ALGHANIM INDUSTRIES FACILITIES

ENVIRONMENT, HEALTH & SAFETY POLICY

Committed to Excellence

INDEX

1. ALGHANIM INDUSTRIES EHS STATEMENT

Alghanim Industries' Environment, Health and Safety (EHS) Policy and Management System are our commitment to:

- Develop, implement and manage Environmental, Health and Safety policies and work processes at all Alghanim Industries facilities.
- Provide a safe and healthy work place and environment, to avoid injury or damage to our employees, contractors, visitors and the public, the environment and company assets.
- Comply with applicable EHS regulatory requirements at each location
- Audit EHS activities at regular intervals at each facility to monitor its effective implementation and to take corrective actions, wherever required
- Create a proactive EHS culture through awareness, training and motivation, to achieve continual improvement in EHS performance.

2. SCOPE & STRUCTURE

2.1 Scope of EHS POLICY:

- Establish an environment, health and safety (EHS) policy and management system for all Alghanim Industries facilities across the world.
- The EHS Policy Will be an integral part of the Way We Do Our Business
- The policy will apply to all employees, contractors, visitors and the public.
- Monitor and measure environmental, health and safety performance KPI's regularly. To implement a system to achieve continual improvement.
- Provide formal job training to each employee so they will:
  - Know their responsibilities
  - Have proper tools and resources
  - Measure what they are doing.
  - Take corrective action on unsafe acts or conditions.

- Each business unit may introduce additional EHS policies where relevant, to meet their business\industry\legislation\statutory standards.

2.2 EHS Policy & Management Systems –Basis

Will be based on:

- **Management Systems**
- **Performance Requirements/ KPIs**
- **Statutory/Regulatory framework**
- **Industries Requirements**

2.3 EHS Policy & Management Systems—Structure

Will be structured along following lines:

- **EHS Policy Statement**
- **Scope & Structure**
- **A. EHS Management System**
- **B. EHS Standards**
- **C. Standard Work Practices**
- **D. Safe Work Procedures**

A. EHS MANAGEMENT SYSTEM

3. ORGANISATIONAL MANAGEMENT

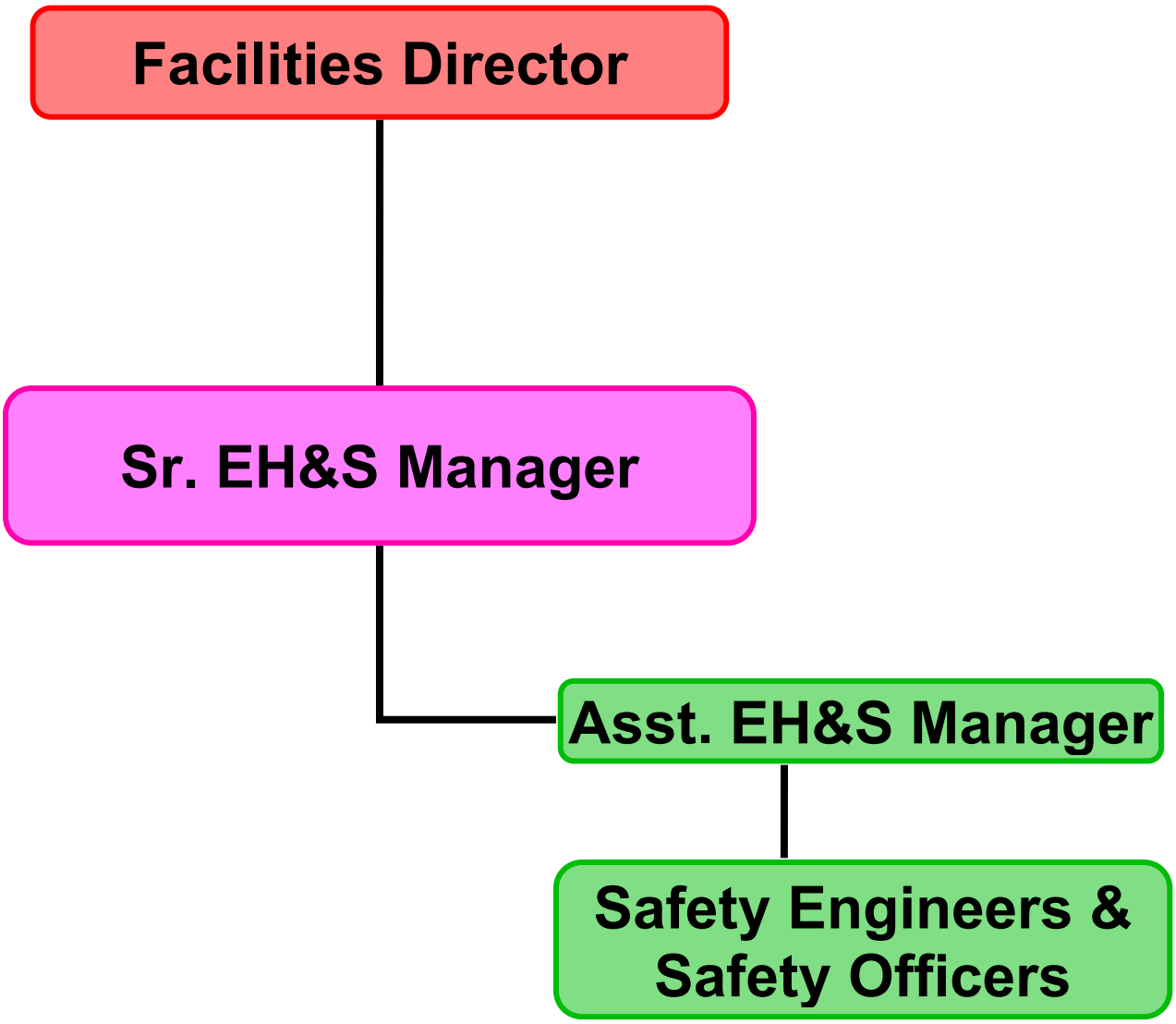
3.1 Management Team Responsibilities

- **Facilities Director, Alghanim Industries** will have final corporate responsibility for:
  - The sign -off on EHS policy
  - Accountable for the implementation of policy in business units at all locations.

- **Sr. EHS Manager** will have the responsibility to ensure the implementation of the Business Unit EHS policy through Facilities Manager and Business Units.

  He will report directly to the Facilities Director.

3.2 Organisation Structure



3.3 Responsibilities of Facilities & Safety Manager

Reporting to the Director of Facilities that he is responsible to maintain, update and implement the EHS POLICY including:

- Promote safety awareness and ensure adequate measures are taken to minimise hazards.
- Ensure that each employee carries out his duties and responsibilities in accordance with the EHS POLICY.
- Be the Emergency Co-ordinator.
- Monitor the facilities operations to ensure they are conducted in accordance with the facilities EHS POLICY .He will take urgent and appropriate action to prevent unsafe working practices or other infringements to the EHS policy.
- Ensure that all work instructions are prepared and issued for safe operations.
- Conduct audits to ensure compliance with legal, contractual and EHS policy requirements.
- Report the findings to the Facilities Director and EHS Committee and recommend what measure, if any are required to be taken as a result of the inspection.
- Determine the cause of any accident or dangerous occurrence and recommend means of preventing recurrence. For serious accidents he will form part of the accident investigation team
- Supervise the recording and analysis of information on injuries, damage and loss, assess accident trends and review overall safety performances.
- Implement health and safety training programs.
- Prepare and update Emergency and other Safety Procedures in conjunction with the Facilities management.
- Check all Work Procedures and Method Statements before they are issued to ensure that safety aspects of the operations covered are in accordance with the requirements of the Facilities Safety Plan
- Keep contact with relevant EHS government officials and professional bodies.

- Attend and participate in the Facilities EHS Management meetings.
- Prepare and submit to the Facilities Director a weekly EHS report on or before the last working day of every week
- Report and record accidents in the Quarterly Accident Report and submit to Ministry of Social Affairs – Occupational Health and Safety Department.
- Maintain safety signs at suitable locations on which will be displayed safety posters, hazard communication and other relevant information.
- Issue Non-conformance Reports for serious irregularities observed in facilities.
- Ensure that all contractors comply with the EHS POLICY.
- Review the health and safety conditions every 6 months to ensure that they adequately cover facilities and where necessary carry out risk assessments and develop further appropriate actions to control those risks.
- Monitor all operations being carried out in the areas under direct control to ensure that they are carried out in the facilities in accordance with both the EHS POLICY and relevant Safety procedures.
- Ensure that periodic tests, inspections and maintenance on facilities Fire Safety equipment are carried out.

3.4 Responsibilities of Maintenance Team

- Carry out regular team talks to ensure that all employees are aware of EHS policy, the hazards associated with the job & the preventative measures to be taken and the required Personal Protective Equipment to be utilised.
- Support the EHS team and provide resources to implement EHS policy

3.5 Responsibilities of Employees:

All personnel will familiarise themselves with the EHS POLICY and implement the policy in their workplace diligently including:

- Take responsibility for all EHS issues within their workplace

- Familiarise themselves with their workplace and safety procedures.
- Work in a manner that does not endanger themselves or others.
- Keep their work area tidy
- Report all injuries and illnesses.
- Protect fellow workers from injury
- Report unsafe acts conditions and incidents to their immediate supervisors.
- Make suggestions to improve EHS areas to the EHS Officer /Manager.

4. COMMUNICATION

Establish an effective communication strategy on EHS throughout the organisation:

- To disseminate relevant EHS information to reach all employees, such that they are made aware of all developments and their responsibilities in EHS policy management.
- Effective forms of communication include:
  - Safety meetings.
  - Audit feedback - A process for feedback to employees of the outcomes of any corrective action identified during an audit.
  - Formal Networks, and sub committees are established to address, challenge and share safety experiences across Alghanim Industries.
  - External Networks, with external authorities and agencies, e.g. Safety organisations, environmental groups.
  - Significant Safety Occurrences occurring within Alghanim Industries is communicated to all sites. All sites to treat as if the incident occurred at their site and ensure the corrective actions are applied.

5. PROMOTIONAL SCHEMES

- A variety of techniques will be adopted, such as poster campaigns, the distribution of health and safety information sheets, DVD/CDs, newsletters and bulletins, to promote EHS policy and create awareness throughout the facilities.

- All ALGHANIM INDUSTRIES employees will be informed and encouraged to actively participate in EHS Programs.

- EHS Suggestion Program will be implemented and on a periodical basis the author of the best suggestion that can be implemented and as decided by the Management team, will be rewarded.
- Outstanding Health and Safety related performances by employees, will appropriately be rewarded and awarded certificates, e.g. Safety Man of the Month.

- Health and Safety Posters, Slogans, Banners, Videos, Facilities

EHS Alerts and Bulletins will be utilised to promote the EHS message with the aim to continually upgrade the employees' awareness.

6. INDUCTION & TRAINING

6.1 Objectives

To ensure that all employees will carry out all job related activities in the safest possible manner.
It is the company policy and Commitment to provide the necessary guidance, equipment and safe working environment to every employee to allow him/her to carry out his work in the safest manner. The employee will familiarise himself with the Company's EHS policy.

6.2 Responsibilities

In terms of the legal requirements, the company is responsible to identify job-related hazards and to take the necessary steps to make all employees aware of these hazards.

All employees will attend scheduled Company EHS Training programs and induction programs as required, to meet the company's commitment towards Health and Safety.

The company recognises that the provision of adequate health and safety information for all levels of personnel makes a vital contribution towards an efficient accident prevention program. Hence a suitably structured schedule of information and training is to be adopted at all facilities.

All personnel including contractors will undergo induction training prior to commencing work.

6.3 Training

6.3.1 Induction and Orientation

To introduce an induction training program for new employees to equip them with the required knowledge and awareness of EHS policies and its implementation.

A continuous training program for employees will be initiated to update and improve their Skills, to enable personal development, to improve their skills and ability, thereby helping the drive towards a safer working environment.

All employees will receive safety training pertaining to the work or task they are expected to perform.

Records will be maintained of all personnel trained, inducted and instructed in Safety. The EHS POLICY department will conduct induction training to all new

employees including contractors, before they are allowed to start work in the facilities on the following:

- Health and safety Rules
- General Facilities Rules
- Employees Safety Responsibilities
- Familiarising with the hazards associated with their respective jobs.
- Familiarising with standards and Safe Work Practices and Procedures.
- Emergency and Fire evacuation procedures.

An attendance register will be kept of all persons attending induction training sessions.

6.3.2 Safety & Risk Management Training

- Facilities & Facilities & Safety Manager will assess the requirements for the safety training to improve safety awareness.
- New staff and those requiring refresher courses will be trained in-house or externally as indicated in the training requirements.
- Contractors staff will be included as required.
- Employees will be trained in first aid and fire fighting and evacuation drill.
- Records will be kept of all training done.
- Educating each individual will stimulate an awareness of hazards around them and also make them conscious of what is expected of them regarding Health and Safety matters.
- All managers and employees will give clear instructions of the work in hand to personnel for whom they are responsible, to ensure that all operations are undertaken safely and without risk to health.
- Contractors will ensure that their respective managers and engineers are competent, experienced and adequately trained to do their duties effectively.
- Management and supervisors will be trained in safety and Risk management.

6.3.3 Training Need Analysis

Any special training needs will be identified, listed and suitable training will be provided.

Facilities management will ensure that all equipment operators are certified competent and issued with an identification.

6.3.4 Course Certification / Competency Certification

- All employees successfully completing safety courses will be awarded with a certificate.
- Electrical workers holding valid certificates only will repair, install, commission, inspect, or repair electrical equipment and installations.

7. EHS AUDITS & REPORTING

The objective is to Implement a systematic EHS audit system measuring regulatory and program compliance of facilities.

Audit Committee —will consist of Facilities & Safety Manager, Safety Staff and Facilities Supervisor

Audits will be conducted every six months and reports generated and distributed to business units, highlighting findings and actions required.

The report will be submitted to Director Operations and Business Unit General Manager though respective facilities supervisor

Besides regular audits, Facilities & Safety Manager will provide in -depth examination of all operations in the facilities.

All businesses must adopt a systematic approach to ensure that the required regulatory inspections are conducted.

All businesses must adopt a systematic approach to bring about and reinforcing

Employee safe work behaviour through:

- Safe Act Observations - Behavioural audits conducted at all levels.
- Tiered Audits - Cross section of people auditing to coach one another and to engage people in the process of auditing.
- Focussed Audit - An audit focusing on a safety system or an issue.
- Technical Safety Audit - Where subject and technical experts conduct formal audits and reviews, e.g. gas safety.
- Housekeeping - Each facility will have a set of housekeeping requirements against which the workplace in regularly audited.
- Job Procedures Checks – Review of the documented safety critical procedure against the actual work practice.
- The target audit frequency rate is that every employee participates in conducting one of the above audits at least once per quarter.

7.1 EHS Violation Systems

A system will be introduced for recording all EHS violations and ensuring that corrective actions are taken and documented.

B. EHS STANDARDS

8. ENVIRONMENTAL POLICY AND MANAGEMENT

Alghanim Industries EHS Policy and Management System wrt environment will focus on:

- Prevention of pollution of water bodies.
- Preservation of flora and fauna around the facilities.
- Cleanliness of the facilities at all times.
- Protection of material, facilities and equipment for avoidance of dust and fumes in storage
- Consideration of noise levels.
- Control and management of potential marine and water pollutants.
- Disposal of hazardous substances and empty containers etc.
- Control of dust by water spray.
- Controlling noise
- Disposal of waste and sewerage through municipality sewerage system.

8.1 Environmental Awareness Program

To include within the induction process a presentation and discussion on the implementation of environmental management
A continuous, measurable process will be implemented to ensure all employees / contractor comply with environmental issues.

8.2. Waste Management Program

8.2.1 Domestic waste

Covered, tip proof metal drums will be provided at the office, workshop and other areas where required. All waste will be removed at frequent intervals to a local authority waste facilities. An on-going anti-litter campaign involving all employees and contractors will be implemented in the facilities and offices. Waste will not be burnt in the facilities premises.

8.2.2 Non-hazardous waste

This will be segregated into the following:--steel, wood, glass and cardboard/paper.

8.2.3 Hazardous waste

Suitable arrangements for disposing hazardous waste materials will include:

- Installing sewage treatment facilities and providing adequate drainage.
- Monitoring facilities conditions daily.
- Arranging removal of hazardous waste materials.
- Ensuring by audits, checks & inspections that waste material removed from facilities is reaching the landfill area or incineration facilities and is not dumped wrongly thereby causing environmental damage.

8.2.4 Liquid and sewage disposal

Will be disposed by an approved contractor complying with legal municipality rules

8.3 Noise Exposure

The statutory and contractual obligations with regard to noise will be followed and noise prevention/reduction procedures will be included in the EHS Management policy.

Regular noise level surveys will be carried out and recorded in a noise survey register.

Protection against the effects of noise exposure will be provided when the sound levels exceed those in the Table.

DURATION PER DAY	SOUND LEVEL
8 hrs	85 dBA
6 hrs	92 dBA
4 hrs	95 dBA
3 hrs	97 dBA
2 hrs	100 dBA
1 hr	105 dBA
30 min	110 dBA
15 min	115 dBA

When employees are subjected to sound levels exceeding those listed, feasible engineering controls will be utilised. If such controls fail to reduce sound levels within the levels listed, then personal protective equipment will be provided.
Exposure to impulsive or impact noise will not exceed 140-dBA peak sound pressure level.

8.4 Illumination

Illumination will not be less than the minimum illumination intensities listed.

AREA OF OPERATION	LUX
Facilities & workshops, living quarters & toilets	100
Offices	400

External area lighting will be sufficient for men and vehicles to move about safely.

8.5 Ventilation

Whenever hazardous substances such as dust, fumes, mist, vapours or gases exist or are produced , their concentrations will not exceed the legal limits.

When ventilation is used as an engineering control method, the system will be installed and operated according to the facilities requirements.
Exhaust ventilation will be designed to prevent dust, fumes, mist, vapours and gases being dispersed into air in concentrations causing harmful exposure and will be drawn out from the work area of employees.

8.5.1 Dust

Whenever any employee is exposed to airborne dust , special precautions will be taken to eliminate the exposure, this includes dust from any cutting or drilling operation. Protective/prevention measures will be taken in areas surrounding facilities to reduce/remove dust pollution.

8.5.2 Pollution

Measures will be taken to control and mitigate any adverse impact on the environment caused by pollution.

8.6 Environmental Controls

8.6.1 Storm-water / Runoff Control

Storm-water / runoff originating from areas with no potential to pollute surface or ground water will be allowed to run off facilities. All runoff from workshop equipment servicing and fuelling areas will be treated to minimise the risk of pollution.

8.6.2 Facilities Effluents

All facilities effluents will be suitably treated to legally required standards, to prevent surface and groundwater pollution. Effluents will be analysed every three months to confirm compliance with the relevant statutory standards.

8.6.3 Spill procedure

In the event of a fuel spill the following steps will be taken:
- Isolate and correct the cause of the spill
- Contain the spill with whatever means are available
- Take steps to eliminate any fire hazard arising and evacuate non-essential persons

9 HEALTH POLICIES AND MANAGEMENT

9.1 Objectives

All significant Health hazards and risks are to be identified, assessed and managed, together with ongoing monitoring .The local Regulatory requirements are also to be understood and complied with.

Maintain an organisational framework that will provide an effective response in an emergency situation.

Provide a list of actions, and assign and authorise personnel responsible for taking specific responsibilities in an emergency.

9.2 Medical & Health.

9.2.1 Policy Objective

To maintain an able and healthy workforce through available in medical facilities and 24-hour emergency paramedic and ambulance services. To provide medical examination and treatment as required ensuring the health and safe working ability of all employees.

9.2.2 First Aid and Rescue

A medical facility equipped with emergency kits will be maintained along with ambulance and full time medical personnel. First aid boxes at various locations throughout its facilities will be kept.

9.2.3 Medical Fitness for work

Candidates recruited to join the company must appear for and pass a medical health check up. Personnel must appear for pre-employment medical examinations, and where necessary company may conduct additional medical checks following the arrival of new employees in the country. Continuing fitness for work of all staff will be regularly monitored and any persons suffering from chronic disease or ill health will be kept under surveillance.

9.3 Occupational Health & Hygiene

9.3.1 Health & Hygiene

Adequate drinking water will be provided. Suitable coveralls, gloves and other personal protective equipment will be supplied without charge as designated by EHS/Production Manager. A satisfactory level of health and hygiene for all employees will be maintained in office, facility and I company provided housing.

9.3.2 Cleaning & Housekeeping

All efforts will be made to keep work areas clean and clear of obstructions.

Housekeeping inspections will be included in all safety and routine inspections by management staff.

9.3.3 Emergency Preparedness Procedures

To facilitate the reporting of emergency situations the Facilities & Safety Manager will display and regularly update the following emergency telephone numbers in the facilities and all facilities:

- Emergency Co-ordinator
- Emergency hospital or doctor on & off facilities
- Fire Station
- Ambulance service
- Police station

In order to ensure an appropriate response to an emergency situation, an adequate number of suitably trained personnel who are competent in the use of fire fighting equipment and provision of first aid will be appointed.

The Facilities & Safety Manager will liaise with the Fire Services Department, Police, Hospitals, Ambulance Services and other authorities to ensure that emergency procedures are in place to safeguard staff, facilities and the public in the event of an emergency situation

Emergency equipment will be provided as necessary.

Procedures will be in place to handle emergency medical rescue operations and in the event of death, the return of mortal remains to the country of origin.

Arrangements designed to prevent access of any unauthorised persons and secure the health and safety of any authorised visitors will be implemented.

9.3.4 No Smoking Policy

The interiors of all facilities, offices and facilities will be designated as **"Non Smoking Zones".** This policy will be strictly enforced without exception, as a measure to protect the environment, health and safety. Adequate signage will be put up throughout the facilities.

9.3.5 Health & Hygiene Information

The training of staff to identify health risks and the measures to avert them will be undertaken at the direction of the Facilities Management after consultation with the Facilities & Safety Manager.

Information concerning most health and hygiene risk and control measures will be maintained at the clinic.

Information campaigns and propaganda dealing with work environmental hazards such as ionising radiation, noise induced hearing loss, dust hazards and respiratory hazards will be undertaken by the SAFETY Department.

9.4 Welfare of Employees

9.4.1 Medical and first aid

The required qualified staff ,as per legislation will be provided at the facilities to ensure that the prime health care of all employees is being taken care of.

Detailed procedures for first aid and the provision of first aid boxes will be included in the Safety Management Procedures.

Medical visits will be controlled by the completion of a " Request for Medical Treatment" form.

When there are more than 200 male employees in the facilities a MALE nurse / Paramedic will staffed an equipped first aid room / clinic will be provided and maintained during working hours. Facilities will be provided suitable for ladies employees.

9.4.2 Medical rescue

An updated list of all expatriates, names, insurance policies, Insurance contact numbers as well as the Safety & HR Departments telephone numbers will be maintained by SAFETY staff and displayed prominently on notice boards.

9.4.3 Emergency Medical Treatment

Emergency medical treatment will be immediately made available wherever hazardous materials are being used.
All persons working with such chemicals will be made aware of the first aid procedures that will apply in a case of accident.

9.5 Health Organisation

9.5.1 Health Practitioners

The facilities clinic will be manned with a male nurse or paramedic. For serious cases, ambulance and medical personnel from the designated hospital will be called upon for medical assistance.

9.5.2 Physical Capability Analysis

No person will be hired or placed into any job, where such a person's health and safety is endangered as a result of a mental or physical dysfunction.

9.5.3 Health of facilities

9.5.3.1Toilets

Suitable sanitary arrangements at facilities, offices, staff/ labour camps will be provided for male and female employees, to comply with relevant standards:

Number of Employees	Minimum number in the facilities

20 or less	1 – Toilet seat
20 or more	1 – Toilet seat and 1 urinal per 40 workers
200 or more	1- Toilet seat and 2 urinals per 50 workers

Every sanitary convenience will be sufficiently ventilated, with proper lighting and reasonable access

9.5.3.2 Potable water

An adequate supply of potable drinking water will be provided in all places of employment. Portable containers used to dispense drinking water will be tightly closed and equipped with a tap. Water will not be drawn from the containers. Drinking water supplied during hot weather will be cooled.

9.5.3.3 Ergonomics

The company will ensure that there are satisfactory designed workplace arrangements for the employees in their working environment

10. SAFETY POLICY AND MANAGEMENT

Safety at Alghanim Industries will be treated as A Way of Life

Safety is Everyone's Responsibility

Alghanim Industries personnel will consistently practice and are committed to safe working behaviour and work practices. Management will actively pursue and support this involvement and motivation of personnel in the development, execution and review of safety initiatives.

Every operating site and every employee is expected to have access to and/ or participate in:

- Safety audits, Job Procedure Checks (every 6 months)
- Attend safety meeting once a month or more frequently
- Induction and training
- Investigation outcomes
- Job Safety Analysis
- Regular communication on Safety

5 S + SAFETY

To use 5S audit form as reference to carry out 5S tasks

To report 5S performance in 5S audit form every 6 months

To record 5S ratings and publicise on notice boards, email messages etc.

10.1 Visitors to Facilities

- Visitors on arrival will be met on arrival at the facility first by the facilities supervisor, Facilities & Safety Manager or in their absence by safety officers to conduct a safety briefing, normally

- A briefing will be made on facilities safety aspects ,including highlighting some strict DOs and DON'T's

- For Facilities tour :

    - Visitors to be briefed on what they were expected to do in case on any emergency / mishap during the facilities tour.
    - Proper shoes – a shoe rack to be maintained which has all available sizes of safety shoes exclusively for visitors for warehouses.
    - Relevant PPE to be provided and compulsorily used; safety helmet and goggles; also ear plugs and hand gloves when required.

10.2 Equipment Registers & Checklists

A Register Program will be introduced appointing competent people who will record the operating condition of all tools and equipment.

Reasonable precautions will be taken ensuring that local legal requirements concerning safety, health, hygiene and environmental conditions are being adhered too.

Registers will be maintained for the following:

- Fire Equipment

10.3 Notices & Signage

Standard signs will be introduced and compliance to local statutory requirements will be maintained.

10.4 Inspection Program

Facilities safety inspections are designed to identify defects, unsafe acts and conditions, breaches of statutory requirements and highlights deviations from the EHS POLICY.

The inspections will be carried out at regular intervals of 6 months by SAFETY Officer.
Safety Officers' Inspection Report will be forwarded to the Facilities & Safety Manager, responsible Facilities supervisor and Business Unit managers to take corrective action.

All checklist and inspection reports will incorporate a follow up procedure to

ensure that any defects identified are promptly and satisfactorily remedied.

All works & areas will be kept clean and orderly. Waste and useless materials that constitute a fire/potential hazard in the facilities/office will be removed from the work areas as soon as possible. Areas for temporary accumulation of rubbish/debris will be provided and will be well protected and properly kept.

EHS engineer will carry out regular inspections in the respective allocated areas and submit reports to Facilities Management.

10.5. No Smoking Policy: Smoking Areas

Each facilities and facility will have pre-designated, clearly marked open areas for smoking .The areas will be selected to ensure minimum inconvenience to employees who smoke, wrt location ,distance etc; yet will ensure that the smoke does not affect other employees nor the environment.
Where possible, to construct a special smoking room with proper ventilation and exhaust system

10.6. Work in Confined Spaces

It is not envisaged that facilities personnel will be required to work in confined spaces. Will work of this nature become necessary, separate safety procedures will be documented.

10.7 Personal Protection

10.7.1 General

Personal protective equipment (PPE) is often the only practicable means of providing protection to workers. Occupational hygiene hazards including exposure to welding flume, dust, cooling oils etc, will require the issue and use of PPE. The wearing of certain types of PPE will inevitably put stress upon the user (ex-sand blasting protection). A particular danger to the individual from the use of PPE can be a substantial increase in heat stress.

10.7.2 Heat Stress

The use and type of PPE will attempt to balance between the opposing hazards of heat stress and the requirement to use PPE. Sufficient ventilation and cooling will be provided at all facilities locations.

10.7.3 Head Protection

It is the responsibility of the individual section engineers, in consultation with the safety department, to decide on the necessity of wearing head protection.

10.7.4 Hearing Protection

The use of hearing protection is a personal choice but all personnel will be advised to use the ear protection. Noise induced deafness is a very real hazard

and will not be taken lightly.

10.7.5 Personal Protective Equipment (PPE)

All specialised protective equipment will comply to International Standards, and will be stamped or certified e.g. BS, ANSI or EURO, etc.

The company will supply personal protective equipment (PPE), which will be maintained by the facilities and the contractors who will each ensure that the appropriate PPE is issued to and used by their respective facilities personnel and authorised visitors. The supply of PPE will be in accordance with relevant statutory requirements.

10.7.6 General

All items of Personal Protection Equipment (PPE) will be regarded as a "Last Resort" hazard control measure. Hazard and the risks they pose will ideally be eliminated, minimised or controlled by mechanical, procedural or other means. PPE will not be the sole method of control.

As a risk control measure the following PPE will be provided for use as required:

- Safety Hat
- Safety Glasses
- Gloves
- Safety Shoes or Boots
- Coveralls
- Respiratory Protection
- Ear Protection or Ear Plug
- Fall Arrestor
- Full Protection equipment of welders
- Other specialist PPE as required.

10.7. 7 Use of PPE

The wearing and use of PPE at all facilities will be decided by facilities EHS committee.

10.7.8 Training in the Use of PPE

Most items of PPE will perform better, last longer and be more hygienic if the user is properly trained. A program will be introduced to train users in all forms of PPE. Training for special PPE will be carried by EHS Department as required.

10.7.9 Storage & Maintenance of PPE

PPE will be properly stored and maintained in the facilities store room, to ensure that they remain effective.

10.7.10 Provision of PPE by Contractor

Contractor working at a facilities are responsible for providing PPE required by their

staff as determined by the Facilities & Safety Manager.

10.7.11 Personal Protective Clothing & Equipment

Protective clothing / footwear worn in the facilities and warehouse will be appropriate for the work being carried out.
Steel toe-cap shoes/boots are recommended for use at all facilities.
Safety helmets will be worn in all places where there is a risk of falling objects causing injury.

Eye protection will be worn by all personnel working in any area or working on any process where the possibility of damage to eyes exists.

Full face shields, body and hand protection (rubber gloves) will be worn when handling acids, caustic solutions or any other harmful chemicals or substances.

Special goggles will be worn during burning or gas welding process.
Welding masks are required to be worn for all electric welding processes. Heavy-duty gloves will be worn for all burning or welding process.

Hearing protection will be worn where noise levels exceed acceptable limits, e.g. 85 decibels per 8 hours shift.

Respirators or breathing apparatus will be worn by all personnel entering a confined space or area where toxic fumes are likely to be in existence.

Employees working in a hazardous or confined area where there is the possibility of the existence of harmful, flammable, toxic gases or any other substance will report the fact to his engineer immediately, obtain the necessary equipment and follow all laid down safety procedures for that particular process.

Work gloves will be worn when handling any material likely to cause injury to the hands.

Sandals and flip-flops will not be worn by workers in the facilities.

10.8 Safe Use & Maintenance of Vehicles, Mobile Equipment

10.8.1 General

For all company personnel including Sales Offices whose job involves usage of a vehicle—car/truck /mobile equipment

- Drivers will at all times follow strict Road And Driving safety practices including:
  - Strictly wearing safety belts at all times while in vehicle

- Maintain driving speeds and road rules ,as applicable at the location
- Ensure that mobile phones are **NOT** used while driving, except with hands free device

- Vehicles will be used only if they are fully serviced and road worthy. They will be registered, insured and will comply with traffic laws and regulations of the country in which they are operating.

- Vehicles will only be driven by persons in possession of a current valid driving license, issued or recognised by the country in which they are operating.

  The licence must be relevant to the type of vehicle being driven.

- Vehicles will only be used for the purpose for which they were designed.

- All vehicles will be maintained and serviced in accordance with manufacturers' procedures .

- Any faults/defects found in the vehicle will be reported to the relevant Manager who will inspect the fault and make a judgment as to the road worthiness of the vehicle.

- In the facilities, facilities speed limits and priorities will be observed.

- Where trailer trucks/tipper trucks are reversing close to road where people are walking, a flag man will be employed to ensure safe manoeuvring and tipping.

- Vehicles will not be over-loaded or driven in an unsafe or reckless manner or a manner liable to cause damage or injury to any property, equipment or personnel.

- Vehicle operators are forbidden to drive any vehicle or mobile facilities in a way likely to cause damage or injury to themselves, the vehicle, or any other person.

10.8.2 Mobile Cranes

All cranes will carry relevant test certificates and thorough examination reports together with the manufacturer's handbook.

Only persons who are licensed, competent and authorised will be allowed to operate cranes.

Crane operators or other competent persons will carry out daily inspections and enter these in the crane register. A maintenance program, in accordance with manufacturer's specifications will be in place for all facilities cranes and equipment.

Travel routes for cranes and crane standing will be pre-decided and announced in order to avoid overhead lines and other structures, underground services, excavations etc.

Crane capacity charts (Load Radius Tables) will be displayed/ available in the

crane for easy reference.

All cranes will be fitted with:

- A safe load indicator
- A reverse warning audible alarm
- Crane hooks with Safety Catches

10.8.3 Motorised Equipment & Checklists

All equipment will be checked at intervals laid down by the Facilities & Safety Manager to ensure equipment is in a safe operating condition.

10.8.4 Facilities Traffic control and Speed Limits

Traffic in the facilities will be kept to a minimum. Only vehicles with specific permits will be allowed on the facilities premises.
90 degrees cross intersections will be regulated.
Speed limits on facilities, unless otherwise stated, will be 20 kph.
Facilities safety officials will have the authority to apprehend violators of traffic regulations.

10.8.5 Transport

All vehicles will be roadworthy and conform to legal requirements. All vehicles will be well maintained, and exhaust emissions will be clean, with no visible black smoke.

The Facilities Management will ensure that only licensed and authorized personnel are allowed to drive vehicles.

Loads will be within the safe weight limit for the vehicle. Passengers will not be carried unless a proper seat is provided.
Personnel will not be permitted to get on or off any vehicle while it is in motion.

General use vehicles will not be parked in such a manner as to block access or emergency points.
All drivers of vehicles will be in possession of the appropriate current valid license for the class of vehicle and of the country where they are driving.

Transport of personnel will be in vehicles designed for that purpose only. Personnel will not be transported in the back of pick-ups, dump trucks or mobile facilities. Seat belts will be worn at all times while the vehicle is in motion.

Continuous non-compliance by contractors / individuals will lead to retraction of vehicle permits.

10.8.6 Competency

- All drivers and operators of mobile facilities (mechanically propelled vehicles) will be in possession of the appropriate GCC licence for their class of vehicle.
- All drivers, operators of mobile facilities (mechanically propelled vehicles)

will be trained.

10.8.7 Certification

Controls will be implemented to ensure that only certified mechanical equipment is used in the facilities.

Equipment that requires 3rd party certification will be tested and approved by a government approved company before such machine is allowed to operate.
Operators operating machinery will have valid certificates and government licence.

10.8.8 General

No mobile facilities (mechanically propelled vehicles) will carry passengers unless a proper fixed seat is provided.

Mobile facilities (mechanically propelled vehicles) will be parked on firm level ground
When unattended, the engine stopped, brakes applied and any load or attachment lowered to the ground.

No mechanical facilities or equipment will be operated on any area of the Facilities without permission

All drivers/operators of mobile facilities (mechanically propelled vehicles) will strictly
obey the instructions of the facilities security, traffic regulations and speed limits.

10.9 Safe Use and Maintenance of Facilities & Equipment

A comprehensive Maintenance Management System will be implemented at all facilities. The Maintenance and Facilities Department will maintain a register of all assets in the site which includes the maintenance strategy, inspection regime and maintenance and requirement of each major piece of operating equipment. The maintenance system will keep records of previous maintenance carried out on each piece of operating equipment.

Each major piece of operating equipment will have full set of engineering drawings and Process & Instrumentation diagrams.

All operating design parameters and capabilities are to be captured with the Standard Work Procedures for that facility. All operators are to be trained in such procedures.

All critical equipment is alarmed or condition monitored e.g. Temp, Pressure, etc.

The maintenance inspection regime and testing requirements are to include the requirements of the local EHS regulations and acts, and are to be contained in the Department's Management System. Records of results and corrective actions are to be maintained for the statutory period.

All such inspections, testing, etc.will be carried out by suitably qualified personnel.

Professional engineering support will be in place or available to support the local area maintenance teams e.g. Crane Engineers, Fluid Power, and Lubrication Engineers etc. Strategy Based Maintenance practices are applied to all potentially hazardous facilities whereby the Critical components are identified and risk assessed to determine the necessary controls required.

These controls will include, schedules for inspections, testing, and calibration. They will also include condition monitoring, Critical Operating Procedures, and Secured or controlled access.

An effective Management System for supply of spares will be in place and only accredited suppliers (approved supplier list) will be used.

10.9.1 Approved Contractors, Maintenance of Company Facilities, Facilities

All personnel, contractors, customers and the public will be provided with a non-hazardous access and exit, to and from all premises and facilities areas. Each business will have a developed list of Approved Site Contractors (ASC) through a process involving assessment of the Contractors safety performance and capabilities.

If departments choose to use a contractor not listed on the ASC list, then they must comply with requirements of getting contractor approved, prior to appointment.

It is the responsibility of each business to evaluate the degree of risk exposure from the contractor's operations in the facilities/facility areas.

A system of Authority to Work is practiced whereby those engaged to do work are checked to ensure that they are certified to do the task, know and understand the hazards and have the right procedures before given authority to proceed.

All items in the facilities will be used only for the purpose for which they were designed and will not under any circumstances be used for any other purposes.

All items in the facilities will be maintained and serviced by competent personnel.

Records will be kept of maintenance, repairs, overhaul or servicing of all equipment.

Damage to any item of facilities will be reported to the Facilities Manager/Maintenance Manager and the Facilities & Safety Manager, who will inspect the fault or damage and make a judgment as to the safety and serviceability state of the facilities.

10.9.2 Safe Use & Maintenance of Facilities Tools, Equipment & Machinery

Tools, machinery and equipment will be kept in a serviceable condition and

used only for the purpose for which they were designed. Damaged, broken or faulty tools or equipment will not be used under any circumstances.

10.9.2.1 Machinery

Machinery will only be operated by trained and competent persons. All guards will be in place before any machinery is used.

Electrical connections will be fixed and declared safe by a qualified electrician. All machinery will be earthed and connected to an earth leakage trip.

Any faults or damage to machinery will be reported immediately. The machine will be immobilized until the fault is repaired and the machine declared safe to use by a competent person.

Safety locks will be fitted to machine controls to prevent inadvertent operation of the machine.

10.9.2.2 Equipment

Equipment will be fully serviceable and free from damage. All specialist equipment will be kept in a clean and safe condition.

Lifting or hoisting equipment will be tested, declared safe and a safety certificate issued by an independent third party against each individual piece of equipment.

Any defective equipment will be reported immediately to the relevant manager and not used until it has been tested and declared safe by a competent person.

10.9.2.3 Lifting Equipment

Lifting equipment used in the facilities will be tested and will have a valid certificate. Equipment will be properly marked with an identification number and safe working load and may be colour coded.

Copies of all test certificates will be available for inspection.

A register of all lifting equipment used will be kept.
The nominated employee will receive all lifting gear on its arrival on facilities and will ensure its proper storage in a rigging store .In addition he will:

- Enter the details of all lifting equipment received on facilities into a register which will have details of the lifting gear identification number and safe working load.
- Keep a register of all issues of lifting gear.

Defective lifting equipment will be withdrawn immediately from service and returned to the repair shop.

No item of lifting gear will be used to support a load greater than the safe working load of the lifting gear.

Lifting equipment and other lifting appliances belonging to the facilities will only be used by facilities personnel.

10.9.2.4 Maintenance

A regular, preventive maintenance program will be established in accordance with the manufacturer's handbooks, to ensure that all facilities equipment is systematically inspected, maintained and repaired.
The facilities employees responsible will be clearly detailed.

A safe system of work will exist during all maintenance and repair operations to ensure that no part of the machinery is set in motion while work is being carried out.
All waste oils will be collected and recycled, or disposed

10.9.2.5 Power Tools

All electrical power tools will be double insulated or have an earth wire in the extension lead. They will be used in conjunction with an earth leakage trip wherever possible.

Grinding or cutting tools will be fitted with appropriate guards. Power tools will never be carried, hoisted or lowered by the power lead or hose. All power or electric tools will be regularly serviced and maintained by a competent person.

Any faults or damage found in an electric or power tool will be reported immediately and the tools returned for checking and repair.

Any unserviceable electric or power tool will be clearly labelled as to the nature of the unserviceability ,will not allowed to be used under any circumstances and must be separated for immediate disposal.

All electrical powered tools will be serial-numbered and a record kept of all servicing, maintenance and repair.
During grinding operation, it is mandatory to wear a face shield and/or safety glasses, a leather apron to prevent sparks from igniting clothing and long sleeved chrome leather gloves. Hearing protection is also required since the noise level exceeds 85db when grinding.

10.9.2.6 Hot Work

Hot work is defined as burning, welding, and grinding.

An adequate amount of dry power fire extinguishers will be located within close proximity to hot work areas.

All slag and sparks will be contained within the immediate work area.

Welding and burning of certain materials may give rise to hazardous fumes. In certain areas local exhaust ventilation will be used. In open areas respiratory protective equipment will be worn.
Hot work will not normally be carried out in office or accommodation areas.

10.9.2.7 Welding

All welding operations will be carried out by competent, trained welders.
All welding equipment will be in good condition, properly maintained and locally earthed.

Terminals and live components will be adequately protected.

Cables will be inspected on a daily basis to ensure the integrity of the insulation.

Any damaged cables or electrode holders will be properly repaired or replaced.

All welding return cables will be fixed to the work piece or as close as possible.

Proper cable connectors will be used to join runs of cable.

Welding areas will, whenever possible, be screened off using flame retardant sheeting .

All welding will be from D.C. welding sources.

Cable routes will be properly managed to keep runs as short as practicable and to avoid trip hazards

Welders will wear:

- Face and eye protection with the correct grade of filter
- Welder's gauntlets
- Long sleeved flame retardant overalls
- Rigging boots

10.9.2.8 Use of Gas & Oxygen Equipment

Where contractors bring their own equipment into the facilities, such equipment will comply with approved standards.
Cylinders will comply with BS or equivalent standards and will be:

- In good condition and not suffering from corrosion.
- Properly colour coded i.e. Black-Oxygen, maroon-Acetylene, red-LPG, Blue-Argon etc.
- Accompanied by a valid test certificate.

Hoses will be properly colour coded to international standards for the gas being used, will be in good condition and fitted with hose connectors attached by permanent clips.

Check valves and flashback arresters will be used on both hoses at all times.

The equipment used will be properly maintained. Suspected leaks may be confirmed by a soap solution. If the leak cannot be cured the equipment will be withdrawn.
Users will check the equipment for perished, damaged hoses, regulators, and pressure gauges, etc. Defects will be reported to their engineers.

Gas cylinders will not be left lying around. Arrangements will be made to store cylinders in an open mesh fenced compound.
The facilities management will provide suitable facilities to minimise manual handling of cylinders.

Cylinders will be in trolleys, or tied off when on facilities.

Oxygen and fuel gas cylinders will be kept separate with a minimum separation distance of 5m. Cylinders will never be stored or used in a horizontal position but will be secured in an upright position. Empty cylinders will also be separated from full cylinders.

Gas cylinders will be handled with care and they will not be misused. They will be properly shut off when not in use and safety caps will be fitted when being moved.

Care will be taken to ensure that gas equipment, including hoses, are not allowed to cause obstruction of roadways, walkways, manholes or other means of access where they can cause hazard . Hoses not in use will be coiled up and put in a safe place. Hoses will whenever possible be supported off the ground. Hoses will be routed to avoid trip hazards or damage.

Where any operation involves the use of gas and oxygen equipment in enclosed or semi-enclosed spaces, the facilities supervisors will carry out frequent checks to ensure that the correct procedure is followed.

During meal breaks and at stopping times, hoses and equipment will be removed from confined spaces. Oxygen or gas cylinders will not be taken into confined spaces for use or storage.

No modification to tanks or drums which contain flammable liquid will be undertaken in the facilities.
The torch will only be lit using a lighter designed for this purpose.

10.9.2.9 Compressed Air

Air receivers and compressors will be in good condition and properly maintained.

Air receivers will be individually identified and marked with their safe working pressure.

All air receivers will be fitted with a properly set pressure relief valve.
Only hose clamps designed for compressed air service will be used.

10.9.2.10 Abrasive Wheels

The facilities will ensure that employees authorised to change abrasive wheels

will be competent to do so.
Facilities employees authorised to change wheels will be in possession at all times, of a certificate detailing their appointment in writing.

Details of each employee trained will be entered in the Abrasive Wheels register kept in facilities.

Machines used to drive Abrasive Wheels will be in good condition and properly guarded, and have the operating speed clearly marked on them.

Pedestal or bench mounted grinders will have an emergency stop button and will be fitted with a properly adjusted tool rack

All hand held grinders will have a "Dead Man" switch.

10.9.2.11 Cartridge Operated Fixing Tools

Cartridge operated fixing tools will be kept in stores and only issued to certified, competent operators. Cartridges will be accounted for, signatures will be required for issue of cartridges and all unused cartridges will be returned to the stores with the tool at the end of each shift. A register will be kept of all cartridge operated tools.

All facilities tools and equipment will be suitable and adequate for the purpose.

Guards and electrical trip switches will work effectively and will not be removed or by-passed.

All tools will be maintained in a safe working condition.

The facilities will provide suitable storage, with suitable racks and bins for storing tools and equipment.

The Facilities Management will employ a competent qualified electrician to inspect and tag electrical power hand tools, transformers, distribution boards, extension cables etc on a quarterly basis. The tag will display name, signature of the individual inspecting the tool, date of inspection and will be ticked to indicate the tool is safe for use.

The facilities will keep a register of all electrical power hand tools in use. The register will detail:-

- Individual identity number of the tool.
- Name, signature of the qualified electrician carrying out the inspection.
- Date of inspection.
- Remarks on condition of tool and whether repaired or withdrawn from use.

No electrical powered hand tool will be used other than those tagged with a current "SAFE FOR USE" tag.

All electrical leads will be connected to the power source through standard

waterproofed plugs and sockets, which will be in good condition.

10.9.2.12 Flame Arresters

All mobile facilities for use in Live Facilities Areas will be diesel driven, and fitted with exhaust Flame Arresters.

10.9.2.13 Machinery Guarding

Persons authorised to use machines will first check that guards are in position and that all other safety devices, e.g. emergency stops are in working order.

All facilities equipment will be properly guarded to prevent injury.

No Guard will be removed from machinery. Guard removed for maintenance or repair purposes will be replaced before the machine is set in motion.

10.10 Fire Protection & Prevention

The company recognises the importance of fire protection and precautionary measures and arrangements will be implemented to ensure that adequate procedures are adopted to prevent risk of injury or damage from fire.

10.10.1 Fire Control Flammable Liquid Store

At least one portable dry powder fire extinguisher of adequate capacity will be located not less than 3 meters and not more than 10 meters from any flammable liquid storage area located outside.

10.10.2 Fire Protection

Adequate fire precautions are:

- All machinery will be fitted with a dry powder chemical fire extinguisher.
- Provision of the correct type of fire extinguisher (normally dry powder).
- The ability of contract employees to use the fire extinguishers.
- Employees are aware of the correct procedures to be followed in the event of a fire alarm/evacuation situation.
- Employees will be made aware of the location of and to be trained in the correct use of:-
  - Fire extinguishing equipment.
  - Alarms call points.
  - Emergency telephones.
  - Escape routes and fire exits.
  - Assembly points
  - Equipment Stopping on Alarm
- The facilities offices/cabins will have at least one powder type fire

extinguisher located at the access/exit door. No point within any office/cabin will be more than 20m from a fire extinguisher.

10.10.3 Smoking Areas

Smoking Areas will be clearly marked. They will be adequately ventilated if in a closed room, or in areas open to nature. There will be sufficient ash trays/dust bins, to ensure correct disposal of used cigarettes and boxes

10.11 Noise

Ear Protection Zones will be clearly identified. Facilities will ensure that employees are provided with and use suitable hearing protection when working in these zones.

Facilities Management will ensure that noise levels produced are as low as possible. If they anticipate excessive noise levels from the operations, then they will advise, so practical precautions can be taken to protect persons who may be affected.

Where noise levels from operations exceed 85 dBA, all employees involved in the operation will be supplied with suitable hearing protection.

10.12 Electricity

Necessary precautions will be taken to avoid accidental contact with live conductors etc.

Repair or installation of electrical equipment will only be carried out by a competent qualified electrician.
Any tool or equipment exceeding 110 volts will be double insulated and connected to an earth leakage circuit breaker (ELCB.),

Cable management to avoid tripping hazards will be implemented.

10.13 Hazard Identification & Assessment

Includes safety audit observations and actions register program (semi-annually)

10.13.1 Hazardous Materials

10.13.2 Objectives

To provide a system for purchasing, transportation, storing recording the use and disposal of hazardous substances and materials at each facilities.

Management will identify and notify employees of these hazards and ensure the required emergency medical treatment is available at the place of work. Further they will provide:

- The correct protective clothing and equipment specified in the "Material Safety Data Sheets" when working with such hazardous substances or materials and what action to take will spillage occur.

- Means for disposing hazardous and chemical waste, liquid or solid that may present a risk of personal injury or impact to the environment, including oils, grease and other hydrocarbon based materials at an approved location.

10.13.3 Gas Cylinder Storage

Gas welding cylinders and LPG cylinders will be stored in secure, well-ventilated areas.

10.13.4 Fuel & Oil Storage

Fuel will be stored in secure areas in a steel tank.
Used oil will be collected and stored in a holding tank until removed from facilities.
Water and oil will be separated in an adjacent oil trap.

All used filter materials will be stored in a secure bin for disposal away from the facilities. Any contaminated soil will be removed and replaced. Soils contaminated by oils and lubricants will be collected and disposed of at any facilities designated by local authorities to accept contaminated materials.

10.13.5 Hazardous Materials Inventory

Hazardous Material Inventory will be updated every 6 months.

The exposure limits of Hazardous Materials or chemical being used will be determined.

10.13.6 Hazardous Materials Safety Data Sheet

Hazardous Material Safety Data Sheets will be available for each chemical, to ensure action in the case of accidental contact
The EHS Department will make Hazardous Material Safety Data Sheets available to the Facilities Clinic, to ensure correct medical treatment

All employees will be fitted with the correct protective clothing, depending on the type of chemical used.

10.13.7 Hazardous Materials Purchasing Controls

Each Facility will appoint a responsible person for purchasing hazardous materials according to safe specifications.

10.13.8 Flammable Liquids

Only approved containers and portable tanks will be used for storage and handling of flammable and combustible liquids.

Flammable or combustible liquids will not be stored in areas used for exits,

stairways or normally used for the safe passage of people.

Flammable liquids will be stored separately from chemicals in suitable closed vessels and kept in a well controlled, ventilated and lockable storage facilities , which either is in a safe position or in a fire resisting structure.

Wherever flammable liquids are stored, all reasonably practicable steps will be taken to ensure that any leaks will be contained or immediately drained off to a suitable container or to a safe place or otherwise treated and made safe.

Storage areas will be kept free of debris and other combustible material.

Adequate means to extinguish any fire that might originate from such equipment will be ensured.

Storage areas will be properly demarcated and sign posted.

10.13.9 Liquefied Petroleum Gas storage

Gas will be stored at ground level and will be readily accessible

In open air, it will be protected from unauthorised access by a fence at least 2 m height. Sufficient shelter will be provided, to prevent cylinders from being exposed to extremes of weather & direct sunlight

It will be kept clear of all flammable or combustible material.
A notice of "LPG - highly flammable" and "no smoking or naked flame" will be exhibited.
Will be separated from other gas cylinders such as oxygen, chlorine, and ammonia by 3 meters
The LPG storage locations will be provided with appropriate fire extinguishers. All installations and maintenance will be undertaken by trained LPG fitters and pipelines/hoses tested for safe working/leak.

10.13.10 Drums

Drums will be stored vertically preferably on pallets to minimise the possibility of puncture or leakage.
Where drums are to be recycled for facilities storage, previous contents will be ascertained and drums well flushed prior to charging with new contents.

10.13.11 Hazardous Materials Disposal Procedures

Florescent tubes will be disposed in a special fabricated drum or container that will contain the Mercury and glass pieces

When the container is full it will be forwarded to an approved chemical company for disposal.

10.13.12 Control Of Substances Hazardous To Health (COSHH)

Hazardous substances include any flammable liquid or substance likely to give rise to toxic, corrosive, irritant or harmful risk.

No hazardous substance will be brought into facilities without the approval of the Facilities & Safety Manager.

Substances will be:-

- Kept to a minimum.
- Securely locked or fenced off.
- Have appropriate warning notices affixed to the storage facilities.
- Have "No Smoking" notices affixed to the storage facilities where flammable substances are stored.
- Have fire-fighting extinguishers and other emergency equipment located nearby the containment area.

Substances will be held in secure appropriate containers with the substance clearly identified on the exterior of the container.

All containers holding hazardous substances will have their lids replaced as soon as they are not in use. Only minimum quantities required will be removed from the approved store at any one time.

A COSHH assessment will be carried out to ensure that users of substances are properly informed, instructed and trained in the hazards and control measures to be used.
Relevant training records will be maintained.
Empty containers will be removed as soon as possible and arrangements made for their safe disposal.
Hazardous substances will not be discharged into the ground or into water drains where they can cause pollution or an explosion.

All hazardous substances to be disposed of will be kept separate from normal waste, and then disposed of.
All containers containing hazardous substances will bear international Hazard Symbols.
Products containing PCB's (Polychlorinated biphenyl's) and asbestos will not be used.

10.13.13 Radiography

Facilities personnel required to carry out radiography work will follow the UK code of practice.

10.13.14 Housekeeping & Removal Of Material

Facilities personnel will keep their work area tidy and not allow rubbish or scrap to accumulate.

Hazardous wastes will be properly contained, identified and segregated from other waste, then disposed.

Combustible rubbish will be disposed of at the end of each shift or more regularly if necessary.

A dedicated housekeeping crew will be allocated to keeping work areas clean and tidy.

10.13.15 Responsibility of Employees

- Familiarize themselves with and conform to all safety practices and procedures.
- Observe all safety rules, practices, procedures and regulations.
- Report to their engineer any accident, dangerous occurrence or damage to company property, irrespective of whether anyone is injured or not.
- Report to their engineer any accident to themselves whilst at work.
- Inform their engineer if they feel they are not fit or have any illness or injury, that would prevent them from carrying out their allotted tasks in a safe manner.
- Keep their workplace clean, tidy and free from debris.
- Report to their engineer any defect, fault or other problem with any
- machinery, equipment etc they may be used or operating

C. STANDARD WORK PRACTICES

11. RISK ASSESSMENT- STANDARD WORK PRACTICE (SWP) WORK INSTRUCTIONS

11.1 Objectives

To provide guidance on the development and preparation of work method statement and risk assessments, in support of hazard control and analysis system

All facilities activities will be assessed and with the assistance of EHS Team all potential serious hazards will be identified. A detailed hazard analysis will be prepared and a proposal will be submitted to control identified hazards.

EHS will list all tasks in each occupation and identify the tasks which are most likely to cause injury or harm to the employees and inform them accordingly

11.2 Scope

All occupations will be analysed to determine for hazards and risks whilst performing such a task based on demand and request from individual businesses and operations

The following will be identified:

- Formal and job training requirements.

- Health exposures per task.
- Personal Protective Equipment required per task.

Instructions will be given to employees on injury prevention.

11.3 Definition of Hazard

A hazard is a physical situation that may result in harm to people, damage to property, or to the environment.
EHS team will ensure that all tasks with hazards and risk at the facilities will have approved hazard control measures and procedures to work.

This process will only be effective when the actual engineer and worker responsible for specific work are principals in the development of a specific hazard identification, analysis and control exercise.

11.4 Risk Assessments

11.4.1 Objective

To identify the hazards that is present within the working activities in the facilities. To provide guidance on the development and preparation of work method statement and risk assessment in support of the hazard control and analysis system.

11.4.2 Responsibilities

The Facilities Manager and EHS Manager will review all facilities activities. The EHS Manager will identify potential serious hazards, prepare a detailed hazard analysis and submit Job Safety Analysis (J.S.A.) proposals to control identified hazards.

All levels of management will assist in developing work method statements and risk assessments.

It will be ensured that the requirements identified during the development of the method statement and assessments are adequate in terms of detail, and it will be effectively communicated to all personnel.

11.4.3 Definition of Risk:

Risk is a combination of the probability that an event will occur and the consequence if it does.

After the completion of the work method statement , an evaluation will be made of list of hazards, which will be ranked in order of magnitude.

The issues will be prioritised based on the severity of existing risks. The

assessment will therefore be based on what the hazards are and what the potential exists for injury or property damage.

11.5 Work Instructions & SWP

11.5.1 Objective

To provide employees with the required knowledge to ensure tasks / work is done safely by complying with the Statutory, Environmental and the company's EHS Policy.

11.5.2 Scope

Method statement / written safe work instructions will be prepared by facilities management/ EHS team for critical tasks and all employees involved will be informed accordingly.

While carrying out the preparation of designs, safety plans and risk assessments, certain activities will be identified for which detailed, written safe systems of work are required to ensure that the activity is properly controlled and executed safely and without risk to health.

When operations under the direct control of a contractor requires safe working procedures then the contractors will prepare it. The safe working procedures generated by contractors will be submitted to the Facilities Manager/Facilities & Safety Manager for review and approval/correction, prior to the commencement of activities.

All written safe working procedures and method statements will clearly identify the objective, the sequence of operations, foreseeable hazards, precautionary and protective measures required and will easily be understood by the personnel who are to carry out the work

All written safe work procedures and method statements will be given a unique document reference number in a register.

During the course of operations, if it becomes evident that the written safe system of work requires re-assessment and revision ,then the document will be revised accordingly.

Facilities & Safety Manager will submit any such revision for formal acceptance to the EHS committee. Upon approval, the revision will be recorded in the register.
The instructions will include a description of the objective, the sequence of operations, the associated foreseeable hazards and precautions to be taken.

11.5.3 .Planned Job Observations.

Management and engineers will carry out job orientation on critical tasks and job procedures to ensure proper competence levels are met.

The responsible persons in each area will carry out observations to ensure that all hazards, control measures, procedures and standards are being followed and adhered to. In the event of deviations or alterations, senior management will be informed immediately to correct or alter these control measures and procedures.

12. INCIDENT/ACCIDENT REPORTING & INVESTIGATION

12.1 Objectives

To create and implement an effective accident and incident reporting and recording system.
To analyse such recordings to detail the root causes, corrective actions and learning.
To track all incidents investigation reports till completed.

12.2 Definitions

An accident is any incident which may result in damage to property, injury to people or possible liability against the company.
Identifiable Accidents are listed as per iceberg starting with highest priority:

- Fatalities
- Serious Accidents
- Lost time injuries
- First Aid Cases
- Near Misses

12.3 Accident / Incident Reporting & Recording

All accidents at any company facilities/ facility will be reported within 24 hours

To the Facilities & Safety Manager, Facilities Manager, Director Operations, Facilities and EHS Director

All serious accidents will be reported within 6 hours to the management.

Facilities & Safety Manager will complete the procedures for reporting and recording the accident, whether or not anyone was injured. In the event of personal injury, the Facilities & Safety Manager will inform the necessary authorities and complete relevant reports.

An investigation will be conducted as to the cause of the accident to ascertain if

the accident had been avoidable and how to avoid a similar accident or occurrence being repeated.

Facilities & Safety Manager with the assistance of the Facilities Manager will produce a report on the accident to be submitted to the Director Operations, with comments or recommendations as to course of action to be taken in order to avoid a repeat occurrence.
The procedures for reporting and recording injuries, Near Miss accidents and dangerous occurrences will be listed in EHS policy. These are designed to satisfy both the statutory and contractual obligations and will also apply to all contractors in the facilities.

12.4 Accidents / Incidents Investigations Statistical Recordings

It will be ensured that the investigation documentation as per company standard procedure is completed.

12.5 Measurement Of Key Areas

All facilities are required to measure and monitor the following on monthly basis:

- Number of Accidents
  Total number of Accidents per month
- Man-hours lost
  Total number of man-hours lost in a month
- Number of Near Miss/Incidents
- Lost Time incidents ,LTI,measured as figure per million man-hours
- Medical Treatment Injuries
- All Injuries.
- Sickness, absenteeism rate
- Hours worked (employees, contractors)
- Ratio of near misses to all injuries.
- Accident frequency rate
  Number of Accident in the period wrt man-hours worked in the period
- Accident severity rate
  Number of hours lost due to accidents wrt man-hours worked in the period
- Workers compensation measures (e.g. new claims, monthly expense, estimated outstanding liability, workers comp cost as % of gross payroll, injury patterns analysis

13. Incident REPORT Form

INCIDENT REPORT FORM
(This form is to be completed for all employee incidents)

INSTRUCTIONS: All staff incidents require Sections I and II of the AI Incident Report to be completed by the injured person. If unable to do so, the person supervising the activity is to complete the incident report. In all cases, the supervisor of the activity is to complete Section III, review the report for completeness and accuracy, sign and forward to the Facilities Operations Manager within 24 hours of the incident. Note: a fax or PDF (followed up by the receipt of the original form) is acceptable form of submittal in order to ensure the 24 hour compliance requirement

SECTION I – Personal Data
(Please print or type all required information)

Name:	
Home Address:	
Number/Street:	Area:
Telephone Number:	Date of Birth:
Email Address:	
Employees reason for being on site:	

SECTION II INCIDENT DATA

NATURE OF INCIDENT: (tick as appropriate)	Accident/Injury	☐	Theft/Burglary	☐
	Physical Altercation	☐	Verbal Confrontation / Abuse	☐
			Fire	☐
	Property Damage	☐	Other (please specify)	☐

Date of Incident:	Time of Incident:
Incident occurred at:	
Specific Location of Incident:	

Briefly explain what happened: (1) explain activities occurring when incident occurred and what tools, machinery, chemicals, were involved, if an injury, (2) what happened to cause this injury or illness (3) what was the injury or illness (i.e., state the part of body affected and how it was affected).		
What action was taken: Tick all actions taken. If more than one, indicate which occurred 1st, 2nd, etc.		
First Aid (administered by)	☐	
Sent to Physician (Name of Physician)	☐	
Sent to Hospital (Name of Hospital)	☐	
Sent Home (By Whom)	☐	
Continued Activity (no action taken)	☐	
Contact/Supervisor:	Name of Witness and phone number (if applicable)	
Report completed by:		Date:
Reviewed by Group Controller:		Date:

Please return this form fully completed and signed on the same day as the incident (or within 24 hours) of the incident, to the Facilities Operations Manager. In the absence of the Facilities Operations Manager please return the form to the Facilities Manager.

SECTION III – SUPERVISOR'S REPORT ON THE INCIDENT (Use additional sheets as required)
What action has been taken to prevent such an incident from recurring? Include specific details on how it was mediated, how the incident can be avoided in the future. (Note that photos are highly recommended immediately following an incident, if at all possible).

Supervisor's Account of Incident which supplements and/or clarifies information provided by injured party: (1) explain activities occurring when incident occurred and what tools, machinery, chemicals, were involved, if an injury, (2) what happened to cause this injury or illness (3) what was the injury or illness (i.e., state the part of body affected and how it was affected)
Section III Completed by: Date:
SECTION IV- FOR FACILITIES OPERATIONS OFFICE: **DO NOT WRITE BELOW THIS LINE: INVESTIGATION/REVIEW**
Investigation Comments: Photos are highly recommended immediately following an incident, if at all possible.
Required Action: Location:
Section IV Completed by: Date:
Date Facilities Operations Manager sent to HR:

D. SAFE WORK PROCEDURES

All work activities and working environment conditions which have the potential to cause harm to people or damage to equipment within the Company's operations or surrounding community will need to be carried out in a safe manner.

14. SAFE WORK PRACTICES

Standard work practices (SWP) will be implemented at all facilities, to provide employees with the correct and safest method for completing tasks and activities.

These SWPs will take into account the EHS regulations and acts requirements and the identified hazards and risks for the area to which the SWP applies.

Those SWPs that could lead to a fatality or Serious Injury if not followed correctly, are to be identified as a "Critical Procedure" and are to be managed with a Code of Practice.

A system of Authority to Work is established whereby those engaged to do work are checked to ensure that they are certified to do the task, know and understand the hazards and have the right procedures before given authority to proceed.

14.1 Lifting Gear

14.1.1 Objective

To ensure that all lifting machinery and tackles are of the highest standard and are regularly examined by competent persons. To further ensure that only persons who are sufficiently trained and experienced will operate all lifting machinery and that all lifting operations are carried out in the safest possible manner.

14.1.2 Scope

All lifting machinery and lifting tackle used by the Company.

14.1.3 Responsibilities

Maintenance Engineer will ensure that all lifting machinery and persons competent to do so regularly inspect tackle and all records are maintained up to date.
Will also ensure that only suitably qualified persons operate lifting machinery. All lifting machinery and tackles used will be in good condition and used in a safe manner.

14.1.4 Documents

To maintain Registers for:

- Mobile Cranes
- EOT Cranes
- Wire Ropes, Slings and Attachments

14.1.5 Work Instructions

All items of lifting tackle will be clearly marked with the maximum mass load, which it is designed to carry with safely.

Every item of lifting tackle will be well constructed of sound material, strong enough and free from patent defects.

The following factors of safety will apply to all ropes and chains:-

- Six for steel wire ropes
- Five for steel chains
- Four for high-tensile or alloy steel chains

Every item of lifting tackle when not in use will be stored so as to prevent damage or deterioration.

14.1.6 Inspection

The installation and working parts of every lifting machine will be thoroughly examined by a competent person and subjected to a performance test, as prescribed by the manufacturer. The serviceability of the structures, ropes, machinery and safety devices will be determined before they are put into use and thereafter at intervals not exceeding 12 months.

In the absence of a performance test, the lifting machine will be tested with 110% of the rated mass load applied over the complete lifting range of such a machine, such that every part is stressed accordingly.

Each lifting machine will have all ropes, chains, hooks or other attaching devices, sheaves, brakes and safety devices thoroughly examined by a competent person at intervals not exceeding six months.

Each lifting machine will be visually inspected for defects at least once every three months.
Records of every test, examination or inspection will be entered in the appropriate register.

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14.1.7 Documentation

Facilities will appoint in writing a competent person to inspect lifting machinery and report on their safety.

Proof of the qualification of the person carrying out the examinations and tests will be submitted to the EHS Department and the results of the examination and tests will be recorded in the appropriate register. A copy of the performance test or load test certificate will be attached to the respective register as proof.

14.1.8 Operators

All persons proposed as crane operators will undergo heart / lung function tests, vision tests and audiometric tests and copies of the results of those tests will be submitted to the EHS Department.

All crane operators, prior to being authorised to operate a crane at the facilities,

will produce proof of training by a recognised training authority, a copy of which will be submitted to the EHS Department.

Facilities will employ all crane operators; the letter of appointment will clearly reflect particulars of training and experience.

14.2 Portable Electrical Equipment

14.2.1 Objective

To ensure that each item of portable electrical equipment is regularly inspected with regard to its safety and that all items of portable electrical equipment remain in a serviceable condition.

14.2.2 Scope

All portable electrical equipment, tools and appliances used by the Company.

14.2.3 Responsibilities

Machinery Supervisors will ensure that a suitable experienced and qualified person is appointed to inspect all portable electrical equipment and that the equipment is in a safe, serviceable condition at all times.

14.2.4 Associated Documents

Health and Safety Representatives Inspection Report
Portable Electrical Tool Register
Earth Leakage Test Register / Checklist

14.2.5 Portable Electrical Equipment

Portable electrical equipment is any item of electrical equipment fitted with a flexible cord and a plug top and will be divided into: -

- Portable electrical appliances i.e. kettles, heaters, typewrites, personal computers, etc.
- Portable electrical tools i.e. electrical angle grinders, drilling machines, pedestal grinders, etc.

Each facility using portable electrical equipment will appoint in writing a competent person to inspect each item and report on the safety of that item in writing in the appropriate register.

No electrical equipment will be issued unless it has passed a test and the report submitted.

Each item of portable electrical equipment will be clearly marked so as to be identifiable and all tests will be recorded in the register. Portable electrical appliances will be inspected every three months.

All grinding machines, pedestal and bench, will have the spindle speed clearly and conspicuously displaced and will have the speed checked before use in the the facilities .Inspection will be carried out every quarter thereafter, with a certificate available verifying each spindle speed

In addition certain portable electrical tools will undergo specific checks before each usage as listed below: -

- Angle Grinders
    - The condition of the disc.
    - The correct disc used i.e. cutting or grinding
    - The handle is secured
    - The guard is in place
    - The on / off switch is working

- Drilling Machines
    - The chuck is in good condition and is lockable
    - The spindle key is available
    - The body (casing) is in good condition and not cracked
    - The on / off switch is working
- Bench / Pedestal Grinders
    - The grinding wheels are in good condition and are correctly dressed
    - The tool-rest gap is not more than 3mm
    - The wheels are mounted correctly and the flanges are in good condition
    - The eye protection shield is in place and in good condition
    - A mandatory eye protection sign is prominently displayed

- Portable Generator and Lights

    - Earth leakage is functional
    - Plug sockets in good condition
    - Lights and lenses in good condition
    - Light stands in good condition
    - Light cords, extensions and plug tops in good condition

Polarity

Colour codes are:-

Red or Brown:	Live
Blue or Black :	Neutral
Green / Yellow:	Earth

14.3 Electrical Installation & Flame Proof Equipment

14.3.1 Objective

To ensure that all electrical machinery and installations are installed according to Statutory Regulations and are maintained in a safe condition at all times. To also regularly carry out inspections by a competent person and ensure that all flame proof equipment used are of an approved type.

14.3.2 Scope

All machinery used by the Company for transmission of electrical energy from a point of supply to the point of consumption.

14.3.3 Responsibilities

Machinery Supervisors will ensure that all installation work is carried out in accordance with the provision of the Electrical Installation Regulations and that all electrical machinery complies with and is used in accordance with the provision of the Electrical Machinery Regulations. They will further ensure that all electrical machinery and installations are regularly inspected by a competent person and are maintained in a safe condition at all times.

14.3.4 Work Instructions

- No electrical machinery will be used unless it complies fully with the requirements of the Statutory Regulations.
- All electrical Switchgear, panels, distribution boards, etc, will be accessible at all times.
- The main isolator to all electrical machinery will be accessible at all times.
- A competent person will inspect all electrical machinery being used once every six months and enter the findings into an appropriate register.
- All distribution boards will be clearly marked as to where they are fed from and all circuit breakers will be clearly marked as to which circuits they are feeding.
- All distribution boards will be located in a permanently dry environment and access to them will remain restricted.
- All plugs will be checked for polarity at least once every six months and the findings entered in the appropriate register.
- All electrical equipment, appliances, fittings and machinery will be wired with the correct polarity.
- Plugs (socket outlets) will be weatherproof or mounted in a weatherproof enclosure when used in wet conditions or areas open to natural elements.

- Electrical plugs switches and fittings which are damaged will be repaired or replaced immediately.

- Electrical cords will not be permanently secured to surfaces and will be without joints, especially when using extension leads with portable electrical equipment.

- Before any electrical installation work is commenced a copy of the Registration as an "Electrical Contractor" or a copy of the permit issued by the supplier will be submitted to the Facilities & Safety Manager.

- All installation work will be carried out by an authorised certified electrician and will be carried out in strict accordance with the requirements of the Statutory Regulations.

14.3.5 Flame Proof Equipment

All electrical switches, plugs, fittings, equipment used in an area containing fumes/ dust or vapours with potential to ignite, will be appropriately flame proofed.

All flameproof equipment, machinery, fittings, etc. will be examined and tested at least once every year, and a certificate to that effect will be made available. Any maintenance being carried out on any electrical machinery will be done in accordance with the lockout procedure i.e. it will be rendered dead and effective measures will be taken to ensure that it remains dead.

All flameproof equipment, fittings, machinery, etc. will comply with the relevant standard as per Statutory Regulations.

14.3.6 Earth Leakage

14.3.6.1 Objective

To ensure that all buildings and equipment are suitably protected against accidental electrical leakage

14.3.6.2 Scope

All buildings and equipment used by the Company

14.3.6.3 Responsibilities

Machinery Supervisor will ensure that all earth leakage relay units are numbered, labelled and tested for sensitivity on a monthly basis and that all tests are recorded. Deviations will be rectified as soon as possible.

14.3.6.4 References

Statutory Regulations

14.3.6.5 Earth Leakage Relay Units

Approved earth leakage devices will protect all buildings.
Approved earth leakage devices will protect all portable electrical equipment, unless double insulated
If any item of electrical equipment is being used outside of a building unprotected by an earth leakage device, then it will be used through a portable earth leakage device.
Facilities will appoint a competent person in writing to test each earth leakage relay unit at least once every quarter.
The record of the above mentioned tests will be recorded in the appropriate register

14.4 Compressed Gas

14.4.1 Objective

To ensure all compressed gas cylinders are handled, transported and stored with the utmost safety.

14.4.2. Scope

All compressed gas cylinders and all vessels under pressure in the facilities.

14.4.3. Responsibilities

Production Engineers will ensure that the facilities and contractors comply in every respect with the requirements of these standards.

Facilities Supervision / Health and Safety Staff

Will assist engineers in ensuring that all employees are aware of and comply with this standard.

14.4.3 Associated Documents

- Health and Safety Representatives Inspection Report
- Gas Welding / Cutting Register / Checklist

14.5 Compressed Gas Cylinders

14.5.1 Introduction

In the facilities, gases may be encountered in the following states:

- Compressed in drawn steel cylinders (e.g. oxygen and hydrogen).

- Liquefied under pressure in welded steel cylinders (e.g. propane, butane and chlorine).

- In a free state, mixed with the surrounding air (e.g. resulting from a leak).

14.5.2 Information

Some gases are highly flammable (e.g. hydrogen and propane)
Some are toxic (e.g. chlorine and carbon monoxide)
Some are both toxic and flammable.
Oxygen does not burn nor is it toxic but is dangerous as it vigorously supports combustion (oxidiser).
Usually a very small proportion of flammable gas mixed in air is sufficient to cause a devastating explosion and only a very small ignition source is required, even a static spark from the human body.

14.5.3 Classification

For the purposes of this standard, gases are grouped into four categories:

- Flammable gases, otherwise known as fuel gases.
- Toxic gases (which may also be flammable).
- Supporters of combustion (oxidisers).
- Inert gases.

14.5.4 Identification

Gases may be identified by international color coding on the cylinders, as follows:

- Flammable - a red band around the cylinder neck or a totally red cylinder in the case of hydrogen.

- Toxic - a yellow band.

- Flammable and toxic - red and yellow bands.

- Oxygen or air (supporters of combustion) - either a white band on a black cylinder (medical quality) or a plain black cylinder. Sometimes grey for air.
- Acetylene - this is an exception and will always be stored in maroon cylinders.

14.5.5 Cylinder Bursting Hazard

Cylinders containing gases stored as a liquid under pressure, such as propane butane and chlorine are liable to burst at a much lower temperature than "pure" gases such as oxygen and hydrogen which are not normally maintained in liquid

state. For example, the bursting temperature of propane and chlorine cylinders is 95°C, whereas oxygen is 420°C and hydrogen 450°C.

Acetylene is particularly hazardous. It is a highly unstable compound and is liable to decompose inside the cylinder after a hard bump or after the cylinder has been exposed to high temperatures, resulting in cylinder bursting up to 24 hrs later. Any acetylene cylinder that has received a severe knock or has been exposed to fire should be totally immersed in water in a safe location for at least 24 hrs.

14.5.6 Storage

- The storage of gas cylinders within the building will be limited as far as practical to those in use.
- An external cylinder store will be required for bulk storage of cylinders.
- The cylinder store will not be used for storage of any other materials, e.g. wood, cartons or any combustible material.
- Vegetation will be cleared for a distance of at least 3 metres.
- Full cylinders will be kept apart, in clearly demarcated areas, from empty cylinders so that it will not be necessary to open valves to check whether cylinders are empty or full. Empty cylinders will be chalk-marked with the letters "M.T." to avoid confusion.
- Cylinders will always stand upright, chained individually or in special stands, to prevent them from falling and causing damage to valve assemblies.
- Cylinders will be stored in rows with aisles in between for easy removal in the event of fire.
- Cylinders will be stored out of direct sunlight.
- Oxygen cylinders will be stored at least 5m apart from flammable gas cylinders
- Empty cylinders will be immediately returned to the "empties store" and a check will be made that the valves are tightly closed.
- Where provision exists protecting caps will be fitted over valves when cylinders are not in use.
- Flammable and oxidising gases will not be stored together. Greases and oils will never be allowed to come into contact with oxygen as this could result in spontaneous combustion.
- Two 9kg dry powder chemical extinguishers will be mounted in an easily accessible position at a distance of not more than 5m from the door of the store.

- Notices indicating "DANGER - FLAMMABLE GASES" will be fitted to the outside face of all doors or gates.

- The following signs will be prominently displayed at the storage facilities:-
  - "No Smoking"
  - "No Naked Flames"
  - "No Unauthorised Entry"
  - "Full Cylinders" and "Empty Cylinders" as appropriate signs indicating the type of gas storage.
  - "Acetylene", "Oxygen", "LPG", etc

- Storerooms will be well ventilated and will not be below ground level.

- All electrical fittings will be of the flameproof type.

- Valves of empty cylinders will be kept firmly closed to prevent breathing.

14.5.7 Operating conditions

In areas where flammable or toxic gases are used:

- Ventilation will be sufficient to keep atmospheric gas/vapour concentrations below danger levels.

- All electrical fittings will be of flameproof construction (for flammable gases) and in some cases explosion-proof fittings will be required.

- Only non-ferrous safety tools will be used to avoid friction or sparks.

- Personnel will be equipped with non-static, non-sparking clothing and footwear when working with volatile & explosive gasses.

- Respiratory protection will be provided where toxic gases are handled.

- Joints and connections will be regularly tested with a soapy solution for leaks.

- The maximum length of oxygen and acetylene hoses is 30m and will only be joined using special brass couplings.

- No lighted cutting torch or any other naked flame will be brought near the Oxy-acetylene cylinders at any time.

- Oxygen and Acetylene cylinders will not be used in any confined space unless under controlled circumstances.

- All compressed gas cylinders will be kept away from naked lights and/or any hot surfaces or heating appliances, e.g. stoves, hot plates, boilers, etc.

- A fire extinguisher will be available during any hot work activities.

14.5.8 Handling

- Cylinders will always be handled with care to avoid unnecessary bumps and knocks and will not be allowed to “slide over".
- Compressed gas cylinders will not be used as roller-beds for moving heavy objects or as support for material or equipment.
- Compressed gas bottles in use will be secured in an upright position in a purpose made trolley.
- Decanting from larger into smaller containers will be carried out only with approved equipment (pumps, cradles, etc.).
- Any leaks will be plugged as soon as practical and the area immediately ventilated, making sure no source of ignition is present. If a leak cannot be plugged, the cylinder will be transported outdoors and allowed to blow down under supervision. Care will be taken as most gases are heavier than air and could enter drains, basements, etc.
- If an escaping gas ignites and burns with a torch-like flame, the flame Will Not be extinguished unless the leak can be stopped immediately. Otherwise, a far more hazardous situation develops, i.e. an unconfined vapour cloud explosion. Facilities must have adequate fire protection equipment to meet such a situation.

14.5.9 Flash Back Arrestors

- Arrestors will conform to BS 6158, DIN 8521 and ISO 5175
- In all instances where Oxy-fuel gas equipment is used, suitable flashback arrestors will be fitted in accordance with the manufacturer's instructions.
- Where a combustible gas is used in conjunction with oxygen or air under pressure, each regulator will be fitted with flashback arrestors embodying a temperature or pressure sensitive cut-off device (or both).
- Flash back arrestors will be fitted to both ends of hoses.
- Where thermal cutting machines are used, the torches will carry arrestors mounted on their inlets and at the torch end.
- Where the machine is solid piped into the supply, no other arrestors, apart from the unit in the pipeline itself will need to be fitted.
- Where conventional hoses are used arrestors at the regulators are advisable.

14.5.10 Transporting of Cylinders

- All compressed gas cylinders, either empty or full, while being transported will be secured in the vertical position with the valve uppermost and will not be allowed to roll freely around the vehicle.

- No cylinders will be transported unless the valve caps and plugs are securely in position and will only be lifted by using a special purpose lifting device approved by EHS Department.

- Before compressed gas cylinders are transported, regulators and other equipment will be removed.

14.5.11 Fire & Protection

- Where bulk supply of any particular gas is required, storage will only be in approved containers in a safe location and equipped with appropriate fire protection systems.

- In the event of a fire-
  - All cylinders will be removed promptly from the area.
  - Cylinders that cannot be removed will be cooled with substantial quantity of water.

- If any acetylene cylinder is accidentally heated or if there is any sign of smoke or an explosion occurs -
  - The cylinder will be immediately removed into the open atmosphere.
  - The valve will be closed and the regulator detached.
  - The cylinder valve will be fully opened to allow the gas to vent freely

- In the event of any compressed gas cylinder becoming involved in a fire, the supplier will be notified and the cylinder will be clearly marked.

14.5.12 Gas Cylinder Store Specifications

- Location - Free standing or with at least one wall at ground level.

- Floor - Solid, of non-combustible material, preferably concrete.

- Roof - Reinforced concrete.

- Walls – 220 mm brick work. External wall to be of lighter construction to vent explosion outwards.

- Doors – 50 mm hardwood completely covered, including the edges with 0.9 mm metal secured to the door with bolts at 300-mm centres along the edges. Doors to open outwards

- Where the area of the store exceeds 10m², two doors will be provided. The second (escape) door is to be fitted with a bolt on the inside and no other lockable device is to be used.

- Windows - Metal frames with no opening sections, glazed with wire-woven glass not exceeding 450 square mm.
- Ventilation - Natural or mechanical ventilation to be provided.
- Electrical - All electrical installation and fittings within the store will be of flameproof construction. In the case of Hydrogen storage, explosion-proof fittings will be used.
- Signage - Notices indicating "DANGER - FLAMMABLE GASES" will be fitted to the outside face of all doors or gates.

14.5.13 External Gas Cylinder Storage Area Specifications

- Location - At least 5m from any building, drain, boundary or any combustible material. Where LP gas is stored, this limit will be 10m.
- Floor - Solid, non-combustible material, preferably concrete.
- Covering - Cylinders will be protected against direct sunlight.
- Fence - 50 mm x 3, 15 mm galvanised chain link wire (diamond) mesh, 2,5m high, with matching gate.
- Electrical - All electrical installation and fittings within 10m of the storage area will be of flameproof construction.
- Signage - Notices indicating "DANGER - FLAMMABLE GASES" will be fitted to the outside face of all doors or gates.

14.6 Fire Prevention and Protection

14.6.1 Objective

To ensure that all fire risks are adequately protected and that the fire equipment is of the highest standard and is regularly maintained in accordance with statutory requirements.

14.6.2 Scope

All fire equipment and flammable substances in the facilities and offices

14.6.3 Responsibility

- Facilities & Safety Manager will advise the Purchasing Manager regarding Fire Equipment specifications and will ensure that service contracts for Fire Equipment are entered into.
- EHS Officer will conduct the Fire Risk Survey and report the findings to the EHS Committee and will ensure that all employees are trained in the use of

the Fire Equipment. He will also ensure that the Fire Equipment is erected at the appropriate locations and those locations will be clearly marked. All flammable substances stored in facilities will meet the safety requirements.

14.6.4 Associated Documents

- Health and Safety Representatives Reports
- Appointment of Fire Prevention Co-ordinator

14.6.5 References

Company Standard Procedure - Safety, Health & Environment

14.6.6 Fire Prevention and Protection

14.6.6.1 Extinguishing Equipment

A Fire Risk Survey will be conducted at each facility and office and a report of the findings will be submitted to the EHS Committee.

The following extinguisher types are approved for use at any facilities:

- Co2 Fire Extinguishers
- Multi-Purpose Dry Chemical Powder Fire Extinguishers
- Note: No water type Fire Extinguisher will be used
- Dry Chemical Powder Extinguishers will be used to protect the following risks:
  - Storage of flammable liquids including Diesel, Paints, Paint Solvents, Flammable Degreases, Cleaning Agents and Oils, Large Electrical distribution units, Electrical Switchgear and Switch Yards

- BCF Extinguishers will be used for the following risks:
  - Offices, Electrical Appliances, Computers and other risks in confined spaces
  - A minimum of two extinguishers will be provided for any building or floor exceeding 100m². Thereafter for general cover, extinguishers will be provided to the following scale:
    - High hazard area - 1 per 100 m2
    - Moderate hazard area - 1 per 200 m2
    - Low hazard area - 1 per 300 m2

- For this purpose the extinguishers will have the following minimum capacities:
  - Dry chemical multi purpose - 4.5kg
  - Co2 - 6,8kg.

- Carbon dioxide extinguishers will not be considered for general-purpose protection but for special protection e.g. Computers, Switch-gear.

- In addition to general coverage, particular hazards such as main electrical boards and motors, flammable liquids stores and gas tanks, will be provided with their own appropriate extinguishers.

- Extinguishers will be positioned in safe, accessible areas, preferably near exits.

- Hose reel installation will be provided in any building, which exceeds 200m².

- Hose reels will be provided in the ratio of not less than one reel for each 500m² of floor area or part thereof of any storey.

    - Hose reels will be located so that all parts of a building floor are within reach of at least two hose reel nozzles when the hoses are fully extended. Obstructions such as stored goods, shelving, etc, will be taken into account when locating hose reels
      Where practical, hose reels will be located in easily accessible "safe areas" (i.e. near exits, stairwells, lobbies)
    - Protective covers will be provided for hose reels exposed to the elements

    - Hose reel stop valves will be sealed with lead or plastic seals and reserved solely for fire- fighting purposes.

    - All piping and fittings used in a hose reel system will be capable of withstanding a pressure test of up to 2 500 psi.

14.6.6.2 Installation of Fire Extinguishing Equipment

- A ground plan indicating the allocated positions of all fire extinguishing equipment will be drawn up.

- Extinguishers will be positioned in safe, accessible areas, preferably near exits.

- Extinguishers will be mounted on purpose-made brackets with the carrying handle not less than 1m and not more than 1.5m from ground level.

- Extinguishers will be numbered with a corresponding number at the location; this number will be recorded in a register.

- All fire extinguishers will be installed at a safe distance from the possible fire hazard. The correct type of extinguisher will be positioned for the expected type of fire.
- In the facilities especially in the storage areas, the fire appliances may be grouped together at "fire points" each serving between 500 and 1000m², depending on suitable locations, in safe accessible areas. Sketches of typical fire points will be posted on notice boards

- All fire extinguishers exposed to the elements will be enclosed in weatherproof boxes / cover sheets.

- EHS Representative will inspect all fire extinguishers half yearly. Inspection tags will be updated on yearly basis.

14.6.6.3 Accessibility of Equipment

- The locations of all Fire Equipment will be clearly indicated by symbolic signs.
- Any symbolic sign used will comply with statutory regulations.
- "Fire points" will have the wall and floor below demarcated with squares of 900 mm with red and white diagonal stripes and will be kept clear.
- No material or equipment will be placed or stored in a position which renders any fire equipment inaccessible.

14.6.6.4 Maintenance of Equipment

- All Fire Equipment will be identifiable, listed in a register and will be inspected at least once per quarter.
- The findings of quarterly inspections will be entered into the appropriate register and any deviations that are found will be corrected immediately.
- Fire Equipment will be serviced in accordance with Statutory Regulations and the manufacturers' specifications.
- Dates of service, pressure test and recharging will be recorded on labels fixed to the unit.
- Hose reels will be fully extended once a year to check condition and coverage
- Fire appliances and their positions will be numbered and a record of all units will be maintained showing type, location, dates of purchase, service, pressure test and recharging.
- All appliances located in open areas exposed to sun and rain will be protected.
- All Fire Equipment will be sealed against unauthorised use and no fire Equipment will be used for any reason other than for extinguishing fires.

14.6.6.5 Storage of flammable Substances

- All flammable substances will be stored in a building of sound construction, which is for the sole purpose of flammable substance storage and will be called the Flammable Substance Stores.

- The flammable substance store will be fitted with a door which will remain locked at all times and the key under the control of the appointed Fire Co-ordinator or competent person.

- No combustible material will be stored in the flammable substance store and all combustible waste will be removed on a daily basis.

- No chemical substance particularly corrosives will be stored in the flammable substance store.

- All flammable substances will be stored in suitable containers, clearly labelled as to their contents and will remain closed when not being used.

- During the decanting of flammable liquids the containers will be adequately bonded to restrict and contain the generation of static electricity.

- The floor of" flammable substance stores" will be of the non-slip type and be suitably bunded to contain any spillage that may occur.

- Flammable substance stores will be adequately ventilated at the top and the bottom of the walls.

- In case natural ventilation is inadequate, then artificial ventilation in the form of a flameproof fan will be introduced.

- An adequate number of signs will be prominently displayed indicating that smoking and use of naked lights in the vicinity of the flammable substance store is prohibited.

- Electrical fittings will be required to be of the flameproof type complying with all relevant statutory requirements and British Standard specification or equivalent.

- An adequate number of dry chemical powder extinguishers will be provided and suitably located at each" flammable substance store".

14.6.6.6 Alarm System

- A system for warning personnel of a situation which may warrant evacuation or some other special action will be implemented at every facilities and office

- Facilities Management will ensure that all employees are aware of what action will need to be taken if an alarm is sounded. An explanation of the Alarm System needs will be posted at strategic places, e.g. clocking stations, notice boards.

14.6.6.7 Fire Drill and Instructions

- All Facilities supervisors and security guards to be trained to identify and operate all types of fire equipments

14.6.6.8 Fire Classifications

- Class A: Ordinary combustibles: wood, paper, plastics, textiles
- Class B: Flammable liquids: petrol, alcohol, oil
- Class C: Electrical: any fire in the presence of electricity
- Class D1: Non-alkali metals: aluminium, magnesium
- Class D2: Alkali metals: sodium, potassium, lithium
- Class E: Flammable gases: methane, propane

14.6.6.9 Fire Prevention Co-ordinator

- A member of EHS team will be designated as the Fire Prevention Co-ordinator with the following duties and responsibilities:

  - The designated Fire Co-ordinator will have adequate training and obtain a certificate in Fire Prevention, from an authorised institute.

  - Regularly inspect the areas paying particular attention to Fire Hazards, e.g. Build up or combustible material, possible uncontrolled ignition sources near flammable or combustible material, etc.

  - Regularly check to ensure that all escape routes are clear and free of obstacles.

  - Regularly check the fire equipment to ensure serviceability at all times, and that the Fire Equipment is clearly demarcated and accessible.

  - Co-ordinate the servicing of Fire Equipment in accordance with relevant codes.
  - Conduct regular surveys to determine whether all risks are adequately covered.

  - Prepare an action plan to be implemented in the event of a Fire.

  - Co-ordinate the Fire Teams' actions in the event of a Fire and co-ordinate that all fire training taking place in the facilities.

14.7 Lifting Operation

14.7.1 Control of Lifting Operations

Facilities Managers will be responsible for the control, inspection, maintenance and upkeep of all routine and non-routine lifts carried out in the areas of their responsibility. The manager will ensure that the lifting specialist is qualified and competent, that all personnel are competent for the task and that any lifting equipment supplied is appropriate and certified. All lifting operations are subject to the requirements of SAFE OPERATING PROCEDURES.

14.7.2 Maintenance and Inspection of Lifting Machinery

- All lifting machinery will be subject to a planned maintenance program incorporating preventive maintenance tasks. All work and inspections carried out on any lifting equipment will be recorded in the individual record register for that equipment.

- Engineers and crane operators will be responsible for ensuring that cranes are fully able to undertake each lift and that all faults, including faults to any safety equipment/apparatus fitted to the crane, will be promptly reported to the Production/Maintenance Manager. They will be responsible for ensuring that a faulty crane is removed from service immediately and only after confirmation of repair to full serviceability will the crane is taken back to service.

- The Maintenance and safety department will track any repairs to lifting equipment and where necessary initiate due repairs, inspection and tests.

14.8 Vehicle and Heavy Equipment Operations

The purpose of this vehicle and heavy equipment operations procedure is to provide guidance and direction on vehicle safety issues.

14.8.1 Drivers/Operators

- All drivers will hold a valid driving licence for the class of vehicle they are required to drive.
- All rules, regulations of the facilities will be strictly observed.
- Operating a vehicle under the influence of intoxicating beverages or drugs is forbidden and will result in dismissal.
- Prescribed speed limits will be observed when driving inside operating facilities, garage and private roads.
- A safety belt will be worn at all times.

- Drivers will check their vehicle for the following:

  - Mechanical system -Clutch, Brakes, Steering.
  - Electric system-Battery, Light, Wipers and Washers.
    Fluids-Fuel, Oil, Water.

- Tyre condition, Air pressure, Spare tyre, Tools.
- Submit his vehicle for preventive maintenance and servicing at regular intervals
- Report any defect/damage/accident.
- Ensure persons will not be allowed to travel at the rear of pick up truck.
- Do not allow over loading. Only the number of passengers as per registration document will be allowed to travel in the vehicle.
- Securely fasten all loads on vehicles.
- Safe driving techniques.
- Seek assistance of a signalman when the view to the rear is obscured

14.8.2 Fork Lift Truck

- Licensed, authorised and trained operators only will be allowed to operate forklift truck.
- Before the start of work, operators will check oil, hydraulic fluid, brake fluid, water, battery, signals and indicator systems, forks, pins and other parts to ensure safe operation.
- Speed limit and safe working load of the forklift will be adhered to.
- Drivers will follow the basic driving techniques and safe practices in stacking, handling and travelling.
- If the load is so high that it obstructs the clear view of the road ahead, the forklift truck will be driven backwards.
- When driving up a gradient the truck will face forward, when driving down a gradient the forks will face up the gradient.
- Trucks will not be parked on gradients.
- When parking, the hand brakes will be left "On" with the fork in the fully lowered position.
- Chemicals, Oils or Flammable materials will not be transported in open-topped containers.
- No person will be allowed to walk under elevated forks - Hands and feet will be kept inside the running lines of the truck.
- One fork only for lifting will never be used under any circumstances.
- Operators will not make repairs or adjustments to any parts of the truck.
- Operators will take care of overhead obstructions and width limitations.

- Trucks will be parked in designated areas free from doorways without obstructing vehicles/other truck movements or fire extinguisher location.

- Under no circumstance will anyone be hoisted aloft on the forks or a pallet.

- A program of regular preventive maintenance will be established for all facilities and equipment.

14.8.3 Cranes

- Only Licensed authorised and trained crane operators will operate cranes.

- Cranes will be operated and maintained to conform to recommendations by the manufacturer.

- While deciding the lifting capacity of a crane, the following will be considered:
  - Weight.
  - Load Size, Shape and centre of gravity.
  - Height to be lifted and final position.
  - Maximum radius at which load has to be lifted carried or placed.
  - Restrictions caused by facilities, building and power lines.

- Proper selection of jib, hook will be done in accordance with the manufacturer's instructions.

- A load radius indicator will be fitted and charts displayed in the cab to check the safe working load.

- No crane will be operated beyond its safe working load.

- All cranes will be kept in sound mechanical condition.

- All safety devices fitted will be in good working order and correctly calibrated. All controls will be clearly marked.

- The cab will be kept clean.

- No person will ride on a load, hook or sling.

- Loads will be raised and lowered smoothly avoiding sudden starts or stops.

- Before every operation, the lifting/slinging equipment to be used will be visually checked to ensure that it is in good condition.

- All parts of the crane, every chain and lifting tackle including load capacity will be thoroughly examined by a competent person once every 12 months and all inspection records of the cranes will be maintained.

- All crane hooks will be provided with standard safety catches.
- Hands will be kept away from pinch points when hooking and coupling.
- Loads will not be left suspended in the air when the hoist or crane is unattended. The path of travel will be clear, devoid of all items.
- Chains will not be knotted and shackles will be fitted with proper pins.
- Tyres of wheeled mobile cranes will be properly and evenly inflated to operate on a level base.

14.9 Emergency Planning

Facilities Management will develop a plan for the safe evacuation of personnel in case of an emergency.

- Facilities Management will ensure that all personnel are aware of the procedure and will ensure that a practice exercise is carried out once every 12 months to test the effectiveness of the plan.
- A person will be selected as overall in - charge of evacuation and evacuation Marshals will be designated for each area. The Marshall will be responsible for ensuring that all people in his area are accounted for.
- Assembly areas will be clearly demarcated and all personnel will be made aware of the area that they are to report to, in the event of being evacuated.
- Control over visitors to the Facilities will be exercised and the Facilities EHS team will be made aware of all visitors' whereabouts. No visitor will be allowed unaccompanied into the work areas

15. DEFINITIONS & ABBREVIATIONS

"Company : Alghanim Industries

"Accident": An incident which has resulted in actual injury or illness and / or damage (loss) to people, assets, the environment or to third party / parties

Accident Scale: Iceberg scale (starting from highest scale)

- **Fatalities**
- **Serious Accidents**
- **Lost time injuries**
- **First Aid Cases**
- **Near Misses**

"Incident": An unplanned event or chain of events, which has or could have caused injury or illness and / or damage (loss) to assets, the environment or third party / parties.

"Near Miss": An incident which could have, but does not result in injury, illness, and damage or product loss.

"First Aid Case": A work injury that gets treatment by a competent paramedic or First Aider from the company's facilities clinic and returns to work.

"Medical Treatment Case (Doctors Report): A Medical Treatment Case is any work injury that involves neither lost work days nor restricted work days but which requires treatment by a medical physician.

"Lost Time Injury": A work related injury which requires medical treatment by a medical physician and prevents the injured from performing his usual or similar job for one full shift after the accident.

"Regulation": A law/rule made within the location and country where the facilities is located.

"Risk": Potential for and the probability that injury or damage will occur.

"Safe": Free from any hazard.

"Substance": Includes any solid, liquid, vapour, gas or aerosol, or any combination of the above.

"User": In relation to facilities or machinery is a person who uses the facilities or machinery

"Work": Work performed by an employee during the course of his employment.

"Workplace": Premise or place where a person performs work in the course of his employment.

"Danger": Any situation which has the potential to cause injury or damage to person or property

This Document is intended for all Facilities of Alghanim Industries. For questions, please refer to:

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