Contract : **PROJECT 401 – INTEGRATED TRAINING CENTER FOR QAF JOINT SPECIAL FORCES**

Contract No. : **T-101-01**

Client : **QATAR ARMED FORCES**

Contractor : **GAP INSAAT YATIRIM VE DIS TICARET A.S.**

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0A	February 26, 2021	Issued for Approval
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HEALTH, SAFETY AND ENVIRONMENT POLICY

HSE policy of TTE GmbH is based on sound principles and includes compliance with the applicable national and international environmental legislation, industry standards and best practices, managing HSE with the same value as all business operations and promoting a positive HSE culture within the company. TTE seeks to achieve the highest level of HSE management systems and recently voluntarily pursued and received accreditation to the highest international standards for our quality management system (ISO 9001).

TTE targets in matter of quality, safety and environment refer to the following commitments:

• continuously improving the Company's performance and worth;

• ensuring compliance with the laws and regulations in matter of safety and environment;

• preventing and mitigating pollution;

• preventing injuries and occupational diseases and mitigating the risks in the matter of health and safety.

Our strategy provided for the implementation of the management system, which integrates and adopts the principles stated by ISO 9001:2015, allowing to turn Company's commitments into actual results:

• by ensuring effectiveness and efficiency of management, durability and reliability of works carried out or installed equipment, in compliance with the requirements set forth in contract documents in connection with mandatory technical regulations;

• by adopting a management of risk starting from the phase of design and planning and allowing to learn from events by analysing the critical situations which may have occurred;

• by guaranteeing the health and safety of Company's employees while fulfilling their duties, by eliminating/mitigating the risks at their very origin, through prevention, the implementation of protective measures, the sensitization and training of personnel;

• by assessing environmental aspects connected with the execution of the works in order to plan control and supervision activities;

• by monitoring the performance of the Company's Management System by appropriate performance indicators, in order to underline the value so obtained;

• by implementing a sensitization, information and training process of personnel in matter of quality, safety and environment;

• by involving suppliers in the adoption of the same commitments taken on in the matter of Safety and Environment.

This policy is made available, within and out of the Company and is the reference frame for the definition of Targets and Goals in the matter of Quality Environment Safety. Then, it is periodically assessed in order to guarantee it is suitable for the organization. The behaviour and sensitivity shown in connection with topics like Quality, Safety and Environment, are significant elements distinguishing TTE personnel and make part of the assessment of employees and third parties.

By reaffirming that all the members of TTE GmbH personnel are responsible for safety, quality and the environment, all the personnel are asked to comply with the principles stated in this Policy, which has to be considered as a reference for all the activities carried out by the company.

SAFETY PROMOTION and INCENTIVE SCHEME

Safety Promotion

In order to create good Safety awareness on Site, visible promotions will be used as a means of communicating rules and practices etc. to be followed.

The purpose of the Safety Incentive is to influence all employees to participate in the HSE Management System and to believe that safety is a value and not just a priority and to influence the behavior of individuals and groups and develop a project culture.

Employees Safety Incentive Program

The Safety Incentive covers TTE Safety Incentive for all Employees. TTE shall be responsible for the implementation of the Safety Incentive Program.

TTE shall be responsible for implementing Employees Safety Incentive. TTE Incentive will at a minimum incorporate the following:

Monthly Area Awards

Activity areas shall be assessed according to the Weekly Area Safety Assessments. The activity area achieving the highest average score over a period of one month shall be eligible for an award. The Executives in charge of the safest area and each member of his crew shall each receive a cash award or present. The recommended amount will be determined by TTE Management.

General Rules for Administering the Incentive Program

TTE shall establish a Safety Committee, consisting of representatives from TTE Management Staff. The Committee shall convene on a monthly basis to review the overall and individual program status.

DISCIPLINARY ACTION

TTE has adopted a disciplinary system on the Project.

A written disciplinary procedure “Disciplinary Action Procedure for violations” of TTE shall be instigated and included as a section within the Human Resources Procedures and Employment Contracts of TTE Employees.

The purpose of this procedure is to place accountability within the TTE Organization and to avoid any disputes that may occur through any seemingly unfair decisions.

The disciplinary procedure shall:

- Observe Qatar Legal and HSE Regulations;
- Be in accordance with the TTE HSE Plan and Procedures;
- Be fair and equitable to all employees.

The following safety guidelines apply to the development of a disciplinary procedure:

- Define the range of offences;
- Detail the actions against the different categories of offences (e.g. verbal warnings, written warnings, suspension and dismissal).

1. PURPOSE

This HSE Plan is developed to provide guidance to TTE GmbH project management, team and all other parties involved in the Project.

The HSE Policy provisions, aims and goals are defined as follows:

- All TTE employees, working on the project shall apply Project Specifications and Qatar Legislations, Laws, Regulations, QCS 2014, national and international codes and standards regarding HSE aspects;
- Full compliance to the HSE Plan leads to continued health, safety and environment of everyone who works on the Project.

The main objective of the HSE Plan is to provide an overview of the structured approach to be used in the elimination and minimization of HSE risks. This approach will also help to prevent unsafe acts and conditions, eliminate potentially physical and working environment conditions and improve HSE awareness and behaviour.

The HSE Plan is a living document and shall be reviewed and revised according to recommendations and lessons learnt throughout the execution of the operations.

This HSE Plan applies to all stages of wind tunnel assembly and installation, commissioning and testing activities being undertaken by TTE GmbH.

TTE GmbH is fully committed to adopting and achieving the HSE goals of:

- **No harm to people;**
- **No damage to property;**
- **No serious accidents;**
- **No damage to the environment.**

2. INTRODUCTION

This HSE plan is prepared for the works on Assembly and Installation of Wind Tunnel as part of 'Project 401 – Integrated Training Centre for QAF Joint Special Forces' and it is applied to all preparation works, assembly and installation operations and commissioning phase.

TTE GmbH Management shall identify the regulatory requirements that apply to the HSE aspects of the Project. The requirements include relevant provisions of:

- Directives;
- Laws;
- Legislations;
- Standards;
- Project Specifications.

Regulatory requirements including:

- Qatar Construction Specification 2014;
- Qatar Civil Defense Law No. 9 of 2012;
- Qatar Labour Law No.14 of 2004 of the State of Qatar parts 3, 10, 11, 13, 15 & 16;
- Qatar Environment Protection Law No. 30 of 2002;
- Qatar Traffic Law No. 19;
- Environment Executive Regulations of 2005;

- Law No. 8 of 1974 Public Hygiene;
- Law No. 8 of 1990 Regulation of Human Food Control;
- Resolution of the Minister for Civil Service and Housing Affairs No. 8 of 2005;
- Instructions of Healthcare Waste Management;
- Resolution of the Minister for Civil Service and Housing Affairs No. 9 of 2005;
- Determination of Working Hours in Open Places During Summer;
- Resolution of the Minister for Civil Service and Housing Affairs No. 16 of 2005;
- Medical Care of the Workers of the Institutions;
- Resolution of the Minister for Civil Service and Housing Affairs No. 17 of 2005;
- Conditions and Descriptions of the Expedient Workers Residences;
- Resolution of the Minister for Civil Service and Housing Affairs No. 18 of 2005;
- Models of Work Related Injury Statistics Occupational Diseases and Reporting;
- Resolution of the Minister for Civil Service and Housing Affairs No. 19 of 2005;
- Periodic Medical Examination for Workers Exposed to the Occupational Diseases Risks;
- Resolution of the Minister for Civil Service and Housing Affairs No. 20 of 2005;
- Precautions and Requirements in Work Areas to Protect Workers against Risks of Work;

Standards

- ISO 9001:2015;
- QCS 2014;

Specifications

- Contractor HSE Specification;
- Contractor Work Zone Traffic Management Guide;
- Workers' Rights Book - National Human Rights Committee - Doha, Qatar;
- Contractor Safety Specification for Incident Reporting and Investigation;
- Contractor Safety Specification Qualifications for the HSE Personnel;
- Qatar Traffic Control at Road Works;

GAP INSAAT Yatırım ve Dış Ticaret A.Ş. is the Contractor of this project and awarded TTE GmbH as the Subcontractor responsible for Assembly and Installation of Wind Tunnel.

TTE GmbH ensures that HSE plan will be followed during the project. GAP INSAAT Yatırım ve Dış Ticaret A.Ş. has the right to do periodic and random audits whenever necessary. If nonconformities are revealed during these audits or regular site visits both parties have the right to give "Stop Work Order". The work will not start until corrective actions have been taken and the risks eliminated or properly controlled.

3. DEFINITIONS

Accident	An undesired or unplanned event that results in injury, illness, disease or death. Or an event that induces a loss of equipment/material/construction.
Audit	Systematic examination to determine whether activities and related results conform to planned arrangements and whether these arrangements are implemented effectively and are suitable for achieving the organization's policy and objectives.
Confined Space	Confined Space: A space (a pipe, duct, tank, excavation, pit, or recess) that: - Is large enough and configured such that an employee can enter and perform assigned work; - May contain hazardous materials, be oxygen-deficient, have a flammable atmosphere, or have the potential for such conditions; - Has limited or restricted means for entry or exit; - Is designed such that entrapment and/or crushing could occur; - Is not designed for continuous employee occupancy.
Continual Improvement	Process of enhancing the HSE Management System to achieve improvements in overall HSE performances, in line with the organization's HSE Policy.
Emergency Case	A sudden serious and hazardous event/condition requiring immediate action; and period related to such incidents.
Environment	Surroundings in which an organization such as TTE GmbH operates, including air, water, land, natural resources, flora, fauna, humans, and their interrelation.
First Aid	First simple treatment given by a trained person or health officer to injured person(s), after an accident.
Frequency	The repetition of an accident/incident with certain periods.
Hazard	Source or situation with a potential for harms in terms of injury or illness, damage to property, damage to the workplace environment, or a combination of these.
Hazard Assessment	The examination of the impact and results of the threats in case that they are realized.
Incident	An unplanned, uncontrolled event that results in damage to property, plant, equipment or infrastructure, or harm to the environment.
Interested Parties	Individual or group concerned with or affected by the HSE performance of organization.
Lost Time	The time when work can't be carried out due to an incident/accident.
Medical Fitness	The physiological and psychological conditions of the employees to work conditions.

Near Miss	An unplanned, uncontrolled event that under different circumstances could have resulted in an incident or accident.
Non-Conformance	Any deviation from work standards, practices, procedures, regulations, management system performance that could either directly or indirectly lead to injury or illness, property damage, damage to the workplace environment, or a combination of these.
Oil Spill	The spreading of oil or oil products to the environment due to a leak or flooding.
Performance	Measurable results of the HSE Management System, related to the organization's control of health and safety risks based on its HSE Policy and objectives.
Risk	Combination of the likelihood of a combination of the likelihood of an occurrence of a hazardous event or exposure(s) and the severity of injury or ill health that can be caused by the event or exposure(s).
Risk Assessment	Overall process of estimating the magnitude of risk and deciding whether or not the risk is tolerable.
Severity	A statistical term used to define the degree of impact for job accidents.
Safety Committee	A committee established by the Contractor to discuss all HSE related issues.

4. ABBREVIATIONS

CLIENT	Qatar Armed Forces
ENGINEER	Qatar Emiri Corps of Engineers
CONTRACTOR	GAP INSAAT Yatırım ve Dış Ticaret A.Ş.
SUBCONTRACTOR	TTE GmbH
HSE	Health, Safety, Environment
ISO	International Standard Organization
MSDS	Material Safety Data Sheet
MS	Method Statement
PTW	Permit to Work

5. HSE PRINCIPLES

TTE GmbH will give high priority to the management of HEALTH, SAFETY AND ENVIRONMENT (HSE). Everybody who works for the project, anywhere, has the responsibility for HSE.

Proper HSE performance and the health, safety and security of everyone who works for the project are critical to the success of the business. The project goals are that as far as possible there is no harm to any person and no damage to property or to the environment for the duration of the Project.

TTE GmbH recognises that safety management is a line management responsibility, the principles of which employees will fully comply and that management must both lead its workforce and control the worksite.

TTE GmbH will require all its senior management to take direct management responsibility for the HSE performance of all of the workers at site.

The following sets out the HSE principles to be applied. All work will be undertaken in a responsible manner. Decisions will be made with full consideration of economic, safety, security and social factors.

- **No Harm To People**

As a principle there is a clear affirmation that accidents and harm to people will be unacceptable in the Project operational culture. Project target is zero incidents and accidents to achieve the objective of no harm to people. It is recognised that incidents will occur, and any incidents that do occur will be investigated by the safety management and a report issued but the objective is clear, no harm to people and to prevent their occurrence.

- **Improve on Current - Best Industry Practice**

The overall Project will seek HEALTH, SAFETY AND ENVIRONMENT excellence. The success of the project will be judged on its HSE performance. This has a potential of bringing cost benefits, providing HSE to become an integral and successful part of the business.

Full consideration towards HSE will be given throughout the duration of the project execution and an ongoing proactive HSE culture should lead to achievement of this objective.

- **HSE Management Strategy**

The focus is on reducing all incidents of TTE GmbH involvement, but not only on a day-to-day basis but especially those that are recognised as high risk, and are known to have caused serious injury in the past.

To maintain good HSE standards it is required to employ qualified HSE personnel. If the subcontractor's work force on the project site is more than 50 persons at the work site, it is required to appoint and deploy a full time Occupational Health and Safety Engineer for each and every 50 persons employed at the worksite. For less than 50 persons employed at the work site, a minimum of one Safety officer shall be present on site during all working hours each day throughout the Contract period.

HSE Legislation, Standards And Guidance

TTE GmbH will comply with all applicable legislation and regulations. If there are discrepancies between the Local Regulations and site HSE Management plan requirements, stricter one will be followed.

In support of the best practice management strategy detailed above, TTE GmbH adopts and applys high HSE standards and guidance, examples of which appear throughout this document.

- **Policy and Management System**

TTE GmbH will adopt a systematic and pro-active management approach.

TTE GmbH will have and implement HSE policy that addresses HSE objectives specifically:

- Personnel development, skills training and competency;
- Minimisation of losses;

- Management control;
- Standards;
- Method of implementation;
- Promoting positive H&S culture;
- Auditing and assessment;
- Continuous improvement.

TTE GmbH will manage the core requirements for the performance of safe work:

- Control of a safe work site;
- Positive identification and certification of all equipment and tools on the work site
- Identification, training, supervision and support of all workforce personnel on the work site

Delivering HSE Assurance

- Auditing and management review;
- Work practices, written procedures and rules;
- Method statement & Risk assessment;
- HSE inspection and review of the workplace on a regular basis;
- Operational control and site supervision.

Behaviour

- Promoting positive H&S culture;
- Continuous improvement;
- Induction and training for the entire workforce to ensure competency in management, technical and HSE.

HSE Risk Management

- Risk identification and assessment;
- Risk management;
- Security procedures and control of the worksite.

Crisis and Emergency Management

- Emergency response procedures;
- Provision of emergency response personal equipment and systems;
- Accident management team;
- Accident management plan;
- Accident exercises on a regular basis;

Major Incident and High Potential Incident Reporting

- Accident and incident reporting procedures and systems.

Accident Investigation Guidelines

- Accident investigation guidelines and procedures;
- Near miss investigation guidelines and procedures;
- Publication of findings and lessons learned.

HSE Performance Targets

- Compliance with standards;
- HSE performance data.

HSE Reporting Requirements

- HSE and KPI reporting procedures;
- Action monitoring of HSE-related remedial actions.

HSE Reporting Definitions

- Publish performance and definitions available to the workforce in training programs and at the workplace.

Health Management

- Demonstration that personnel are competent and fit for work;
- Demonstration that in the performance of the work, personnel are not under the influence of alcohol or illicit drugs (or inappropriate use of licit or prescribed drugs).

6. KEY ROLES & RESPONSIBILITIES

All levels of management from TTE GmbH are involved in the HSE organization and shall recognize that HSE is Line Responsibility and shall fulfill their own roles and responsibilities to attain the HSE objectives and targets.

Project Manager

- Plan, Organize, Lead and Control the Project Team in the provision of the full range of activities;
- Support and progress the Project HSE Management Programs, and specifically coordinate the Commitment & Motivation, Risk Management, Incident, Investigation, Emergency Preparedness and other elements of the GHSER (Getting Health, Safety, Environment Right) model for which he has responsibility;
- Deliver a cost-effective project;
- Maintain awareness and promote project goals in respect of HSE, Quality, Budget, Schedule, and Technical Integrity;
- Ensure the implementation of the HSE Plan.

Construction Manager

Construction Manager reports to Project Manager and has the following responsibilities:

- Monitor/audit HSE performance;
- Ensure the practical implementation of the HSE Plan;
- Full accountability & responsibility for all HSE aspects and performance relating to the contract;
- Ensure risks are identified, controls are in place and that these controls are assured and impacting the workforce;
- Participate in and promote the ongoing development of effective relationships between all parties involved in the Project;
- Ensure that Lessons Learned are appropriately considered in the design and construction of the Project;
- Develop and train local personnel within the project team;

HSE Manager

HSE Manager reports to Project Manager and has the following responsibilities:

- HSE personnel to ensure that the organization on site is set up to promote and implement safe working practices;
- Provide advice, and support to Project Manager and executives in implementing and monitoring the Project HSE Plan;
- Provide HSE Assurance to Project Management Team;
- Participate in the development of security plans;
- HSE Activity Planning;
- Lead the investigation of accidents and incidents;
- Maintain HSE records;
- Attend internal and external HSE meetings, and effectively communicate on issues related to HSE performance, expectations and strategy;
- Promote the elimination and prevention of accident, incident and occupational illnesses risks at workplaces;
- Advise on precautions to take against physical and chemical working environment hazards;
- Organize training and meetings in order to establish and increase the HSE awareness, morale and motivation of employees;
- To ensure all Project personnel are aware of their responsibilities and are implementing them in accordance with the HSE plan;

HSE Engineer

- Continuously be aware of changing site conditions such that a rapid response can be made in the event of an accident/incident on site;
- Be aware of any dangerous substances in use at the site, and, be aware of actions required in case of contact with dangerous substances;
- To assist the workforce in assessment and elimination of risks;
- To inspect unsafe conditions and acts;
- To warn persons who do not comply with HSE instructions;
- To maintain (high-quality) traffic order in relation to the vehicles, equipment and employees;
- To deliver personal protective equipment to employees, to assure their usage and keep related records;
- To place the necessary and proper HSE warning signs at certain locations of the workplace.

Engineer, Foremen

- To take all reasonable measures to ensure the Safety of the workforce, no damage to equipment or materials and no damage to the Environment;
- To implement the Project HS Plan and all the relevant safety procedures;
- To comply with and carry out the site-specific HSE instructions;
- To make suggestions regarding HSE;
- To attend the HSE Meetings at the workplace as required;
- To report all hazardous conditions, accidents, incidents, non-conformances etc. to Project HSE Management;
- To monitor employees for compliance with site-specific HSE instructions;

- To ensure the hazards associated with the work that they are supervising have been identified and appropriate controls have been implemented prior to the start of work;
- To stop the job if it is unsafe.

7. ENVIRONMENT, HEALTH AND SAFETY MANAGEMENT

Health and Safety Management Plans

TTE GmbH prepared the HSE Management Plan to be used in the Project and this management plan must be followed by all employees. This management plan should be used as a guidance document during all activities related with the project.

Procedures and Work Practices

- Control of Working Hours;
- Working Procedures;
- Method Statement;
- Task Risk Assessment;
- Health, Safety, and Security Procedures and Manual;
- Communication Procedures.

Training

- Management/supervisory H&S induction training;
- Refresher Courses;
- Tool Box Talks;
- Specialist assistance;
- LOTO Trainings;
- Other training (including practical training).

Driving and Vehicles

- Vehicle Inspection and Maintenance arrangements;
- Driver Training and Evaluation.

Plant and Equipment

- Identification, quality and certification – pre mobilisation and during use;
- Inspection and Maintenance;
- Operator Training and Evaluation.

Audits and Reviews

- Work Site System Audit/Reviews;
- Site Inspections;
- Documentation;
- Equipment on Site in use.

Occupational Health

- Site Cleanliness;
- Hygiene;
- Occupational Health and Welfare;
- Accommodation /Messing Standards (Hygiene);
- Work Site Noise;

- Community Noise;
- Ergonomics;
- Illumination;
- Control of Substances Hazardous to Health;
- External Temperatures.

Incidents (Near Misses and Accidents)

- Unsafe Acts/Near Miss Conditions;
- Investigation Teams appointed;
- Investigations undertaken and actions identified;
- Reporting System/Procedure;
- Fatalities;
- Day Away From Work Cases;
- Hazard Reporting;
- Recordable Injuries.

Legal Necessities

- Certification for qualified persons;
- Following Safety Laws.

Safety Committee

For the purposes of site safety, health and welfare monitoring, the site management shall establish a Safety Committee in accordance with QCS 2014 and Project Specifications.

The composition of the Safety Committee shall include representatives from the TTE employees and the Contractor. It will have the function of keeping under review the measures taken to ensure the health and safety of employees at work. In carrying out the function the Safety Committee shall draw up agreed objectives and terms of reference. The membership and structure of the Safety Committee shall be agreed in consultation between site management and employees representatives. The aim shall be to keep the total size as reasonably compact as possible.

An Objective shall be the promotion of co-operation between management and employees in instigating, developing and carrying out measures to ensure the health and safety of employees at work. The committee should be concerned with all relevant aspects of health, safety and welfare in the workplace. It should draw up objectives and agreed terms of reference. These might include:

- study of accidents, dangerous occurrences, disease statistics and trends;
- examination of safety audits and other inspection reports;
- consideration of reports and factual information from the enforcing authorities;
- reports which safety representatives may wish to submit;
- development of safety procedures and safe systems of work;
- effectiveness of the safety content of employee training;
- adequacy of safety and health communication and publicity in the workplace;
- the provision of a link with the appropriate enforcing authorities' inspectors;
- the appropriate input into risk assessments, etc.

The chairman of the Safety Committee shall be the Project Manager. Committee members shall include HSE Manager, the HSE staff of TTE and representatives of the employees, the Contractor

and the Employer. The number of management representatives shall not exceed the number of employee representatives.

The committee shall meet on a monthly basis and the meetings shall be conducted in accordance with a formal agenda and subject to comprehensive minutes that will be promptly distributed to all committee members within seven days of the meeting.

Any remedial actions that are subsequently taken should be publicized throughout the workplace via the normal channels of communication and should be brought to the specific attention of the safety committee.

Welfare Facilities

TTE shall ensure that they comply with the requirements of the Qatar Labour Law 14 - Part 10, Article (104), QCS 2014 and Project Specifications for the provision of welfare and first aid equipment and facilities.

Welfare General Provisions

TTE shall provide adequate drinking water and first aid facilities on its work areas of the Project.

At each place of work, copies of publications shall be provided, dealing with fire, gas and electric shock precautions, together with a telephone for emergency, transport, and first aid equipment as required.

TTE shall be responsible for ensuring that first aid, including the provision of trained personnel, is available. Arrangements shall be made for ensuring the quick removal for medical attention of workers who have suffered an accident or sudden illness.

8. HAZARD IDENTIFICATION, RISK ASSESSMENT AND MANAGEMENT

General

All risk assessments must be documented and maintained. All risks will be periodically reviewed to ensure that the hazards and risks of the operation have not changed.

The following areas should be regarded as potentially hazardous occupational factors:

- areas adjacent to a building (structure) under construction;
- floors (tiers) of buildings and structures located within one bay above which installation (dismantling) of constructions or equipment is taking place;
- zones of moving equipment and machinery or parts or operating elements thereof;
- places above which loads are moved by cranes.

9. PEOPLE, TRAINING AND BEHAVIOURS

The behaviour of people at all levels of the project is critical to its success and to the achievement of the HSE goals. It is therefore essential that all personnel are carefully selected and trained, and that their skills and competencies are regularly assessed.

It is also essential that good HSE performance is encouraged and rewarded, through the KPIs and incentives developed by TTE GmbH.

Behavioural Change

TTE GmbH will implement H&S programmes and training that engage managers, supervisors and personnel in behavioural change and improved safety performance.

The behavioural change programme will develop awareness of risk and encourage teams and individuals to build an interdependent safety culture with personal and team commitment to improving safety.

Drugs, Alcohol and Smoking

It is the policy of TTE GmbH to maintain a work environment free from the influence of alcohol and other drug abuse. Accordingly, TTE GmbH prohibits the consumption, use or influence of alcohol during working hours and prohibits the use of illicit drugs at any times.

This includes to/from and during work or when conducting business on the behalf of TTE GmbH employees who have to be free from alcohol, illicit drugs and controlled substances.

Any alcohol found on personnel outside of designated areas for the consumption of alcohol in periods of social activity during rest periods at camp sites will be confiscated. Illicit drugs and controlled substances will never be allowed by TTE GmbH.

Any incident involving illicit drugs or controlled substances will be brought to the attention of the appropriate law enforcement agency.

TTE GmbH will immediately remove personnel violating the policy from the premises.

TTE GmbH will note the following important requirements for all personnel:

- No smoking in the work sites at all times. Designated smoking areas will be addressed for the site, which shall be away from the any gas exposure and other hazardous areas;
- 'Designated Smoking' areas in the campsite;
- No smoking within project vehicles.

HSE Induction Training

Induction training will be provided by TTE GmbH and specifically structured for TTE GmbH line management and TTE GmbH HSE professionals. The purpose of this training is to ensure full understanding of the HSE requirements and the practical application of HSE plans. No one will be allowed to enter the site without necessary training such as induction training, fire fighting training or visitor training.

Prior to allowing newly-recruited workers to work, it is necessary to arrange for them to receive induction training and site briefing.

Repeated training in health and safety shall be arranged at least once every three months. Where work is to be executed on the territory of another organisation, induction should be given by persons in charge of occupational health and safety of that organisation.

After completion of training and subsequently on an annual basis, or in the case of transfer of employees from one organisation to another, or where any violations are identified by persons in charge or supervisory bodies, the employees' competence in the occupational health and safety instructions approved by the head of the organisation which put those employees on the payroll should be examined.

All personnel will undergo a mandatory induction course regarding safety, emergency evacuation and relevant procedures.

10. COMMUNICATION

The language for the Management Level is English. All documentation relevant to the project is in English and Russian (if required). All checklists and essential instructions shall be in English. All warning signs shall be understood by all personnel.

Posters, Rules of Safety, notices and HSE Policy for the Project shall be posted in key locations around TTE work site area to maintain HSE awareness. HSE Information shall be issued to inform employees about particular issues and about progress in achieving objectives, results of inspections and accident investigation findings.

Monthly HSE Review

Once per calendar month TTE GmbH will meet to discuss HSE matters. The format of that meeting will be based on, but not limited to, the following structure:

- Minutes of the last meeting;
- Matters arising;
- Accidents, incidents and near misses;
- Feedback on incidents;
- Monthly look-ahead of activities;
- Performance Review;
- Additional meetings may be called to address special circumstances;
- Work requiring special instructions and precautions;
- Lessons Learned.

Toolbox and Team Talks

Team Talks in daily basis

Daily “team talks” shall be given at the start of each shift in a language understood by the workforce and will address the application of safety rules and procedures to the hazards of current work. Method statements and risk assessments are going to be major sources for toolbox and team talks. Duration of the team talk will be not less than 5 minutes. In the case of particularly hazardous operations (for example, confined space entry) team talk duration will be appropriate to the task undertaken.

Toolbox talks in weekly basis

Weekly toolbox talks will be conducted every Monday morning at the start of the shift by the appropriate TTE GmbH Supervisors. Topics will be given to supervisors by TTE GmbH HSE team. Attendance signatures will be obtained. Feedback from employees will be received at the meetings in order to improve HSE performance.

11. HSE Monitoring

TTE shall constitute methods for regularly monitoring and measuring the main characteristics and HSE performance of Project activities that may have an important environmental impact and TTE shall implement and maintain continuity thereof.

Plans shall be constituted in relation with the monitoring and measurement activities and the activities available in the plans shall be monitored and measured periodically.

Monitoring and measurement activities include documentation of information in order to monitor their effectiveness, success level and suitability to applicable operation/business administration controls, legal and other requirements, proactive measures and objectives and targets of TTE.
Corrective or preventive actions shall be commenced, if necessary, by monitoring the accidents, incidents, narrow escapes and proofs of insufficient HSE performance of the past shall also be monitored.

HSE Inspection

TTE shall conduct site safety inspections.

12. Heat Stress Management

TTE shall manage the heat stress throughout the Project in accordance with Heat Stress Management Plan.

13. Traffic Management

Entry & Exit to and from the Project facilities shall be only through the authorized access gates and layout.
Vehicles entering the site shall be approved in terms of access control documentation issued by GAP Insaat Security.
Safe Operation/Driving

- Overtaking of moving vehicles on site is not allowed;
- No persons may be transported on open vehicles, or hang onto vehicles to hitch a ride;
- The number of passengers of the vehicle may not exceed the seating capacity of the vehicle;
- The use of mobile phones or other communication devices while driving is not permitted;
- Vehicles shall be parked only in designated parking and not obstruct other vehicles, roadways, access ways or fire hydrants;
- Vehicles shall not be left idling unattended at any time with the engine on;

Right of way

- Heavy Vehicles and special vehicles shall have right of way over light vehicles;
- Emergency vehicles shall have right of way at all times when their sirens and bar lights are activated and they respond to a scene;
- Pedestrians shall yield to all vehicles and stay confined to walkways

Motor Vehicles Engine Left Running Without Occupants

- It is considered illegal to leave a running motor vehicle unattended;
- A running unattended car can start moving, if not parked and secured properly, and danger anybody around;
- Any unauthorized or unlicensed person may gain access to your vehicle and drive off, possibly causing an accident, or use it illegally;
- Fuel is being wasted;
- It causes noise and environment (air) pollution;

- If driver switch off their vehicles engine, lock their cars and remove the key before leaving their vehicle, they can avoid car theft, unnecessary environmental pollution, fuel wastage and most importantly, the unpremeditated injury of innocent bystanders;
- Should any vehicle be found running unattended the vehicle will be switched off, key remove, and the keys handed in at HSE department (Security Supervisor) or Administrative assistant. The details of the person responsible for this unsafe act will be recorded and forwarded to his department manager to correct behavior.

14. INFORMATION AND DOCUMENTATION

Project management systems addressing technical integrity and HSE will be properly documented and totally adhered to.

The following information will be provided by TTE GmbH and kept on file at TTE GmbH safety office throughout the duration of the project:

- Weekly Safety Reports (Weekly orientation, man-hours worked, Weekly Training Program, etc.);
- Weekly Inspection;
- Monthly Injury Summary;
- Injury and Damage;
- Fire Extinguisher Inspection;
- Preliminary and Detailed Accident;
- Safety Trainings;
- Tool Box Meeting Reports and Attendance;
- Disciplinary Actions;
- Accidents, incidents and near miss reports;
- Register for color coding of the ladders, electrical equipment, lifting tools and tackles;
- Earthing inspection reports;
- Scaffolding, heavy equipment, compressor etc. registers;
- Third party certificates.

The provided information will not be limited with the listed information topics.

15. CRISIS AND EMERGENCY MANAGEMENT

Emergency Response Plan

TTE GmbH will develop an Emergency Response Plan addressing eventualities at the work site including, for example fire, explosion, collapse of structures, serious injuries, medical evacuation, spillage of chemicals and exposure to harmful or toxic substances.

The plan should also address response to natural occurrences such as sandstorms and other important security issues such as civil unrest or terrorist activity.

16. INCIDENT REPORTING, ANALYSIS AND PREVENTION

Introduction

The reporting and investigation of accidents and incidents is an essential tool in the management of health, safety & environmental issues.

TTE GmbH will ensure that all injuries, illnesses, accidents, near misses and hazards are reported and documented and Contractor will be notified on emergency situations, accidents appearing at the site. Investigation is to be performed in cooperation with the Contractor.

All accidents/incidents and near misses should be reported to the Contractor.

Incidents Immediately Reportable to the Project

The following Incidents will be reported immediately (day or night) to the Construction/Site manager, the Employer Project HEALTH, SAFETY AND ENVIRONMENT Manager or Site Senior Safety Office.

Accidents reportable are:

- Death resulting from an accident arising out of, or in connection with work;
- Major injury;
- Fractures;
- Any amputation;
- Dislocation of the shoulder, hip, knee or spine;
- Loss of sight, whether temporary or permanent;
- Chemical or arc-burn to the eye or any penetrating injury to the eye;
- Any injury resulting from an electric shock or electrical burn (including burns from arcing or arching products) leading to unconsciousness or requiring resuscitation or admittance to hospital for more than 24 hours;
- Any injury leading to hypothermia, heat induced illness or to unconsciousness;
- Any injury requiring resuscitation or requiring hospital admittance for more than 24 hours;
- Loss of consciousness caused by asphyxia or by exposure to a harmful substance or biological agent;
- Either acute illness requiring medical treatment, or loss of consciousness, from the absorption of any substance by inhalation, ingestion or through the skin
- Acute illness requiring medical treatment where there is reason to believe that this resulted from exposure to a biological agent or its toxins or infected material

In addition, all incidents resulting in absence from work will be reported to the Construction/Site manager, Project HSE Manager or Site Senior Safety Officer by the line management on the first day of absence following the injury.

Accidents involving more than three consecutive days of lost time (including public holidays) must be reported to the Construction/Site manager, TTE GmbH Project Health & Safety Manager or Site Senior Safety Officer.

Dangerous Occurrences Immediately Reportable to the Project

Certain types of incident given below will be reported immediately (day or night) to the Construction/Site manager, Project HSE Manager or Site Senior Safety Officer.

Dangerous occurrences involve the use of:

- Lifting Machinery etc.;
- Electrical Short Circuit;
- Explosion or Fire;
- Escape of Flammable Substances;
- Collapse of Scaffolding;
- Collapse of Building or Structure;

And are further defined as follows:

Lifting Machinery etc.

The collapse of, the overturning of, or the failure of any load bearing part of:

- Any lift, hoist, crane, derrick or mobile powered access platform;

Electrical Short Circuit

An electrical short circuit or overload that includes fire or explosion which has the potential to cause serious injury.

Explosion or Fire

Explosion or fire.

Escape of Flammable Substances

The sudden, uncontrolled release inside a building which can cause hazardous situations.

Collapse of Scaffolding

The complete or partial collapse of any scaffold

Collapse of Building or Structure

Any unintended collapse or partial collapse of:

- Any building or structure under construction, reconstruction, alteration or demolition;
- Any floor or wall of any building being used as a place of work;
- Any temporary structures.

Explosives

Any of the following incidents involving explosives:

- The unintentional explosion or ignition of explosives other than one where a failsafe device or safe system of work functioned so as to prevent any person from being injured in consequence of the of the explosion or ignition;
- A misfire except where a failsafe device or safe system of work functioned so as to prevent any person from being endangered in consequence of the misfire;
- The projection of material beyond the boundary of the site on which the explosive are being used or beyond the danger zone in circumstances such that any person was or might have been injured thereby;
- Any injury to a person involving first aid or medical treatment resulting from the explosion or discharge of any explosive detonator.

Diseases

The subcontractor will report cases of certain diseases that are linked with specific work activities.

The subcontractor will make a report only if:

- A written diagnosis of one of these diseases has been identified and reported by a doctor;
- The employee's current job involves a specified work activity.

Therefore, any employee who suspects they are suffering from any diseases that are work related should speak to a Doctor.

For those employees who wish to consult their own doctor, written statements of diagnosis should be passed to the appropriate Line Manager in order to ensure that the illness may be fully investigated and any necessary reports made.

Incident Investigation

TTE GmbH will develop an Incident Investigation Team, comprising permanent and part time members. Attendance by senior management will be dependent on the severity or potential severity of the Incident, however as a minimum, the TTE GmbH. HSE representative will chair all investigations.

An incident investigation system is required to enable root causes and actions to prevent recurrences to be identified and resolved in a timely manner. Incident reports may be requested as the Employer sees appropriate.

TTE GmbH will assess the risk classification on an incident investigation form, which will be developed to show ratings as follows:

LOW:

TTE GmbH HSE Representatives will conduct an investigation and forward a copy of the investigation findings to the Employer's HSE Manager.

MEDIUM:

TTE GmbH HSE representatives and the Investigation Team will conduct a joint investigation and forward copy to the Employer's HSE Manager. If it is necessary there will be the possibility for the Site Manager and/or HSE Manager to stop the work in the affected area during the investigation and whilst the correct preventative actions are being determined to prevent recurrence.

HIGH:

TTE GmbH will conduct a comprehensive investigation. The Employer will designate a Major Investigation Team to conduct a comprehensive investigation in parallel with TTE GmbH investigation.

As work will be stopped in the affected area during a high rating investigation and the determination of actions determined to prevent recurrence it is essential that the Employer's investigation team is prompt and productive.

17. WORKING AT HEIGHT

- It is required to reduce the risk of persons falling from height by providing a means of fall prevention or arrest for every person on the Worksite that is exposed to a risk of falling a distance of 2m or more;
- Supervisors of persons using fall arrest systems will be trained in the correct installation, use and maintenance of fall arrest systems. Training will be provided by a 3rd party. All persons required to use fall arrest systems will receive formal training in safe working at height prior to using such systems;
- The use of safety belts as part of a fall arrest system is prohibited;
- All edges of working platforms and work areas that objects may fall from will be provided with securely fixed continuous toe boards that are at least 200mm high;
- All holes and openings in floor areas will be fitted with temporary covers to prevent objects falling to lower levels of the structure;
- Where work is on-going on the exterior faces of structures the working platforms that are used to gain access will be fitted with lightweight mesh or netting to prevent objects falling from them;
- Materials and equipment will not be stored or located within 2m of edges of working areas or platforms;
- All materials and waste that may be blown by the wind from raised structures will be secured and stored in a manner that prevents them from being blown from the structure;
- Where designated pedestrian walkways, entrances or exits are located beneath edges or openings where work is on -going steel framed and sheeted canopies will be erected to protect pedestrians from falling objects.

Occupational Health and Safety requirements:

(a) The storage of materials on roof surfaces will be minimized at all times;

(b) Storage of materials on roof surfaces is not permitted within 2m of any edge or eave;

(c) All openings and non-walkable areas will be protected by barriers and signage to prevent pedestrian access;

(d) All waste will be removed from the work areas on a daily basis and prior to any areas being left unattended;

(e) All areas of roof or canopy covering will be fully fixed at the time of positioning. The practice of laying large areas of unfixed coverings is prohibited.

- The structure that the suspended working platform is attached to or mounted on will be surveyed and assessed to ensure that it is capable of supporting the loads that the equipment will impose on it.
- The installation, maintenance, use and dismantling of suspended working platforms will be under the control of a competent person that is appointed by the Contractor. The competent person will be fully familiar with each and every type of suspended working platform in use on the Worksite. Persons who work from suspended working platforms will have received formal training to ensure the safety of themselves and of other persons that may be affected by the

operation with particular emphasis on the correct use of the equipment, working at height and falling object prevention.

- The following requirements will be met for all use of suspended working platforms:

(a) Users will not alter or interfere with any part of the suspended working platform, control or safety devices.

(b) The work area below the suspended working platform will be clearly marked a pedestrian exclusion zone will be created.

(c) The user will check all controls and safety devices on a daily basis to ensure that they are functioning correctly.

(d) Use will cease whenever wind speed in excess of the maximum permissible is anticipated.

(e) The suspended working platform will be maintained in a horizontal position whilst it is in use.

(f) The practice of transferring people or materials from the suspended working platform is prohibited other than at the designated access points.

(g) Every person working from a suspended working platform shall wear a full body safety harness that is attached to an independent lifeline.

(h) The platform will be kept free of loose materials or articles liable to endanger or interfere with the worker's hand hold or foot hold

(i) The power supply will be disabled whenever the suspended working platform is left unattended.

Scaffolding

No one may order or bring scaffolding on site without authorization from the Construction/Site Manager.

Scaffold erection, altering and dismantling will be done by certified scaffolders.

All scaffolds must be tagged by the scaffold supervisor and he will check all scaffolds on the site. Tags and meanings are listed below:

Red Tag: Scaffold can't be used.

Green Tag: Scaffold is ready to use.

The Construction/Site Manager will be responsible for the provision of recognised scaffolding inspection services.

The surface of the ground on which scaffolding is to be installed shall be planned (levelled and compacted), and suitable surface water drainage shall be provided. Where it is impossible to meet these requirements, scaffolding shall be fitted with adjustable supports (winches) to ensure it is installed in a horizontal position, or temporary support structures shall be installed to ensure that scaffolding is in a horizontal position. Scaffolds which do not have their own design stability shall be fastened to buildings using methods specified in the manufacturer's technical manuals (for knock-down scaffolds) or in the organisational and technological documents for the production of works. Attaching points shall be specified in the organisational and technological documents. Where no specific instructions are given in the design or manufacturer's manuals, the scaffolds shall be affixed to the walls of buildings at least at every other tier in the case of end standards, after each two bays in the case of the upper tier, and shall have at least one fixing for each 50 sq. m of the projection of the surface of the scaffolds to the elevation of the building. It is prohibited to fasten scaffolding to parapets, cornices, balconies and other protruding parts of buildings and

structures. Scaffolding located in proximity to passageways used by transport vehicles shall be protected with fenders in such a way as to ensure that such fenders are not closer than 0.6 m to the clearance limits of transport vehicles. Scaffolds shall be equipped with ladders for ascent and descent of people. It shall be allowed to operate scaffolds and falsework with a height of up to 4 m only after they have been accepted and registered in the work log by a site manager or foreman. During the acceptance of scaffolds and falsework, the following shall be checked:

- availability of struts and braces ensuring stability,
- attachment points of individual elements,
- guard-rails,
- verticality of standards,
- stability of support platforms and earthing (for metal scaffolds).

Where work is to be carried out from scaffolds with a height of 6 m or more, at least two decks shall be provided - a working deck (upper) and a protective deck (lower), and each working place on scaffolds which adjoin a building or a structure shall be, in addition, protected from the above with a deck located at a distance of not more than 2 m from the working deck. Where no work, movement of people or transport vehicles under scaffolds is expected to take place, it is not necessary to make a protective (lower) deck.

Main rules of scaffolding are listed below:

- All scaffold components shall be done by same manufacturer;
- All scaffold components shall be capable of supporting 4 times the maximum intended load;
- Scaffolds to be erected by competent person;
- All working at height rules must be applied to erectors during erection and dismantling of scaffolds;
- All scaffolds must be registered in a log book after inspection and acceptance by the scaffold supervisor. If the height of the scaffold is higher than 4 meters acceptance act must be prepared and the scaffold must be tied to the building or additional outriggers must be added;
- Inspection journal shall be filled once in 10 days;
- Scaffolds should be provided by lightning protection with the resistance not more than 150;
- There will be no activities on the scaffolds during sandstorms and if there is a wind which equal or more than 15 m/sec;
- Alteration of scaffolds to be prohibited via welding, burning, bending etc;
- Scaffolds to be erected on secure bases with mudsills/base plates used on all surfaces. A solid wooden plank of not less than 5cm thickness should be under each pair of cross direction posts of scaffolds;
- Scaffold platforms to be kept free from slippery conditions, trash and debris. Materials on scaffolds and runways to be stored in quantities that do not exceed the daily amount to be used;
- Scaffold planks should extend over supports at least 6" (15cm) but no more than 12" (30cm). Where scaffold planks are abutted both planks to be supported and the overlaps to be at 12" (30cm) minimum. Permissible clearance between planks are not more than 5mm;
- Decking to be made of pine wood planks with flame-retardant coats. Scaffolds work platforms to be fully decked with scaffold grade boards in good condition, and at least 1m;

- All platforms to be equipped with handrails (1.1 m), toe boards (0.15m) and mid rails (0.45m from toe board and guardrail);
- Openings near accesses to different levels shall be protected by guardrails;
- Safety feet/shoes to be used for portable metal ladders if used for access to scaffolds platforms;
- If higher than 5m with canting angle more than 75 degrees ladders to be equipped with arched guards, if canting angle between 70 and 75 degrees ladders to be equipped with guardrails from both side (0.9-1.4m vertical height) starting from 5m height;
- Stair towers are to be at least 18 inches (46cm) wide and constructed with handrails, landings at each level, slip resistant treads, and in a manner which does not present a hazard;

Ladder Safety

- Side rail must extend 1.05 meters above the upper landing;
- Ladders must be secured, tied;
- Slip resistant ladder shall be used in slippery surfaces;
- When employee is ascending he shall face the ladder;
- Employees shall not carry materials which interfere with climbing.

Welded ladders can't be used.

18. PERSONAL PROTECTIVE EQUIPMENT

Introduction

Personal Protective Equipment is the last protective mean in the hierarchy of controls.

Prior to commencing any work under this Contract, TTE GmbH will ensure that all workers on the site have all the necessary protective clothing and protective equipment to safely perform the work. TTE GmbH will provide PPE for his employees. PPE will be readily available and procedures for its issue will be established.

Helmets, safety boots with steel toe, safety glasses and high visibility jackets will be provided and will be mandatory attire on worksites for all personnel of TTE GmbH. Ear protection, face visors/goggles, dust masks and respiratory equipment must be made available if risk controls require. The wearing of sleeveless shirts whilst in any work area will be prohibited.

PPE is to be regarded as a last mean to protect against risks to health and safety as it only protects the person wearing it.

Effective protection is only achieved by suitable PPE, correctly fitted, maintained and properly used.

The selection of suitable PPE must be based on an assessment of significant/unacceptable risks, which cannot be controlled by other means, such as engineering controls and safe systems of work.

The provision of all necessary protective clothing and protective equipment will be the sole responsibility of the subcontractor.

Where PPE is required, personnel must wear:

- Safety-toed footgear with a minimum ½-inch heel which otherwise is in compliance with the CE standard;
- Hard hats in compliance with the CE standard;
- Safety glasses with side shields in compliance with the CE standard;

- Adequate coveralls. Where there is a fire hazard, coveralls will be worn and be fire retardant;
- Luminescent work vests

Information, instruction and training needs be provided to employees on the fit, use, maintenance and limitations of PPE. It is the responsibility of the Construction / Site Manager to arrange this.

General Protective Clothing

Protective clothing for the body can provide protection against chemicals, cold, heat, wind, rain or general dirt. It may also be used to signal the presence of a person.

Activities that may require the use of protective clothing are:

- Assembly and installation works – outfits/overalls, coats, boots, hard hats glasses and gloves etc for protection;

Protective clothing should only be used for the purpose intended. It should be maintained in good condition and regularly checked. It should be repaired or discarded if damaged.

Eye Protection

Eye protection guards against mechanical, chemical, thermal and ionising and non-ionising radiation hazards.

Suitable eye protection must be worn according to the risk assessments and method statements.

Activities that may require the use of eye protection are:

- Machining, chipping, grinding and cutting;
- Welding.

The lenses of eye protection must be kept clean as dirty lenses restrict vision, which can cause eye fatigue and lead to accidents.

To clean eye protection, wet it thoroughly then dry carefully with soft absorbent paper.

If the contamination is heavy or difficult to remove use a mild soap solution.

Lenses that are scratched, pitted or show other signs of damage must be replaced as they may impair vision and their resistance to impact may be reduced.

Face shields must be replaced when warped, scratched or have become brittle with age

Head Protection

The main type of head protection is the safety helmet that can protect against falling objects or impacts with fixed objects.

Head protection must be worn where the mandatory sign for head protection is shown. Activities that may require the use of helmets are (not limited with these examples) :

- Assembly and installation, particularly work on, underneath or in the vicinity of scaffolding and elevated workplaces;
- Work in shafts;
- Work near hoists, lifting plant and cranes;
- Work with industrial machinery.

Head protection should be comfortable to wear, compatible with the activity and maintained in good condition. The following advice should help achieve this:

- Adjust the head bands to suit - all straps should be snug but not too tight;
- Use an absorbent sweatband. Clean or replace the sweat band regularly;

- Work in windy conditions, especially at heights, or where the helmet can readily fall off, fit a chin strap ensuring the straps do not cross the ears;
- Store in a locker or on a peg. Do not store in direct sunlight, such as on the rear window of a car, or in a hot environment as this damages the helmet;
- Inspect the helmet regularly for signs of damage or deterioration;
- Replace if the shell has received a severe impact, if deep scratches occur or the shell has any visible cracks;
- Clean regularly with soap and water. Do not use a solvent or an abrasive cleaner, and avoid contact with paints and adhesives

Ear Protection

Ear protection is worn to protect against noise induced hearing loss.

Action Required	***Below 80 dB(A)***	***80 dB(A) First Action Level***	***85 dB(A) Second Action Level***
Employers Duties ● Risk of hearing damage to be reduced to the lowest level reasonably practicable.	√	√	√
Noise Reduction ● Reduce exposure to noise as far as is reasonably practicable by means other than ear protection.			√
Provision of Information to workers ● Make the ear protection zone as far as reasonably practicable.			√
Ear Protectors ● Provided to employees who ask for them; ● Provide all exposed & make sure they are using; ● Maintained and repaired.		√ √	 √ √

Ear protection must be worn where the mandatory sign for ear protection is shown.

Project first action level is 80 dB(A) and second action level is 85dB(A).

Activities that may require the use of ear protection are:

- Operations or processes where you have to shout or raise your voice to be heard two meters away or if your ears are ringing when you have finished work.
- Cutting with power tools.

Three types of ear protection will be made available - ear muffs, helmet mounted muffs and semi-inserts.

Ear protection should be worn properly, comfortable, compatible with the wearer and activity, and maintained in good condition.

The following advice should help achieve this:

- Ear protection should be worn at all times, where advised. Removal of ear protection for short times in high noise areas may severely reduce the amount of protection provided;
- Earmuffs should be checked to ensure the ears are contained within the cup and the seal is in contact with the head all around. Avoid wearing thick-armed glasses with ear protection as they can significantly reduce protection. The head band tension should be as high as is comfortable;
- Semi-inserts should be worn if worn with thick spectacle frames as they reduce the effectiveness of muffs. Beards and long hair may also reduce muff effectiveness;
- Muffs with damaged or hardened seals, twisted or poorly tensioned headbands, or the foam missing from inside the cup should be replaced;
- Muffs and semi-inserts should be kept clean by wiping down with mild soapy water;
- Semi-inserts are usually more comfortable for hot environments or heavy work; some users may experience discomfort with semi-inserts and prefer muffs;
- Helmet mounted muffs or semi-inserts should be worn when safety helmets are necessary.

Foot Protection

Foot protection can guard your toes, ankles and feet from injury.

Activities that may require the use of foot protection are:

- Assembly and installation works to protect against falling objects or sharp objects puncturing the sole;
- Mechanical and manual handling where there is a risk of objects falling on or crushing the foot;

The selection of foot protection depends mainly on the hazard, however comfort, style and durability should be considered.

Footwear should be maintained in good condition, inspected regularly for damage or deterioration, and disposed of if worn or damaged.

Hand Protection

Hand protection can protect the hand against damage from cuts, abrasions, extremes of temperature, impact with objects, and contact with hazardous chemicals.

Activities that may require hand protection are:

- Manual handling;
- Handling hot and cold materials, and work involving contact with naked flames or welding;
- Work with power tools such as grinders.

A range of gloves and gauntlets will be made available.

The glove selected should be capable of providing adequate protection from the hazards during use, be comfortable and fit the wearer without significantly reducing grip strength and manual dexterity.

Gloves should be inspected for holes, cuts, distortion or wear before use. Damaged gloves should be disposed of.

Respiratory Protective Equipment

Respiratory protective equipment (RPE) is worn to protect against inhalation of hazardous substances (dusts, fibres, gases, mists, vapours and fumes) and/or to provide a source of breathable air in oxygen-deficient atmospheres.

Respiratory Protective Equipments should only be used by trained (Competent) persons.

There are two main types of RPE:

- Air purifying devices, which filters the contaminant from the air before it is inhaled by the wearer. These devices are not for use in oxygen-deficient atmospheres;
- Air supplied devices, which provide uncontaminated air for breathing from an independent source.

There are two types of air purifying devices - disposable filtering respirators and powered helmet/visor respirators.

19. CONFINED SPACES

- Entry into a confined space will only be permitted where a competent person is appointed to directly supervise the work. The competent person will hold a certificate of training or license that is issued by a 3rd party. The competent person will be appointed in writing by TTE.
- Any person that enters into a confined space will have received formal training in the safe methods of entry and working in a confined space. Such training will include the arrangements for emergency communication and response. In addition every person that enters into a confined space will be given a briefing by the appointed competent person relating to the specific hazards of the work.
- Any person that acts as an attendant for confined space work will have received formal training in the safe methods of rescue from a confined space and the arrangements for emergency communications with external emergency services.
- TTE will only permit trained workers, under the direct supervision of an authorised competent person, with confined space attendants present, to enter a confined space.
- Internal combustion engines will not be taken into a confined space or operated in a position where their exhaust gasses may be drawn into the confined space.
- Persons entering into a confined space will wear a full body rescue harness that is attached to a rescue line outside the confined space
- The contractor will implement a safe working procedure for confined space entry that includes the following:

(a) Preparation of a confined space entry permit;
(b) Provision of all equipment necessary for entering into and working in the confined space;
(c) Provision of warning signs and barriers around the confined space entry point;
(d) Setting up emergency communication and rescue equipment;
(e) Issue of a permit to enter the confined space;
(f) Checking of the atmosphere inside the confined space and installation of ventilation equipment;
(g) Installation of lighting;
(h) Entry into and work in the confined space;

(i) Monitoring of conditions in the confined space;
(j) Continuous checking and recording of all persons entering into and exiting from the confined space by the confined space attendant;
(k) Completion of work and removal of all equipment from the confined space;
(l) Accounting for all persons and equipment that entered the confined space;
(m) Securing the entry point to the confined space;
(n) Closing the confined space entry permit.

20. PERMIT TO WORK

The purpose of work permit procedure is to assign responsibilities and establish a safe system of work to control hazards (which under normal circumstances are difficult to control), by means of a recognised permit system.

- A permit-to-work system (Hot work, Excavation, Scaffolding & Electric work) shall be observed (correctly issued, signed) when undertaking any work on an existing utility, service, item of equipment or structure;
- A permit-to-enter system shall be observed (correctly issued, signed) when undertaking any work in a confined space.

Action Required To Implement This Procedure

- In order to control hazards which under normal circumstances are difficult to control such as fire, dangerous substances, electrical equipment, confined spaces, excavations etc. A formal written procedure shall be used to ensure a safe place of work/safe system of work strategy and full compliance with current legislation.;
- Permit to Work Systems Shall be used on TTE Projects in the following circumstances:

(a)Work on/test on electrical equipment which could give rise to risk of injury or death from electrical shock or burn, including commissioning work and, particularly, work involving exposed live conductors operating at dangerous voltages. (USE ELECTRICAL PERMIT FORMS).
(b)Welding, flame cutting, use of ignition sources, or work on electrical equipment which could give rise to an incentive spark. (USE HOT WORK PERMIT FORM).
(c)Work in confined spaces or at any poorly ventilated place where toxic/flammable gases, fumes, or vapours are likely to be present in dangerous concentrations, or where there may be oxygen deficiency or oxygen enrichment. (USE CONFINED SPACE PERMIT FORM).
(d) Controlling access to complete or specific areas. (USE WORK ACCESS CONTROL PERMIT FORM).

21. FIRE PREVENTION

Introduction

This section provides the guidelines, instructions and requirements pertinent to fire hazard control.
TTE GmbH is responsible for compliance with the fire prevention requirements in his respective areas and in operations by personnel under his supervision.
TTE GmbH will give instructions to his staff/supervision on the use of the fire extinguishers.

Objectives

The fire prevention program will be based upon five objectives:

- Prevention of fires;
- Early detection;
- Control of fire spread;
- Extinguish fire promptly;
- Plan for prompt and orderly evacuation of personnel to a place of safety.

Prevention of Fires

The following practices will be observed:

- Regular clean-up of debris;
- Regular thorough inspections of the work areas and buildings to detect and eliminate fire hazards or the potential sources of fire;
- Safe storage, handling and use of combustible materials.

Detect Fires Early

All personnel must be constantly alert in detecting fires.

Control of Fire Spread Rate

- TTE GmbH will provide enough fire extinguishers of the correct type and size;
- The fire extinguishers will be strategically located;
- Fire extinguishers will be made highly visible;
- Fire extinguishers will be clearly marked on the site drawings;
- All fire equipment will be regularly inspected.

Extinguish the Fire

The extinguishing of fire often involves critical matters of judgment, which are best exercised by trained fire fighting personnel.

However, it may be necessary to control the fire until trained fire fighting personnel can decide on the correct method to extinguish.

The level of training to be provided to site fire fighting personnel will be dependent on the site principal of either a passive or active response to fire fighting.

Fire Reporting

The person discovering a fire will alert all personnel in the immediate vicinity and will immediately thereafter follow the published instructions relative to reporting fires.

The emergency phone number for reporting fires will be prominently displayed and advised to site personnel at induction training.

Supervision of Fires

When fire occurs, the nearest supervisor will be responsible for all immediate fire suppression or control work until relieved by appointed, authorised personnel. Necessary instructions are going to be given to supervisors at supervisor training.

Fire Extinguishers

All personnel will know the location of fire extinguishers.

Monthly control tags will be used to indicate condition and date of inspection of fire extinguishers

Damaged, malfunctioning or empty fire extinguishers will be repaired or refilled in a timely manner.

The location of temporary mounted fire extinguishers will be clearly marked and free access maintained. They will not be transferred from established locations.

TTE GmbH will locate fire extinguishers, suitable for the various classes of fire as follows:

- Portable or permanently mounted fire extinguishers will be available throughout the Site within 15 m of any on-going work involving welding, burning or use of open flames;
- At least one temporary mounted fire extinguisher will be provided in each building, preferable near a door, and additional fire extinguishers mounted as required to have one within 30 m of any point inside the building;
- Each item of industrial mobile equipment, including all welding machines, having diesel or gasoline engines, will have a permanently attached mounted extinguisher;

Extinguishers will be maintained fully charged and in operable condition, and kept in their designated places at all times when not in use.

22. TEMPORARY ELECTRICS

- This applies to all temporary electrical systems on the Worksite and all electrical equipment used for assembly and installation, commissioning and testing purposes. The requirements given are minimum requirements and TTE is required to equal or better them.
- A competent electrician or electrical engineer will be appointed or employed on every contract. The competency requirements will be determined by the nature of the temporary electrical system that will be installed on the Worksite
- TTE will reduce risk by using cordless tools or electrical equipment that is operated at reduced voltages. Only intrinsically safe electrical equipment will be permitted for use at any location where flammable atmospheres may exist or confined space.
- All electrical equipment used on the Worksite will be manufactured in accordance with an internationally recognised standard.
- Portable Power Tools will be of a double insulated type.
- Jointing of all electrical cables and wires shall be by means of proprietary terminations or connectors. The practice of twisting and taping electrical components together to create a connection is prohibited .
- Temporary power supplies for the Worksite may be provided from generators or via a Worksite specific transformer connected to the national power network. All generators and transformers on the Worksite shall be located in areas that are fenced and secured to prevent any unauthorized entry. Each such location will be provided with portable fire extinguishers. All electrical systems shall be bonded to the earth.
- All electrical circuits that are created will be protected by earth leakage circuit breakers (ELCB). All metal components of an electrical system shall be earthed. Distribution of electrical power shall be provided through distribution panels and switches that are enclosed or housed in securely closed and locked boxes or cabinets.

- Warning signs that clearly indicate electrical hazards shall be fixed to all electrical switch boxes and distribution panels. Similar signs shall be displayed at all transformers, generators and overhead power line locations.
- All signs and notices shall be in English, Arabic and Russian.
- All electricity supply cables shall be buried or properly supported and protected and shall be armoured. Flexible cable shall only be allowed for hand lamps and hand held tools and shall not exceed 6 metres in length. Industrial type plugs and sockets shall be used. All electrical installations shall be in charge of a competent person who shall accept full responsibility for its use and any alterations or additions thereto. The name, designation and telephone number of such person shall be prominently displayed close to the main switch or circuit breaker of the installation.

23. WORKSHOP AND SITE OPERATIONS

Plant and Work Equipment

Key points

- The term 'work equipment' is self-explanatory and very wide ranging; it refers to any item of equipment being 'used' to carry out work;
- The word 'used' means any activity involving the work equipment, including: starting, stopping, repairing, modifying, maintaining, servicing or repairing;
- Broadly speaking, the effort necessary to comply will depend upon the complexity of the equipment and its potential to cause harm;
- These regulations also require anyone who uses an item of work equipment to be trained and competent to do so.
- The effort and time needed to achieve the required level of competence will depend upon the complexity of the equipment and its potential to cause harm.
- Work equipment must be inspected as necessary to ensure that it can continue to be used safely.
- Certain work equipment must also be subjected to a schedule of thorough examinations.

HAND AND POWER TOOLS

Hand (non powered) tools can be both dangerous and non-productive if they are not maintained in good condition.

Hand tools are one of the most common causes for injuries on construction sites, so it is important that workers are told to return defective/broken tools to the stores for repair. Supervisors and Safety Officers must inspect the Site on a regular basis and ensure that only good quality hand tools are being used.

Power tools are either electrically, or pneumatically (air) operated. In both cases they are usually very powerful and can cause serious injury if not correctly used. Therefore, all power tool operators will be instructed/trained in their safe use.

CHECKLIST

a. Only trained workers are to use power tools.
b. Power tools must only be used with all their safety features (such as guards and handles etc.) in place.

c. Power tools will be properly maintained in accordance with the company's Planned Maintenance Inspection Programme.

d. In the case of Electric Power Tools, inspections and repairs will only be carried out by a qualified electrician.

e. Electrical power tools will be of the double insulated type and will bear the manufacturer's label to confirm this. Where the item is not double-insulated it will be correctly earthed.

*NOTE: Records of inspections and repairs must be maintained.

Health and Safety at Work (Construction Sites)

- TTE shall provide safe plant and machinery for use at work. The self-employed worker is given similar duties regarding plant and machinery that they provide for their own use.
- TTE shall provide the information, instruction, training and supervision necessary for persons to be able to operate the plant and machinery safely. Employees, in turn, are required to use the equipment safely, in accordance with the training which they have been given.
- A general duty is placed on any person who manufactures, designs, imports or supplies any article, materials or substance for use at work to ensure, so far as is reasonably practicable, that articles and substances are, by design and construction, safe and without risks to health when being used, set, cleaned or maintained by persons at work.
- In addition, duties are placed on employees not to recklessly interfere or misuse anything provided for health and safety purposes. This could include the act of removing a guard or defeating a safety cut out switch.

Provision and Use of Work Equipment

- These Regulations are fundamental to the health and safety aspects of how work equipment is selected, used and maintained.
- These Regulations place legal duties on TTE with regard to work equipment that TTE provides to employees.
- These duties are to:

(a) only provide work equipment that is suitable for the job;

(b) ensure that work equipment is maintained in an efficient state and kept in good working order by persons who are trained to do so;

(c) ensure that maintenance logs are kept up to date where they exist;

(d) ensure that where the safety of work equipment depends on the way it is installed, it is inspected as necessary and records of inspections made;

(e) ensure that equipment subject to deterioration through exposed conditions, which could give rise to a dangerous situation, is maintained and inspected at appropriate intervals to allow remedy, or after each exceptional circumstance;

(f) ensure that where the use of work equipment involves a specific risk to the health and safety of employees, the use, maintenance, repair, modification and service of the equipment is restricted to competent and specified workers;

(g) provide employees with information, instruction and training in the use of work equipment, where necessary for their health and safety, including abnormal situations;

(h) ensure that work equipment has been designed and constructed in compliance with any European Safety or International Safety Directives;
(i) ensure that dangerous parts of machinery are adequately guarded, where practical, by fixed guards that cannot be defeated or removed;
(j) take measures to protect the health and safety of any person from exposure to:
(i) anything falling from or being ejected from any item of work equipment;
(ii) rupture or disintegration of any parts of work equipment;
(iii) work equipment overheating or catching fire;
(iv) the unintended discharge of any article, dust or gas which is produced by or stored in the work equipment;
(v) the unintended explosion of any item of work equipment or any article or substance produced, used or stored in it;
(k) ensure that users of work equipment are adequately protected from any part of the work equipment that exposes them to very high or low temperatures;
(l) ensure that all work equipment has adequate controls, emergency controls and, where necessary, a control system to enable it to be used safely;
(m) ensure that where stop controls are fitted, they bring the machine to a safe condition. This may include bringing the machine to a complete stop and/or isolating it from energy sources;
(n) ensure that where stop controls are provided, they are easily accessible and activated;
(o) ensure that all controls for use are easily identifiable and that where reasonably practicable, the operator is in a position of safety when operating them;
(p) ensure that failure of any equipment leads to a safe situation and that the function of stop controls are not affected, if reasonably practicable;
(q) ensure that each item of work equipment can be effectively isolated from all sources of energy;
(r) ensure that work equipment is stable in use, if necessary by clamping;
(s) ensure that suitable and sufficient levels of light are available for the safe operation of work equipment;
(t) ensure where reasonably practicable, that servicing, maintaining and cleaning of equipment is carried out whilst it is shut down or with appropriate measures in place to safeguard employees;
(u) ensure, where appropriate, that warnings are incorporated. These can range from signs and notices, to alarms and beacons.

General requirements applicable to all work equipment Suitability for purpose

- All equipment that is used to carry out a work activity must be suitable for the work to be carried out;
- Improvisation is dangerous and can lead to serious accidents occurring;
- All work equipment must be regularly maintained in an efficient state, in efficient working order and in good repair.
- To be able to work as safely as possible, it is essential that work equipment is regularly maintained, again by a competent person. In practice, maintenance is usually divided into three types of activity:

(a) daily basic maintenance can be as simple as regularly checking the oil and water levels of a petrol -driven cement mixer, and is sometimes referred to as 'pre -use checks';
(b) periodic maintenance of equipment involves more detailed checks than carried out under 'daily maintenance' and is usually carried out by a fitter as part of a pre -planned programme of regular inspections, for example the replacement of engine oil or hydraulic oil filters;
(c) detailed inspection and servicing, which may involve a degree of dismantling of the equipment in a workshop and entail, for example, the measurement of wear of moving parts or the integrity of hydraulic hoses and connections. This type of inspection is carried out at specific intervals according to the manufacturer's instructions and is often based on the 'running hours' of the equipment.

- There is no specific requirement to keep a maintenance log for work equipment, but where there is one, it must be kept up to date;
- All work equipment must be inspected at suitable intervals and records of inspections made;
- As with maintenance, a competent person must set up an inspection regime, in accordance with legal requirements and manufacturers' guidance. The frequency of inspection is not specified;
- The level of inspection will depend on the complexity of the equipment and vary from a visual inspection to a comprehensive inspection that might include some dismantling and testing;
- Usually inspection is undertaken as part of the maintenance activity as well, but inspection falls into two broad headings;
- A visual check of low risk items before use will suffice for items such as hand tools, to check they are in good order. These inspections are not usually formally recorded inspections. In addition, equipment that poses a high risk, such as some plant, or is used in a high risk environment, such as a confined space, should undergo a visual check every time before use - usually an operator inspection, provided they are competent to do so;
- More complex equipment and equipment used in higher risk areas should also undergo a formal inspection, after which the details of the inspection are recorded;
- When deciding the frequency of inspections, the following points need to be considered:

(a) the type and class of the equipment;
(b) the frequency of use of the equipment;
(c) the potential of the equipment to cause serious harm if not maintained;
(d) the likely deterioration of the equipment whether in use or in store;
(e) the environment in which the equipment is being used.

- Normal practice for most plant is to undergo a weekly formal inspection, in addition to the driver's daily inspection. The frequency of inspections may be adjusted after considering the above factors;
- The following legislation also place duties on Contractors to ensure that specific work equipment and areas of work (which will also involve inspecting the associated work equipment) are inspected as highlighted below.

Hot work and Welding

- TTE will only use electric welding equipment in accordance with the following requirements:

(a) Welding cables and equipment will be properly maintained and inspected before use. Defective equipment will be removed from use and arrangement for repair will be made;
(b) Electric welding cables are to be kept as short as possible and routed away from pedestrian walkway areas;
(c) Electric welding operations will only be undertaken with earth return electrodes connected to the work piece;
(d) All connections between welding equipment and welding cables will be securely bolted;
(e) Pipelines containing flammable liquids or gases, or electrical cables will not be used as a ground;
(f) When electrode holders are to be left unattended, the electrodes will be removed and the holder placed where it is protected from unintentional contact;
(g) A fire resistant container will be provided for spent electrode stubs;
(h) Welding machines will be turned off when being moved or when the equipment is not in use.

24. OPENINGS

Openings, corners, breaks, edges and joisting in a floor

- Where reasonably practicable, edge protection, in the form of guard-rails and toe-boards, must be provided if people have to work close to what would otherwise be an unprotected edge, where:

(a) a person who fell would be injured as a result of the fall;
(b) material, tools or equipment could fall;
(c) the work is over water, other liquid or dangerous materials.

- All holes in floors, etc. must be similarly guarded or securely covered. The covering must be of a suitable material, securely fixed and clearly marked 'Hole below';
- Open joists through which a person could fall must be boarded over to provide safe access to a working place;
- Guard-rails, toe-boards and covers may be removed to allow access for people and materials, but must be replaced as soon as possible. This does not apply to demolition work unless it is left unattended.

25. MANUAL HANDLING AND LIFTING EQUIPMENT

Key points

- Poorly thought out or badly performed manual handling activities are the cause of many injuries to employees;
- 'Manual handling' includes lifting, lowering, pulling, pushing or carrying a load by physical effort;
- Several factors will determine whether it is safe for an individual to manually handle any particular load.
- TTE must:

(a) avoid so far as reasonably practicable their employees having to carry out manual handling activities likely to result in an injury;

(b) where that is not reasonably practicable, assess the risks to the employee;
(c) put in place control measures to prevent such an injury occurring.

- Employees must:

(a) make full and proper use of the safe system of work;
(b) use (lifting) equipment and machinery in accordance with instruction and training given;
(c) report to TTE any situation where it is considered that the system of working is not safe.

- Where sustaining an injury is a possibility and handling a load cannot be avoided, using a mechanical means of carrying out the activity is the best solution.

Note: Section 1, Part 9.2 of the QCS covers the manual handling of materials .

Introduction

The Wind Tunnel assembly and installation works involve lifting and handling to some extent. Although mechanical equipment should be used whenever practicable, much of the work will inevitably continue to be done manually. The risk of injury can be greatly reduced by a knowledge and application of correct lifting and handling techniques and by taking a few elementary precautions.

The Management of Health and Safety at Work

- These Regulations place a requirement on TTE to make a suitable and sufficient assessment of every work activity, including those that involve manual handling, to identify any hazard to employees which might be encountered during their work, or to any other person who might be affected by their operations.
- Once those hazards have been identified, it is then TTE duty to put control measures into place, either to remove the hazard or, where this is not possible, to reduce the risk of injury resulting from manual handling activities, as far as is reasonably practicable.
- TTE must provide employees with comprehensible and relevant information on any (manual handling) risks that exist in the workplace and any control measures that are in place to reduce those risks.
- Employees, in turn, have a duty under these Regulations to inform TTE of any work (manual handling) situation that presents a risk to themselves or others.

Manual Handling Operations

- These Regulations specify how TTE have to deal with risks to the safety and health of employees who have to carry out manual handling in the course of their employment, as follows:

(a) Assess the manual handling task to identify any risk that may be inherent in the operation;
(b) Avoid the need to carry out manual handling as far as possible;
(c) Where a risk is identified, implement control measures to reduce that risk;

- The requirements relevant to lifting and handling are described below.

TTE duties

- TTE shall, so far as is reasonably practicable, avoid the need for employees to undertake any manual handling operations at work, that involve a risk of their being injured; or where this is not reasonably practicable, TTE shall:

(a) make a suitable and sufficient assessment of all such manual handling operations to be undertaken by their employees;
(b) take appropriate steps to implement control measures, thereby reducing the risk of injury to those employees undertaking any manual handling operations, to the lowest level which is reasonably practicable;
(c) take appropriate steps to provide any of those employees who are undertaking any manual handling operations with general indications and, where it is reasonably practicable to do so, precise information on:

- the weight of each load;
- the heaviest side of the load whose centre of gravity is not positioned centrally.

- Any assessment that TTE has made must be reviewed where:

(a) there is reason to suspect that it is no longer valid, or
(b) there has been a significant change to the manual handling operations to which that assessment relates.

- Where changes to an assessment are required, as a result of any review, TTE shall make them;
- When determining for the purposes of these Regulations whether manual handling operations at work involve a risk of injury, and to determine the appropriate steps needed to reduce that risk, particular regard shall be taken to check:

(a) the physical suitability of the employee to carry out the operation;
(b) the clothing, footwear and other personal effects worn by the employee;
(c) the employee's knowledge and training;
(d) the results of any relevant risk assessment carried out;
(e) whether the employee is within a group of employees identified by that assessment as being especially at risk;
(f) the results of any health surveillance already carried out.

- TTE must additionally:

(a) provide safe systems and places of work;
(b) ensure the safety of their employees and, where possible, the absence of risks in the handling, storage and transport of all types of articles and substances;
(c) provide the information, instruction, training and supervision necessary to ensure the health and safety of their employees. Employee's duties.

- It is the duty of each employee, while at work, to:

(a) make full and proper use of any system of work provided for use by TTE in connection with manual handling;
(b) Use any machinery or equipment provided by TTE in accordance with any training or instruction received;
(c) Inform the responsible for safety, of any dangerous work practice or shortcomings in TTE arrangements for safety.

Lifting Equipment

- Any lifting activity and the equipment used to carry it out must comply with the requirements of these Regulations. The term lifting equipment not only includes machinery such as cranes

but also any device used to connect the machinery to the load, such as eye-bolts, hooks, slings. These are known as lifting accessories.

- Briefly, these Regulations place legal duties on TTE to ensure that:

(a) all lifting equipment is stable in use and of adequate strength for the purpose for which it is being used - safe working loads;
(b) lifting equipment used to lift persons, for example a passenger hoist, is designed for the purpose and is safe to use;
(c) lifting equipment is positioned and;
(d) installed so as to keep the load under full control;
(e) lifting equipment is marked with its safe working load;
(f) lifting activities are properly planned, appropriately supervised and carried out in a safe manner;
(g) lifting equipment (including lifting accessories) is subjected to a scheme of periodic thorough examination for which reports are raised.

- All ropes and chains used should be thoroughly examined before their first use for any sign of chafing or wear, and then every six months. They must be securely attached to the chair and to the anchor. Swivel connections should be used to prevent spinning.
- Fall ropes should not be less than 18 mm in diameter. They should be tied off correctly in the working position. The rope must not be removed from the cleat while the chair is in use; a controlled descent is achieved by removing the locking -hitch from the rope in the 'tied -off' position and easing it around the cleat.
- Hooks should be 'moused', 'C' shaped, or fitted with a spring -loaded device to prevent the displacement of the load.

26. SUBSTANCES HAZARDOUS TO HEALTH

- TTE will control the use, handling, transportation and storage of hazardous substances to reduce the associated health risks. These requirements below are the minimum that the TTE will meet to comply with their contractual Occupational Health and Safety obligations;
- Where any spillage of liquid occurs TTE will take action to immediately clean the spillage and remove any contaminated materials from the Worksite;
- To effectively control the hazards associated with the use, storage, handling and transportation of hazardous substances TTE will:

(a) Maintain a register of all hazardous substances on the Worksite;
(b) Obtain Material Safety Data Sheets for all hazardous substances;
(c) Make an assessment of the health risks associated with the intended use of each hazardous substance;
d) Provide the control measures required to reduce the risks identified to acceptable levels. Acceptability will be based on internationally recognised best practices and standards;
(e) Train people that use, handle or transport hazardous substances in the associated risks and control measures;
(f) Provide routine health checks for employees that are exposed to hazardous substances;
(g) Provide appropriate spill containment and disposal Spill kit;

(h) Toxic/hazardous substance correctly tagged/ labelled/ signage and secured;
(i) Adequate storage provided and Class B fire extinguisher nearby.

27. HEALTH, FIRST AID AND MEDICAL TREATMENT

General

TTE GmbH is fully responsible for assessing the medical conditions of his employees and shall be ready to submit all necessary documents related with medical assessments of his employees. TTE GmbH. will ensure within his proposed system of audit and review that spot checks are conducted to verify compliance with this requirement.

No one suffering from a transmittable disease will be allowed to work on the project. Employees using medication, which could influence their performance, will report this to the medical staff.

TTE GmbH will operate a personal health programme in order to prevent illness occurring or spreading.

Medical Treatment and First Aid

The medical treatment and first aid standards are applied to all TTE GmbH projects. But there may be additional changes according to the local regulations in the project's country.

TTE shall provide:

- Basic first aid training for the workforce;
- First aid kits suitable for trauma response in all working areas;

28. ENVIRONMENTAL PROTECTION

Our aim is to ensure that there is no adverse environmental impact from our activities while assembly and installation works during the project implementation and also during the operation phase.

Management is responsible to generate and review this procedure, to review each project and fully brief all employees.

Employees are responsible to fully comply with the provisions of this procedure, to be aware of the delicate natural balance on sites and not to act or damage this in any way.

1.0 PROCEDURE.

1.1 Review each site.

Review Contractor's criteria.

Highlight possible interfaces.

1.2 REVIEW AREA.

Location.

Nature site e.g. peat bog, forest, grass land etc.

Type of Flora / Fauna likely to be affected by the operation.

Proximity of watercourses and site drainage.

1.3 POTENTIAL IMPACTS FROM OUR OPERATIONS.

1.3.1 EMISSIONS.

(a). Exhaust gases.

(b). Oil leaks.

(c). Oil spills.

(d). Service oils.

1.3.2 MISCELLANEOUS SOLID WASTE.

1.3.3 Noise.

1.3.4 Fire.

1.3.5 General.

1.4 CONTROLS.

1.4.1 Emissions.

(a). Exhaust gases.

- Maintain exhaust system, if required.
- Regularly service engines, i.e. avoid emissions due to clogged air filters.
- Avoid unnecessary engine running.

(b). Oil leaks.

- Adapt spill procedure, if required.
- Use drip trays under all stationary engines. Contents of drip trays to be stored in secure containers, clearly labelled, pending treatment at licensed facilities.

(c). Oil Spills.

- Use bunded oil storage receptacles.
- Take care when dispensing oil.
- In event of spill, use spill procedure and aim for containment.

(d). Service Oils.

Dirty oils at service intervals:

Collect in a secure labelled container. Return for recycling and specialist treatment.

1.4.2. Waste Management

a) Waste generation

- Waste inventory shall be done by subcontractor to estimate the quantity of hazardous and non-hazardous waste.

b) Waste Separation

- Waste separation to be performed in compliance with Qatar legislation, Laws, Regulations and Project Specifications.
- Waste to be separated for hazardous and non-hazardous (general/domestic waste)

1.4.3 Storage

- Waste collection points to be marked and arranged as per Qatar regulation requirements and Project Specifications;
- Hazardous waste collection points to be located in safe place to avoid unauthorized access;
- Hazardous waste to be stored in separate proper-labeled and lockable containers. Liquid waste (waste oil, paint etc) to be stored in barrels/tanks with lids - secondary containment is obligatory.
- MSDS copies to be provided for each hazardous waste storage point.

Waste disposal facility (area) on Site shall be provided by Contractor.

29. SITE AREA AND HOUSEKEEPING

Site Establishment

Materials and Construction Equipment not being used will be stored safely in such a way that they will not obstruct other Site activities or present a potential for harm to site personnel.

Roads and walkways will be maintained clean and every effort will be made to keep mud, slush and other slippery substances off roads and walkways.

Cables, water and air hoses will be placed where they cannot be damaged, and where they cannot cause damage or injury.

If placed in roadways or pipe ways, the cables and hoses will be placed in a protected trough or suspended above the road or pavement surface and conspicuously tagged and marked.

Hygiene

The Temporary Facilities will be maintained in accordance with the highest standard of cleanliness and hygiene.

In eating areas, all waste and scrap food will be discarded daily into containers placed in the lunch area for that purpose.

Rules of cleanliness and order will be enforced amongst all personnel working at the Site.

Personnel will not drive their personal cars beyond the parking area.

Site Waste

Waste materials will be picked up immediately and be properly stored while on Site and must be moved off Site on a regular basis so as not to create a source of hazard .

All combustible waste material will be removed from building interiors at the end of each shift, and placed in waste receptacles located at least 2 meters away from any structure. This distance will be increased as long as it is practicable and possible.

Areas around and routes to fire doors, exits, stairways, fire hydrants, monitors or fire extinguishers will be kept free and clear of obstruction at all times.

Flammable liquid spills will be immediately cleaned from floors, ground, equipment and drip pans.

Outside storage areas and grounds around structures will be kept free and clear of debris accumulations.

All protruding nails will be knocked down or removed from any materials on the site.

Smoking

Smoking will be allowed in designated smoking areas. “No smoking” signs will be respected at all times.

Individual violators of the above smoking rules may be subject to immediate dismissal.

30. GENERAL RULES

TTE GmbH is responsible for the conduct of its employees on the property.

The following acts are of such serious nature as to warrant immediate and permanent banning of an individual who commits such act on the property:

- Carrying weapons;
- Stealing or malicious mischief;
- Obtaining material, tools or equipment on fraudulent orders or by misrepresentation;

- Falsification of records;
- Fighting (aggressor or defender) or attempting bodily harm to another;
- Being in a partially or completely intoxicated state, or dealing, introducing, possessing, or using intoxicating liquor or narcotics while in the plant;
- Smoking in restricted areas (outside of the designated smoking areas);
- Speeding;
- All drivers and passengers must use seat belts in the vehicle during the trips;
- Back up alarms to be installed in specialized motorized equipments (cranes, excavators, cherry pickers);
- Site containers must be equipped with adequate numbers of first aid kits.

The following irregularities are also considered serious and will result in immediate and permanent banning of an individual who commits them on the property, unless mitigating circumstances justify less drastic action:

- Sleeping or dozing on the job;
- Violation of any criminal law;
- Harbouring a disease, which may endanger a fellow worker;
- Negligence of duty in case or use of the property or endangering the life of another while on the property;
- Horseplay or violation of any safety rule;
- Intimidation or coercion of others;
- Climbing any fences or attempting to enter or leave the property except through regularly designated passageways;
- Repetition or accumulation of less serious irregularities;
- Tampering or falsifying time records.