MONITORING AND PERFORMANCE MEASUREMENT

13.1 HSE System Implementation

The level of compliance to this manual will be measured through audits and inspections, both internal, conducted by the employer and externally by DMCC or its nominated representative as is required. Specific audits will be conducted to measure the effectiveness of the employers' HSE program and compliance with this manual.

Action plans must be developed by the employer based on audit and inspection findings highlighting the detailed steps required for corrective and preventive actions. Actions will be tracked and monitored via an action tracking registry.

All HSE statistical reports including key issues/highlights must be reported to DMCC without fail on a monthly basis.

13.2 Industrial Annual Fitness Certificate Inspections (IAOFC)

The Process of Industrial Annual Operation Fitness Certification (IAOFC) ensures that each company operating from any industrial facility within DMCC Free Zone complies with all the requirements set forth by Dubai and UAE HSE Regulations. IAOFC Inspection Request forms shall require to be submitted prior to the start of any operations/activities carried out in an industrial facility.

IAOFC Inspections will be carried out bi-annually by the DMCC nominated representative. Employers should provide the nominated representative unrestricted access to their units to undertake these inspections. Industrial facilities who fail to pass the IAOFC inspection will not be able to renew their DMCC licence. Industrial units who fail to meet the requirements set out by the IAOFC Inspection and/or fail to allow the inspections to be undertaken shall have their DMCC licences will be suspended

13.3 Inspections by DMCC

DMCC may at any time, in its absolute discretion, enter all industrial premises within the DMCC Free Zone for the purposes of conducting a HSE inspection of the unit to investigate whether the unit is in compliance with DMCC requirements and any other applicable Dubai and UAE Laws.

All employers or their representatives shall on demand provide the DMCC with immediate access to their Premises so that DMCC may undertake an IAOFC Inspection.

An employer, or its representative, shall not in any way restrict or hinder DMCC access to the unit. On completion of an inspection DMCC will issue a report which must be addressed and closed out by the employer in the time frame stipulated by the report to avoid further action being taken by DMCC.

13.4 HSE Performance, Measurements, Statistics and Charts

Incident counts and frequency rates must be monitored, measured and reported to DMCC on a monthly basis. As a minimum, the employer shall include in the monthly report the following HSE performance statistics for the month. The monthly report must be submitted to DMCC without fail within 4 days of the next month.

- Man hours
- Man power
- Reportable incidents
- Work days lost due to incidents
- Recordable incidents
- Lost workday cases, restricted workday injuries and medical treatment case
- All fires and explosions
- Property damage
- Dangerous occurrences
- Near-miss incidents
- Any unusual incident that needs to be reported to protect DMCC from adverse publicity
- Lost time incident (LTI) frequency rate
- Number of inductions, tool box talks, training, drills
- HSE meetings
- Inspections and audits
- Number of observations and enforcements
- Waste management

14.0 ENVIRONMENTAL REQUIREMENTS

The employer is responsible for compliance to all Dubai and UAE Environmental regulations and any requirements set out by DMCC from time to time.

DMCC believe strongly in the following actions:

- Reuse
- Reduce
- Recycle
- Treatment
- Disposal

14.1 Environmental Protection

All employers are required to produce an environmental plan. This environmental plan shall cover environmental impacts such as control of industrial activities, definitions of all environmental aspects related to the industrial activities highlighted in the environmental impact assessment (EIA), or which can have significant environmental impact, and for which it is required to take adequate protective and preventive action, in line with Federal Environmental Laws of the UAE.

The plan will reflect the findings for industrial activities and include but not be limited to the following contents:

- Spill prevention and response
- Waste management
- Indoor air quality
- Noise and vibration control
- Environmental protection training
- Environmental monitoring

14.2 Environmental Monitoring

There are a number of specific environmental issues to be considered during any industrial works:

- Noise and Vibrations
- Atmospheric pollution
- Control of potential spills
- Energy Management
- Waste Management
- Housekeeping

14.3 Noise and Vibrations

The general objective for the management of potential environmental impacts in respect of noise and vibration shall be to control and limit noise and vibration levels from industrial activities at their source. This can be achieved by the use of best practicable means (BPM) (e.g. by careful selection of machinery & equipment, maintenance and location of that machinery & equipment, use of noise barriers/screening), ensuring compliance with Dubai and UAE legislation and municipal/local noise limits and through the work place environmental impact assessment.

Noise shall be controlled in accordance with the employer's procedure and with an environmental monitoring and mitigation plan in line with the relevant legislative requirements.

14.4 Atmospheric Pollution

During industrial activities, consideration is to be given in respect of atmospheric pollution which involves any potential nuisance within industrial units and the release of air pollutants associated with aerial emissions. The general objective for the management of potential impacts in respect of atmospheric pollution shall be to carry out the works, so far as is reasonably practicable, to minimize emissions to the air from pollutants, including odour, in accordance with Dubai and UAE legislation and by the use of best practicable means.

To avoid the creation of any nuisance, the employer will take all reasonable steps to avoid the creation of pollution by fitting a scrubber system within each industrial unit. All industrial units are required to undertake periodic air quality testing as required by DMCC or any other applicable authority, to monitor indoor air quality. The records are to be kept within the unit and be available for review during any inspection, a log of air quality testing is to be kept up to date and submitted to DMCC during the licence renewal process.

14.5 Compressed Gasses

Liquid Petroleum Gas (LPG) cylinders are prohibited inside industrial units.

The following are to be followed when working with compressed gas cylinders:

- Compressed gas cylinders are to be secured within a protection cage in an upright position at all times, except for short periods when being carried or hoisted.
- Compressed gas cylinders shall be stored / located to avoid exposure to sparks, hot slag, or flames. If these cannot be avoided, fire-resistant shields must be provided.
- Compressed gas cylinders must not be used as, or placed where they may become part of an electrical circuit.
- Compressed gas cylinders must be stored separately when both empty and full and within in a separate cage.
- Cylinders must be stored in well-protected, ventilated, dry locations from highly combustible materials, and away from egress routes such as stairways and elevators.
- All compressed gas cylinders must be secured correctly during use and storage. Securing shall be around the body of the cylinder, midway between top and bottom. Securing around the cylinder neck or by its cap is prohibited.
- Empty cylinders must be removed immediately from the work area.

The valves of compressed gas cylinders must be completely closed when not in use.

Compressed gas cylinders must not be transported with the gauges attached. The gauges shall be removed from the cylinders and protective caps installed during any long transportation.

14.6 Control of Potential Spills

The employer must have an emergency spill kit available, which contains the following:

- Oil/chemical absorbent material (mats, booms, sand etc.)
- Hand or electric pump
- Chemical resistant gloves
- Chemical resistant overalls
- Chemical resistant calf length boots
- Chemical resistant face shield
- Respirators with cartridges suitable for chemical mist
- Hazard warning tape

14.7 Energy Management

The employer will consider energy management issues as an on-going part of his responsibilities. Wherever possible, efficient use of energy shall be encouraged through appropriate instruction and training of personnel.

Portable electrical equipment shall conform to Dubai and USE legislation with respect to efficiency and testing.

14.8 Waste Management

The purpose of waste management is to ensure that:

- Disposal of waste is conducted in a safe and environmentally friendly manner
- All options are considered to minimize, eliminate, prevent and reuse waste materials
- Method of disposal is suitable and sufficient for the waste generated

The correct identification, segregation and storage of waste is fundamental to proper waste management in order to identify which of the waste disposal options is best suited to the waste generated by the operation undertaken. Employers are responsible for the management and disposal of its waste following the instructions detailed below.

Potential sources of waste generation are:

- General industrial activities
- Provision and maintenance of mess halls
- Workshops
- Materials store

Identification, segregation and storage of waste

The employer is responsible for the correct management of waste, dangerous and other, produced by them in line with Dubai and UAE legislation. All the documentation relating to the management of waste, from the copy of the transport/disposal authorizations to that testifying that disposal has taken place, must always be available in the work place.

All the costs related to a correct final disposal of the waste generated during the activities will be at the employers charge.

The employer must maintain the work place for which he is responsible. It must be kept clean and tidy and must set aside a special area, segregated and made impermeable, for the separation and differentiated collection of waste, complete with appropriate labelled containers. The employer must also organize waste disposal activities in such a manner that they comply with the time and management conditions dictated by DMCC, Dubai and UAE legislation.

The correct identification segregation and storage of waste prior to disposal is essential to ensure that the most suitable method of disposal is selected. Waste classification (non-hazardous, domestic and municipal, hazardous waste) will be in accordance with the Dubai and UAE legislation:

14.8.1 Garbage and Solid Waste

Garbage

This includes wood, plastic, paper, food waste, packaging materials, etc. These wastes must be collected in different containers: one for plastic and metal, one for wood, one for glass, and one for the other ones.

All garbage must be placed in general waste collection bins located at the specific points around to facilitate material re-use and recycling to their maximum extent.

Collection of garbage, at high generation points, must be on a daily basis.

All garbage waste must be transported to dump site or recycling site.

Hazardous waste

The hazardous waste must be transported to an authorized dump site, maintaining a documented Manifest.

Drums and containers

This includes metal and plastic containers, crates and packaging. Metal and plastic containers, used for a wide range of chemicals, can present problems for storage and disposal as they accumulate.

All chemical drums and containers (empty or part full), must be segregated and stored in a special designed storage area.

All drums and containers must be securely closed to avoid any possible leakage of variable quantities of residues.

If transfer of materials is necessary, steps must be taken to identify the contents and any associated handling hazards, the suitable protective equipment that must be worn and precautions taken to minimize the risk.

Non-refillable containers must be returned to the supplier. Where this is impracticable, arrangements will have to be made for suitable disposal.

14.9 Housekeeping

The objective of pursuing good housekeeping is to:

- Minimize personnel injury hazards and fire hazards
- Conserve space, time, materials and effort
- Create and maintain good working conditions
- Protect the environment

General

It is essential that all materials and equipment be kept in an orderly and safe manner. This applies equally to stores, work areas and offices.

All surfaces outside or inside the industrial units area must be kept free from litter, refuse, spills of chemicals or other liquids which might cause slipping, or constitute a fire hazard.

Walkways and staircases must be kept free from obstructions at all times.

Trash

Trash containers must be placed at the areas designated in the work place. The containers must be collected, loaded and removed regularly.

Any hazardous material waste must be removed as quickly as possible. A specific Plan will cover the proper disposal of wastes of all kind. (Waste management plan)

Food

All food waste, empty drink cans etc. must be disposed in the correct containers / bins provided for this purpose. Collection of such waste from the work place must be done daily. Under no circumstances will food waste be permitted to accumulate so as to pose a health hazard or nuisance.

Paper recycling

Used paper disposal must be deposited in special containers /bins designated for recycling purposes.

The employer will prepare a procedure for housekeeping and recycling.

15.0 CORRESPONDENCE AND COMMUNICATION

All correspondence relating to industrial HSE issues should be addressed to:

- HSE Dept. hse@dmcc.ae or call 04 3602758
- Security Ccc.jlt@dmcc.ae - Emergency 04 4232999 - Non Emergency 04 4232995

All written correspondence must be accompanied with a cover letter addressed to the Executive Director of Property.

16.0 DMCC FREE ZONE - INDUSTRIAL HSE FINE TARIFF

| Description of Violation | | Maximum Fine AED |
|--------------------------|---|------------------|
| 1 | Fatality/Major Incident/Environmental Incident/Hi PO Dangerous Occurrence/Major Property Damage | 250,000 |
| 2 | Serious Injury/Incident/Environmental Incident/Dangerous Occurrence/Property Damage | 200,000 |
| 3 | Significant Injury/Incident/Environmental Incident/Dangerous Occurrence/Property Damage | 150,000 |
| 4 | Minor Injury/Incident/Environmental Incident/Near Miss/Property Damage | 100,000 |
| 5 | Failure to report a Major/Serious Incident/Dangerous Occurrence/Property Damage | 100,000 |
| 6 | Undertaking works without valid Permits or NOCs | 100,000 |
| 7 | Repeated breaches of DMCC and other Regulatory HSE Requirements/Regulations | 100,000 |
| 8 | Fire Incidents/Actions that may result in a Fire or compromise Fire Management systems | 100,000 |
| 9 | Failure to meet the requirements or follow a Prohibition Notice in the time frame assigned | 100,000 |
| 10 | Repeated Incidents of the same nature | 75,000 |
| 11 | Failure to Investigate and report any Incident in the given time frame | 75,000 |
| 12 | Failure to meet the requirements or follow an Improvement Notice in the time frame assigned | 75,000 |
| 13 | Failure to comply with DMCC and other Regulatory HSE Requirements/Regulations | 75,000 |
| 14 | Breach of NOC/licencing terms and Conditions | 75,000 |
| 15 | Failure to Provide suitable and sufficient occupational health and welfare facilities/screening | 75,000 |
| 16 | Failure to provide a safe working environment | 75,000 |
| 17 | Failure to use or certify, equipment and machinery | 75,000 |
| 18 | Failure to control hazards which have the potential to cause occupational disease or illness | 75,000 |
| 19 | Failure to action observations highlighted through Inspections in the given time frame | 50,000 |
| 20 | Failure to implement waste management and removal by a competent company | 50,000 |
| 21 | Failure to implement a suitable and sufficient a HSE Plan | 50,000 |
| 22 | Failure to implement periodic air and water testing | 50,000 |
| 23 | Failure to supervise works | 50,000 |
| 24 | Allowing lone working | 50,000 |
| 25 | Failure to promote HSE awareness | 50,000 |
| 26 | Failure to submit monthly HSE reports in the given time frame | 50,000 |
| 27 | Insufficient housekeeping and waste management | 50,000 |
| 28 | Failure to manage the use of chemicals within the building | 50,000 |
| 29 | Using LPG inside the building | 50,000 |

| Description of Violation | | Maximum Fine AED |
|--------------------------|---|------------------|
| 30 | Failure to implement a suitable and sufficient emergency response | 50,000 |
| 31 | Failure to submit equipment certificates to DMCC | 25,000 |
| 32 | Failure to notify DMCC of emergency drills | 25,000 |
| 33 | Failure to control vapours, noise and vibrations | 25,000 |
| 34 | Failure to undertake HSE training and inductions | 25,000 |
| 35 | Failure to clean up spills | 25,000 |
| 36 | Working without suitable and sufficient risk assessments | 25,000 |
| 37 | Failure to carry out inspections | 25,000 |
| 38 | Failure to control/store compressed gas | 25,000 |
| 39 | Working outside designated hours | 25,000 |
| 40 | Failure to implement and follow safe systems of work | 25,000 |
| 41 | Failure to inspect and tag equipment safe for use | 25,000 |
| 42 | Carrying out external modifications without approval | 25,000 |
| 43 | Carrying out internal modifications without approval | 25,000 |
| 44 | Failure to inspect firefighting equipment in the given time frame | 25,000 |
| 45 | Repeated failure to wear PPE | 25,000 |

This list is indicative and not exhaustive. DMCC reserves the right to amend the Industrial related Fine Tariff as appropriate from time to time. Last updated - 31st October 2016.