

HEALTH, SAFETY & ENVIRONMENT PLAN

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1.0 Introduction

Majan Technical Supplies & Services (MTSS) is a Engineering and contracting company carryout multidisciplinary nature of projects and maintenances (Electrical, Instrumentation, Plumbing and mechanical Engineering Jobs)

The purpose of the Health, Safety and Environment Plan is to define the specific procedures that are to be applied to ensure the achievement of Health, Safety, and Environmental (HSE) goals and objectives for this project.

The minimum standard that will be accepted is to comply with all HSE procedures &MTSS safe work practices, Environment & OHSAS and adhere to the contents of HSE plan, but the ultimate goal of HSE Management is to aim for standards that will eliminate injury to human and damage to facilities, materials and the environment.

2.0 Purpose& Scope of Work

2.1 Purpose

The purpose of this document is to demonstrate and describe comprehensive HSE plan covering specifications, programs, procedures that will be implemented to manage hazards associated with the execution of work and services undertaken by Majan Technical Supplies & Services (MTSS). the contract.

This document shall be reviewed and update as necessary based on the any comments from client, any site specific requirements.

2.2 Scope:

This document is a structured guide for all workers, visitor and sub-contractors to help them perform all assigned project task, without injuries to people, damage to asset and the environment.

This document also ascertains the assurance of Majan Technical Supplies & Services (MTSS) commitment to respect and comply with Sultanate of Oman's Law and acceptable industry practice.

This plan covers the safety programs and procedures to be applied to all projects executed by MTSS.



2.3 PLAN REVIEW and UPDATE

The HSE Management Plan is a live document and at the Project Level the Project Manager and the Project HSE Manager/ Engineer will formally review it on a yearly basis.

From a Project operational perspective it will be reviewed on a frequent basis throughout the duration of the life of the Project Execution in order to ensure that it reflects accurately the specific requirements of the Project and that any material Project condition changes have been considered and are captured within the HSE Plan.

The HSE Plan will be formally reviewed by MTSS Corporate on a twice annually basis in order to provide Assurance & Compliance and it is the accountability of MTSS HSE Manager/Engineer to ensure that any Omani Legislative & applicable International Regulations changes or revised requirements are appropriately considered within the Project HSE Plan.

2.4 REFERENCE

Oman Labour Law Royal Decree no. 35 / 2003

OHS Ministerial Decree no. 286 / 2008

Applicable legal requirements

Applicable international regulations

2.5 CONTROL OF DOCUMENTS

The HSE Manager/Engineer shall be the custodian of this document. Approved copy shall be distributed to all Project Key Personnel, Client and all Subcontractors and the distribution list shall be maintained at Coast and Site Office. The document will also be visibly made available at all Site Locations.

Commitment to HSE CONTINUOUS PERFORMANCE IMPROVEMENT through ACTIVE leadership

The management of MTSS is absolutely committed to playing its part in ensuring that MTSS strives to continuously improve and satisfy the required health, safety and the protection of the environment requirements in each of its Projects.

In demonstrating this commitment, MTSS shall ensure adequate supervision of its subcontractors engaged in carryout work activities in the scope of this contract for health and safety compliance. Sub-contractors working onsite and offsite shall be obligatory to the requirement of this HSE Management plan.



This commitment also applies to our selection & supervision of our sub-contractors and all Stakeholders others who may be affected by our activities & operations.

In order to ensure that this commitment is maintained the following activities / behaviours and outcomes are seen as part of the day-to-day management accountability of our operations:

- Effective participation in all HSE activities such as Site visit, inspection / Audit, workshops, Forums etc. by Senior Managers and Supervisors and set a high personal standard in regards to HSE Leadership & Commitment.
- HSE issues included on the agenda of all meetings.
- Participating in the review of performance against all HSE plans, goals, objectives, and/or targets.
- Providing immediate and visible response and involvement in case of any incident and HSE issues affecting the normal operations.
- Participating in Quarterly Incident Review Committee meeting and review all kinds of incidents including the Near miss Incident.
- Establishing a system PEER and external Subject Matter Expertise on HSE matters to improve the HSE standards & performance.
- Acknowledging & recognising high performing individual and groups via promotional activities to build a positive behaviour HSE culture throughout the organisation.
- Clearly defining expectations, HSE responsibilities, duties, requirements and standards.

To achieve the above the management has assigned HSE responsibilities and duties to all its employees within the HSE management system of the company.

3 Proactive target setting

REF	ACTION	ACTION PARTY	TARGET
1	Discuss the HSE targets and indicators with the staff and employees.	Contract/Project Manager /HSE Manager/ HSE Engineer/ Const. Manager	½ Yearly
2	Ensure that staff is apprised of their HSE responsibilities, HSE tasks, HSE targets and HSE performance indicators.	Construction Manager / /HSE Manager /HSE Engineer	Quarterly
3	Include HSE Plan action items in task and targets of action parties and issue.	HSE Manager /HSE Engineer	6 months
4	Celebrate HSE achievements / reward to employees on achievement of HSE performance targets.	Contract/Project Manager	On achieving HSE Milestone
5	Measure the competence of Emergency Response Team.	HSE Manager /HSE Engineer	Quarterly



3.1 Company Culture

<u> </u>	Company Culture		
REF	ACTION	ACTION PARTY	TARGET
1	Employees are reminded regularly of their empowerment to stop unsafe work. Motivate employees for a participative HSE culture.	Contract/Project Manager/ Construction Manager/ HSE Manager/ Engineer	Regularly through HSE meetings, Tool Box Talks
2	Employees are reminded frequently the MTSS HSE House rules.	Construction Manager/ HSE Manager/ Engineer	Monthly
3	All MTSS employees shall sign the MTSS HSE House Rules	HSE Manager/ Engineer	Yearly

3.2 HSE compliance and Penalties/defaults

MTSS is fully committed to comply with the industrial HSE Specifications and other requirements mentioned in the Contract HSE Documents. MTSS shall ensure all controls to avoid safety defaults during all phases of this contract.

4.0 Objectives

- **4.1** To meet the HSE Key Performance Indicators (KPI) and achieve continuous improvement of health and safety practices.
- **4.2** To attain improvement in safe behavior through continuous training, monitoring & organizing forum.
- **4.3** To revise objectives and targets periodically.
- **4.4** Factors to be taken into consideration while revising objectives includes risk and dangers to people health and safety and the security of facilities, technological options, economic and financial conditions, legal requirements, other regulations and standards including ones entered into voluntarily and the viewpoints of sub-contractors hired, if any.

Sl. No	HSEKPI(Proactive)	Target
1	Sr. Management visit	Once Every Year
2	Project Management visit	Once a Month



3	HSE Manager/Engineer Lead Visit	Once Every Six Months
4	Mandatory HSE training compliance	100% Compliance
5	HSE audit internal / External	Once Every year

SI. No	HSE KPI (Reactive)	Target
6	Incident close out by Incident Review Committee (IRC)	Within 2 weeks of incident occurring
7	Monthly HSE performance Report	100% compliance to Project requirements

5.0 Leadership and Commitment

MTSS senior management continues to:

Visible leadership & commitment to HSE, promote HSE awareness among all employees and culture in which all employees work as a team to work safely.

Participate in all HSE campaigns, meetings, inspections & audits.

Participate in setting out targets and monitor achievement of these targets, promoting improved targets and reward employees.

Providing immediate and visible response and involvement in incident review.

MTSS is committed to achieve excellence in Health & Safety:

To manage all risk.

To Focus on prevention.

To Comply with health and safety.

Continuous improvement.

To evaluate Health & safety performance of Sub-Contractors.

To establish Communication Channels.

SI. No	Action	Responsible for Action	Frequency
1	Site inspection	Site In-Charge/ Supervisor	Weekly
2	HSE walk around	Project Manager ,Site In-Charge& HSE Team	6 Months
3	HSE Performance Review meeting with site staff	Site In-charge & HSE Manager/Engineer	Quarterly
4	Weekly HSE Meeting	Site In-Charge, Site Supervisor & HSE Team	Weekly
5	Reward & Recognition Program	Project Manager, Site In-Charge& HSE Team	Monthly



6.0 Policy

6.1 HSE Policy

6.2 Drug and Alcohol Policy

7.0 Strategic Objectives

All site staff including workmen is required to comply with this HSE plan. There shall be process in place to effectively monitor progress against the HSE plan.

SI. No	Action	Responsible for Action	Target
1	Monitor and review compliance of the HSE plan and recommend action items.	Site In-charge/ Site supervisor	Monthly

- Demonstrating the management's firm commitment to HSE matters at all times.
- Maintaining strong HSE organisation at corporate and project levels with adequate competent staff and other resources.
- Investigating all accidents/near misses and communicating the learning points to all the employees.
- Conducting HSE audits and review at regular intervals and taking appropriate corrective action.
- Providing adequate competent supervisors.
- Clearly allocating HSE responsibilities to each level of employee.
- Inculcating and promoting safety culture among employees.
- Setting realistic and achievable safety targets for the projects
- Our ultimate objective is zero harm.

8.0 Roles & Responsibilities, Resources & Communication

8.1 Roles & Responsibilities

HSE performance is line managers responsibility; hence the Contract Manager being overall in charge and is accountable for the management of HSE of the contract. However, the team of Site In-charge, Supervisors and Permit Holder are responsible for ensuring that activities are carried out in accordance with the contract HSE plan.

In particular:



General Manager: is responsible for the overall arrangements and for ensuring that the company's operations are executed at all times in such a manner s to ensure, so far as is reasonably practicable, the health, safety and welfare of all employees and others who may affected by its operations.

Ensure there is an effective company policy for health and safety and that all employees, contractors and temporary workers are made aware of their individual responsibility.

Arrange for funds and facilities to meet the requirements of company policy and legislation. Make provision for adequate and appropriate training to be given to all employees. Provide adequate resources to meet the requirements of HSEMS

Contract/Project Manager: The Contract/Project Manager has overall accountability for the implementation & performance of the HSE Plan within the Project & its operations. Some key specific accountabilities are listed as follows:

Ensure that all works related to this contract confirm to MTSS Health, Safety and Environmental Management System.

To ensure adequate resources is available to enable the HSE management system and procedures.

Review the results of accident / incident reports, and statistics, and implement control measures to prevent the reoccurrence.

Participating in HSE audit, involve in the investigation team of incidents and chairing the HSE meetings at coast and site.

Ensure audit and inspections are carry out as per schedule.

Ensure recommendations of NCRs, incidents and other site observations are followed throughout the project.

Ensure that senior line personnel evidence their commitment to HSE through participation in various HSE activities like meetings, inspections and toolbox talks.

Understand and implement the company Safety Policy.

Appreciate the responsibilities of personnel under their authority and ensure that each employee knows his responsibility and are equipped to play their part smoothly.

Prepare and maintain a record which identifies work equipment requiring inspection by competent persons and ensuring that the equipment is identifiable and available for inspection on the required date.

Conduct Risk Assessments on activities within their department ensuring that the method and systems of work are safe. And also ensure that the necessary procedures, rules and regulations designed to achieve those are formulated, and implemented.

Ensure that all engineering construction work under his control complies with all relevant construction statutory equipment.

Ensure accident and near-miss reporting procedures are understood and implemented.

Must carry out JHA for each activity supervised and ensure that the job safety plans are implemented.



Ensuring PTW system is established and implemented.

HSE Engineer: shall be responsible for monitoring HSE plan of the contract and providing advice on improvement of HSE performance to the line management, monitoring implementation of HSE plan, promotion of best practices and facilitate line management for continuous improvement in HSE performance.

Ensure that an adequate training for health and safety is established and that the safety culture is encouraged among employees.

Keep up to date with changes in current legislation and to bring the attention of the Manager responsible for Health and Safety any relevant new legislation.

Ensure that all "assessments" as required are conducted and reviewed at relevant intervals.

Carry out investigations into all accidents and near-miss incidents and to record the findings on the relevant forms.

Project Engineer

Construction Engineer / PTW Applicant / Supervisor are responsible for: -

Ensure the health and safety of personnel working under his supervision.

To follow the advice given by management and the HSE Staff at all times.

Ensuring that work under his supervision is carried out in accordance with safety procedures and that Personal Protective Equipment is supplied and used at all times.

Ensure that all facilities, tools and equipment are in a safe condition.

Ensure that personnel are working in a safe manner and under safe conditions.

Ensure that personnel working under his supervision are trained and competent to carry out their work safely and that they understand the relevant safety procedures.

Ensuring that no damage is done to the environment in which he is supervising the work.

Conduct and record the Tool box meeting whenever require.

Take part in the investigation of incidents occurred in his work sites.

Must carry out JSA for each activity supervised by them and ensure that the job safety plans are implemented.

Ensuring all necessary safety equipment such as fire extinguishers, first aid boxes, gas monitors etc. are in place.

Ensuring PTW system is established and implemented as per procedures.

Ensure the work forces understand PTW requirements and control measures are implemented at site.

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Foreman / Team lead

Following all basic and specific HSE rules and ensuring that his team does so.

Ensuring the health and safety of personnel engaged in work under his supervision.

Ensure that the requirements of PTW-System are always complied with at the worksite.

Ensuring that Tool Box Talk meeting is conducted daily and all precautionary measures are in place prior to the work.

Conduct and record the Tool Box Talk meeting immediately after meeting.

Ensure that records of Tool Box Talk meetings of previous three months are documented.

Attending and participating in all HSE interaction platforms like fortnightly HSE meeting, weekly gate meeting, and in-house training courses.

Be conversant with emergency response procedures. Ensuring that all control and recovery measures are in place at site and procedures are followed during execution of work.

Ensuring that tools and equipment are in a good condition and inspected daily before use.

Reporting all accidents, incidents to management immediately, initiate emergency action for any emergency at site.

Ensure that no environmental damages caused. Work site is kept in a tidy condition.

Ensure that Waste is segregated and disposed of in accordance with the MTSS waste management procedure requirements. Ensuring that after completion of job, work site is left only after proper restoration.

Ensuring to discuss new hazards (due to change in resources, work scope, site conditions, procedures and incident analysis) observed during the process of work, it's risk, control and recovery measures and submit suggestions to immediate Supervisor / HSEA through HSE meetings.

All Employees: should carry out tasks and duties in a safe manner, in accordance with instructions, and to comply with safety rules/procedures, regulations and codes of practice.

If unaware of any safe practice or condition, or if any doubt about the safety of any situation, consult the supervisor.

Obtain and use the correct tool/equipment for the work and not to use any that are unsafe or damaged. Do not make any alteration on tools.

All tools, equipment and personal protective equipment must be stored in the designated place after use.

Not to operate any equipment or plant unless authorized.

Need to Report all accidents, near-miss and dangerous conditions to the line management.



Not to participate in horseplay or place fellow employees in danger by their actions.

Maintain proper housekeeping

Maintain personal hygiene and co-operate with Supervisors to maintain high hygiene standards in work site.

8.2 Competence

8.2.1 HSE Competence Requirements

HSE competence requirements shall be verified through Competence Assurance Procedure. As per this procedure, the HSE Critical roles are identified and their HSE competences are verified, monitored and assured as per the requirements.

8.2.2 Fitness of Personnel

All personnel working in the project shall be medically fit in respect of safely executing out their respective activities & jobs. MTSS shall conduct periodic medical checks (once in two years) and medical records of all employees will be maintained.

8.2.3 Employee HSE induction Programme

All employees of MTSS and its Subcontractors shall complete the contract specific in-house site HSE induction programme, which is arranged by the Site HSE Engineer/ Officer.

All new employees within 24 hours of arrival at site office are provided with this in-house induction.

The induction shall cover all necessary HSE information pertaining to site and the training record shall be completed and maintained by the HSE Engineer.

All new and transferred employees shall be provided with job specific HSE orientation by discipline engineers. This shall be done within first week of arrival at site.

All employee both onsite and offsite working for the scope of work on this project shall completed their mandatory HSE training as specified in the training matrix before commencing work Suitable Licensing for various job categories like PTW Holder, Engineers, technicians, drivers etc. and likewise shall be obtained to ensure the required competency levels.

8.2.4 HSE Training

ACTION	ACTION PARTY	TARGET
In house HSE induction of new and transferred employees to provide them site specific HSE information	Construction Manager /HSE Engineer	On arrival at site



Compulsory / Mandatory HSE training of employees as per project requirement	Construction Manager/ HSE Engineer	To be completed before deployed for work on site and before one week of expiry date of the course.
Maintain a database to keep HSE training records for all employees to help ensure that all employees attend mandatory HSE training courses including refresher training.	Construction Manager/ HSE Engineer	Always

8.3 Resources

MTSS Management shall provide sufficient competent human resources, equipment, vehicles & tools for the effective HSE management and avoid adverse HSE consequences due to permanent or temporary changes.

8.4 Communication

Communication is a two way process to ensure that relevant HSE information is communicated to all employees via HSE meetings, safety alerts, bulletin etc.

8.4.1 Schedule of Meetings

The following schedule of meetings shall be followed within the project:-

Sr. No.	Nature of Meeting	Frequency	Conducted By	Participants
1	HSE Meeting	Weekly	Const. Manager / HSE Manager/Engineer	All Senior staff including Subcontractors
2	Gate Meeting	Weekly	Const. Manager / HSE Manager/Engineer	All Employees
3	Tool Box Talks	Daily	Supervisors/ Foreman	Workforce
4	Client Meetings	As per Programme	Client	Contract/Project Manager, HSEM (Coast) Const. Manager, HSE Manager ,HSE Advisor (At site)



8.5 STANDARDS AND DOCUMENTS

8.5.1 HSE Legislation and Standards

MTSS shall ensure compliance with the following HSE Legislation and Standards: Government regulations, codes and standards of the Sultanate of Oman.

Client HSE Spécifications, codes and standards.

MTSS HSE Management System and MTSS Procedures.

International and National Codes.

Availability, compliance & PRECEDENCE

MTSS Manager/ Engineer is responsible for ensuring that latest revision of contract applicable HSE specifications, procedures and client HSE documents are made available for reference purposes.

National Regulations shall take precedence over all other regulations in force and will follow the guidelines set forth.

HSE Manager/Engineer is responsible for ensuring copies of the MTSS HSE Plan are issued/ made available to all concerned, including sub-contractors at site level.

8.5.2 Control and authorisation

Personnel who are issued with such document are responsible for its safe keeping and ensuring its availability to persons within their department on a reference basis.

This control shall ensure that:

Pertinent issues of appropriate document are available at all locations where operations essential to the effective functioning of HSE system are performed.

Invalid and obsolete documents are promptly removed from all points of use or otherwise assured against unintended use.

Documents that are obsolete but retained for legal requirement are suitably identified.

Change to data and documents is reviewed and approved by the same person who authorised the original document unless specifically designed otherwise.

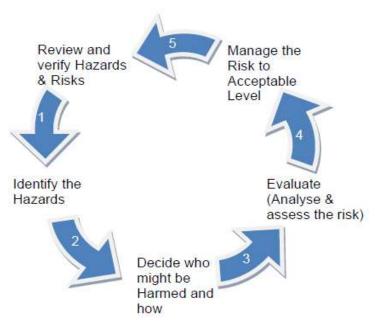


9.0 HAZARD AND EFFECT MANAGEMENT PROCESS (HEMP)

Updated Hazard & Effects Register is in place and is being implemented to avoid, reduce or eliminate hazards and effects associated with all activities being carried out.

9.1 Methods and Procedures for Hazard and Effects Management

MTSS has a systematic approach to hazard identification and risk management which is aimed at effective control of all occupational health and safety risks as well as risks to assets, environment and company reputation.MTSS will comply with the 5-Step Hazard Management Process which is summarized in Diagram below:



9.2 Application of HSE Studies / Risk Assessments

Hazards and risks associated with each phase of the Project will be identified and assessed for activities in the contract as per the Risk Management Plan, and documented in the project Risk Register.

HEMP sheet/ risk assessment, together with Hazard and Control Sheets, shall be reviewed during the HSE Risk Workshop.

The HEMP sheets/ risk assessment will be updated and re-issued after completing any amendments arising from review of incidents and where new activities arise which are not covered in the Risk register.



Copies of the Hazard and Control Sheets will be distributed to the engineers and supervisors for reference in their respective activities and shall form part of the application for the Permit To Work.

All site supervisors shall ensure that control measures mentioned on each HEMP/risk assessment for the activities are fully implemented.

Hazards and Control shall be communicated to all appropriate team members during Toolbox talks and pre-job meetings.

The HSE Engineer shall carry out periodic site checks on correct implementation of controls among personnel and report any noncompliance for corrective action.

HEMP/ risk assessments sheets shall be continuously reviewed against performance and revised accordingly.

9.2.1 Hazard Management during Engineering Design

During design engineering services, MTSS will conduct or participate in studies to assess Risks associated with design, construction and operation of facilities associated with project (e.g. HAZOP, HAZID and ENVIID, as appropriate).



9.3 Assessment of Exposure Of The Workforce To hazards and Effects

The breaking down of an activity into various tasks permits MTSS to carry out a true assessment of the exposure of the workforce to hazards causes and effects. Each task shall then be analysed to identify hazards, assess them and suggest measures to manage them out, mitigate & control them on an ALARP basis. The below Risk Matrix shall be followed in order to categorise the risks and all practical measures taken to mitigate its manifestation..

					Potential:	Severity	(Wha	t might have	gone worst)
Α.	Actual Severity or Consequence Severity		everity	Very low	Low	Medium	High D	Very high	
Severity Rating	People Injury (P)	Assets Damage Loss (A)	Environment Total Effect (E)	Reputation of Company (R)	Never Heard of in Gas Industry	Heard of Incident in Ges Industry	Incident Has Occurred in OGC	Happens >5 Times per year in OGC	Happens >5 Times per year in Region
0	No injury	No damage	No effect	No Impact			NEAR	MISS	
1	Slight (FAC)	Slight (<\$ 1k)	Slight Effect	Slight Impact Local public awareness but no discernisis concept					
2	Minor (RWC, MTC)	Minor (\$ 1-10k)	Minor Effect	Minor impact Local public concern		LOW			
3	Major (LTI)	Considerable (\$10-100k)	Localized Effect	Moderate impact Moderate aftention in local media		MEDIUM			
4	Single Fatality	Major (\$100k-1M)	Major Effect	Major impact Putic wide concern' Extensive attention in national/Regional media			HIGH		
5	Multiple Fatalities	Extensive (>\$ 1M)	Massive Effect	Massive impact international media attentiony License to operate impact					

9.3.1 Material Safety Data Sheet or Safe Handling of Chemical

The line supervisor and or HSE Engineer, or his designate is responsible for ensuring that information pertaining to the safe handling of chemicals (SHOC) which may be regularly encountered during the contract.

This information is to be updated as and when new items are brought at site. The CM and HSE Engineer shall ensure that the characteristic relating to hazardous chemicals are presented and verbally discussed, by the discipline engineers and supervisors. Adherence to chemical and component information is assessed by way of audit and inspections.

Suitable PPE and facilities are made available for safe handling of chemicals. This is the responsibility of MTSS Construction Manager / Site engineers.



No food is allowed to consume where chemicals are stored/ handled.

9.3.2 PPE Requirement / Instruction / Training

Construction Manager / site Engineer and work supervisor are responsible for ensuring required PPEs are identified and made available to workforce and that all necessary PPEs are used. All personnel are instructed in the correct use of PPE.

HSE Engineer ensures that workforce is trained on the use and care of PPEs. He shall also advise the management on the quality and quantity of PPEs required at site.

PPEs shall conform to quality norms as specified in the standards like BS or ANSI.

9.3.3 Renewal / Replacement

The renewal or replacement of PPE is as per manufacturer's recommendation and MTSS standing rules. If any PPE becomes deficient in any way through normal work usage or wear and tear, PPEs are renewed. However, at all times, employees shall have adequate PPE Supply. PPEs renewal and replacement is at MTSS expenses.

ACTION	ACTION PARTY	TARGET
Cascade information in HEMP/risk assessment to employees	Construction Manager / HSE Manager/ Engineer/ Site Engineers/ Supervisors	Throughout the contract
Discussion of new hazards (due to change in resources, work scope, site conditions, procedures and incident analysis) observed during the process of work, it's risk, control and recovery measures and submit suggestions to CM/ HSE Engineer	Site Engineers/ Supervisors	During weekly HSE meeting
Review and update Hazard and Effect Register on the recommendations received from Sites	Contract/Project Manager / HSE Engineer	As and when required



10. PLANNING AND PROCEDURES

10.1 HSE Plan

ACTION	ACTION PARTY	TARGET
Develop and regularly update the HSE plan	HSE manager/ Engineer	As and when required
Cascade the requirements of HSE plan to workforce and review compliance with HSE plan at site level	Construction Manager / HSE Manager/ HSE Engineer	During HSE Meeting and Weekly Gate Meetings

10.2 Permit to Work System

MTSS shall follow the Permit to Work System as applied within the Contract at work site.

Permit to Work System will be followed rigorously during the execution of the high risk activities (hot work, excavation etc) in the project. MTSS shall identify, provide training and undergo client's licensing process for PTW signatories for all discipline.

Permit should be properly filled by assessing the potential hazards in the work place before commencing the activity.



10.2.1 Permit to HOT WORK:

10.3 Emergency Response Procedures and Mock drills schedules

The entire construction team shall be fully familiar with the potential Hazards, its effects and the emergency procedures & preparedness. Emergency response procedures and Emergency response team shall be developed and relevant information shall be made available to all employees. Regular Emergency drills, based on various emergency scenarios shall be conducted in accordance with HSE activity matrix.

Emergency exit layout and emergency response flow chart to be displayed in the site, industrial area and work site offices..

In case of any emergency / incident MTSS personnel shall strictly follow the Site emergency Plan for safe evacuation with a Buddy system in place.

SI. No	Action	Responsible for Action	Target
1	Review HSE plan during management	MTSS	3 Years
	Review meeting.		

SI. No	Action	Responsible for Action	Target
1	Review and update HSE procedures.	HSE Team & Site In-Charge	As and when Required(Note: After 3 year All risk Assessment should be reviewed)

11.0 Implementation & Monitoring

MTSS

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11.1 Implementation

Ensure that all control and recovery measures are in place at site during the preparing of Standard operating procedure SOP, pre planning of task, Toolbox Talk, Site inspection, HSE Walk Around and Audits.

11.2 Monitoring

Monitor compliance of HSE Management System such as HSE Procedures, Standards and Resources. Intimate non-compliance and maintain records.

Monitor HSE performance, identify areas for HSE improvement and recommend corrective action.

Prepare trend analysis on HSE performance, incident analysis, occupational illness, sickness absenteeism and recommend improvement and initiate action.

12.0 Client's Health Management System

MTSS shall comply with client's Health Management System. MTSS to maintain clinic visit record and shall include the details in monthly HSE report. Health awareness programme will be conducted once in 6 months

Food Safety Hygiene measures like HACCP requirements shall be strictly followed at camp catering facility.

13.0 Accommodations and Catering Facility

Suitable residential and site facilities are provided for all employees. These facilities meet with Client and Sultanate of Oman Government Standards. MTSS will obtain necessary ROP and other approvals in advance and requirements will be complied throughout the project duration.

Inspections, regarding hygiene and housekeeping of the office, site facilities and camp are conducted in accordance with the HSE inspection schedule.

Construction Manager and HSE Engineer ensure that such inspections take place in accordance with the schedule.

14.0 First Aid Training and First Aiders

Employees shall be trained in Industrial First Aid and will be available to meet the requirement of one first aider in each crew of 25 employees. When less than 25 people are working at a particular location, at least one person per shift is to be competent First Aider with access to suitable First Aid kits. Additional trained first aiders will be introduced in case of increase in the number of workforce. Refresher training



will be imparted to the first aiders on expiry of the validity of their certificates. Adequate identification marks/stickers shall be made for easy identification of first aider at site.

15.0 Health Hazards Awareness

Health hazards that have been identified within the work activities shall be brought to the attention of all employees. They shall also be advised of the preventive measures required, through orientation programmes and toolbox talks. HSE Engineer will conduct Health Hazard Awareness Training Programme at least once in six months. This topic will also be discussed in the HSE meetings and as a part of Job Safety Plan of PTW and also before the works without PTW are carried out. HSE Engineer shall play a significant role in Promoting occupational health and safety culture within the organization, coordinating and integrates individual and environmental level health promotion policies and safety practices to promote employees health. Conducting pre-qualification HSE audit for catering sub-contractors and external medical facility to ensure company is meeting acceptance. Obtaining medical fitness for all the employees for pre-employment health assessment and updating the status, conducting site based initiatives aimed at improving health and wellbeing on site. Conducting audit and inspection for Occupational health management including catering company, medical facility etc.

16.0 Road Safety Management

Road Transportation is identified as one of the major HSE. MTSS is committed to manage its road transport operations in a safe, efficient and responsible manner. All MTSS site vehicles shall be properly maintained. Road transport activities of subcontractors will also be monitored to ensure compliance with Road Safety specifications and stipulations of MTSS.

16.1 DRIVERS COMPETENCE

All professional drivers assigned in this contract shall be

- Medically fit
- Possess valid light vehicle driving license by Royal Oman Police
- Undergone mandatory HSE training

17.0 Waste Management:

MTSS will establish a waste yard and hazardous & non hazardous wastes will be collected segregated and



stored initially and disposed to approved waste yard through approved waste disposal contractor.

Wastes from work site will be collected on daily basis and measures will be taken to avoid accumulation. Food and kitchen waste will be disposed on daily basis.

Approved contractor will be selected and formal contract will be made for sewage disposal from camp as well as from portable toilets provided at site.

MTSS will ensure that hazardous and non hazardous wastes are not mixed at collection point.

Industrial areas and workshop shall be keep clean and waste shall be disposed to the Company waste facilities provided.

Management of waste will be carried out as per the client's waste management specification.

Record/ logbook will be maintained. Waste management plan attached as appendix 10 MTSS will prepare and forward quantity of waste disposed on monthly basis.

HSE team will conduct audit of waste management once in three months.

18.0 Camps

The camp boss will have the responsibility for all aspects of HSE in the camp, and will ensure that the camp meets the minimum standards..

The camp boss will inspect the entire camp daily.

Monitor health and hygiene in the camp, disposal of waste, cleanliness and ensure the quality of drinking water.

Portable drinking water supplied in the camp shall be tested on monthly basis from different sources such as water tanker, storage tank, cooling units.

Kitchen shall be equipped with fire detector and fire fighting equipment such as fire extinguishers and fire blankets. Statutory inspection of six month period shall be maintained and also monthly inspection to ensure the physical condition remains good for intended purpose.



Camp boss will report any concern on HSE matters to the Construction Manager, HSE Engineer immediately.

Vehicle and pedestrian routes will be marked within the camp area.

18.1 House Keeping and Clean Up

Good housekeeping remains the backbone of the environmental protection in the day-to-day operations.

To prevent pollution waste shall be segregated and each type disposed in a correct manner.

18.2 Site Security

MTSS will ensure security of personnel and property during the entire project life cycle. Security personnel shall be deployed during night hours in Industrial Yard to prevent theft incidents.

19.0 Incident Investigation

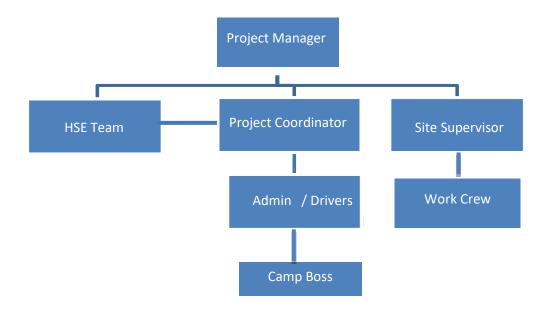
Any incident involving an employee, vehicle, equipment or a Sub-contractor or third party shall be reported immediately to the Construction Manager / Engineer. They in turn will report the same to the HSE department-HO. Every incident including near misses will be investigated and learning points communicated to all and action points will be implemented in the prescribed manner and duration. MTSS procedure on Incident Investigation and Reporting shall be followed. All incidents shall be reverted, closed out and approved by MTSS HSE team.

Incident Overview:

- Immediate action
- Site Investigation
- Incident escalation
- Investigation team set up
- Conducting a successful investigation
- Identifying causational pathways
- · Report writing and presenting
- Remedial actions and lateral learning.



20.0 Site Organization chart



21.0 HSE Inspection, Audit & Follow Up

21.1 HSE Inspection

Sl. No	Action	Responsible for Action	Target
	Site In-Charge	1/Month	
1	HSE Inspections	Supervisors	1/Month
		HSE WALK	6 MONTHS
_	Monitor Compliance of	HSE Team/Site In-Charge	As and When
2	Recommendations from inspections,	nse realitysite in-charge	Required



follow up and discuss findings in HSE	
Meeting.	

21.2 HSE Audit& Follow Up

_Auditing supports the monitoring arrangements by providing Management with information on the implementation and effectiveness of plans and performance standards. The purpose of MTSS audits is not for finding fault with individual but evaluate the deficiency in our HSE system, which provides opportunities for correction and improvement. Audits are intended to evaluate that

HSE internal audit shall be conducted once a year by a personnel external to project team. This person will be an MTSS personnel with relevant training, certification and experience in auditing system.

How activities meet the requirement of the HSE system.

Records indicating effectiveness of the HSE system.

HSE Officer in consultation with HSE Engineer shall prepare a HSE audit schedule. Audits shall be conducted by suitably competent personnel in auditing

SI. No	Action	Responsible for Action	Target
1	Conduct audit to check the implementation of HSE Plan, discuss the findings and recommendations for improvement	Contract Manager/HSE Manager/Engineer	Yearly
2	Monitor Implementation of audit recommendations and follow up	Site In-Charge/HSE Manager/Engineer	Monthly
3	Discuss audit findings and recommendations in HSE meeting	Site In-Charge/HSE Team	After the audit

22.0 Management Review

22.1 HSE Performance Review

SI. No	Action	Responsible for Action	Target
1	Review medium and high potential incidents	MTSS	As and when required
2	Review implementation of HSE Plan, its effectiveness and need for changes, if any	MTSS	Yearly
3	Review progress against performance, action plan, prioritize and recommend areas of improvement		Yearly

22.2 REVIEW

Regular review of HSE controls is done by management in consultation with HSE team. HSE management



controls are reviewed and updated in response to incident investigation findings, introduction of new hazards and audit/inspection findings.

HSE team shall assist the line management to effectively review the HSE performance on day-to-day basis. Similarly HSE team shall assist the management in reviewing the effectiveness of the HSE management system on annual basis.

Review of HSE plan progress is carried out on regular basis through HSE plan progress review meetings which may be coupled with HSE meetings.

23.0 Sub-Contractors Management

Control of sub-contractor activities will be direct responsibility of MTSS.

MTSS shall ensure that only approved sub-contractors are identified and sub-contracted with the work scope. Sub-contractors are made aware of project specific HSSE requirements specifically with respect to site safety rules, road transportation safety, vehicle/equipment standards, environmental impact and employee HSSE training. Specialist sub-contractors shall prepare and submit HSSE method statements and specific activity related risk assessment and emergency response plan.

Health and safety requirements must be specified in advance for each contractual relationship. Such requirements must explicitly include compliance with legal requirements and the provision of information on their teams' health and safety performance.

Sub-contractors must comply equally with all health and safety requirements established by MTSS and client.

Sub-Contractors must receive Induction Training on health and safety and other critical activities training before beginning their activities. This must make clear the health and safety policy and all contractual health and safety requirements.

Periodic health and safety meetings with sub-contractors must be held. At these meetings, the sub-contractors leaders must present the results of their health and safety programs.

Subcontractors shall be monitored to follow MTSS HSSE plan and accountable for the task and target objective as mentioned in the plan.

23.1 Sub-Contractors Identification & Vetting

All sub-contractors follow Client's HSSE standards as applicable to MTSS and will attend all HSSE meetings when at site. Where the services of specialist sub-contractors have to be utilized to complete a specific job, an HSSE method statement, specific activity related risk assessment and emergency response plan will be required. Sub-contractors will not be required to submit any HSSE plan but will comply with the schedules of this particular HSSE Plan.



23.2 Rules, Regulation & Guidelines for Contractors

All the sub-contractors shall be made aware of the HSE Plan and should comply with all the requirements of this plan. The contractor shall report all injuries, illness and environmental incidents to MTSS's Representative immediately. And all such related reports should be submitted within 24 hours of occurrence of the injury etc. The contractor shall inform its employees of potential hazards, take appropriate steps to reduce potential hazards and be prepared to respond to emergency situations as explained.

23.3 <u>Sub-Contractor's Responsibility</u>

To know and understand all central, state and local laws governing its activities and communicate the same to its personnel. Ensure Safe Execution and performance of all work activities. Need to comply with all applicable MTSS& Client HSSE rules and Policy.

24.0 Definitions

Company: Majan Technical Supplies and Services LLC

Accident: An Accident is an Incident, which has caused harm. In this document accident is used to indicate in conjunction with Road Traffic Accidents.

Environmental Impact: Adverse effect on the environment due to the activities/omission of Company/Contractor/ Sub contractor.

Event: Possible Incidents that could result if a threat should release a hazard.

Hazard: The energy in a system that has the potential to cause injury or illness to people or harm the environment if it is released.

Risk: The severity and the likelihood of the exposure to the hazard.

Severity: The severity of injury, damage or loss that can result from the event. (It is calculated as the total lost workdays resulting and if necessary estimated to be going to result from incidents).

Control: A formal precautionary measures taken to prevent undesired events.

Mitigation: A measure to reduce escalation consequences of an incident.

Activities: An 'activity' is a grouping of tasks at a level where it may be possible to identity the hazards.

Task: A 'task' is the lowest level to which activities are broken down for the purpose of hazard analysis.

Fatality: Death resulting from a work Injury or occupational Illness regardless of the time intervening between the death and injury or illness.

Injury: Any Injury such as a cut, fracture, amputation, sprains etc., which results from a single instantaneous exposure.

Near Miss: Near Miss is an incident, which resulted in no injury illness, damage or product loss or harm to the Contractor reputation.

LTI: (Lost Time Injury) Is the sum of fatalities, permanent partial disabilities, permanent total disabilities and lost workday cases.



LTIF: (Lost Time Injury Frequency) Is the number of lost time injuries per million man-hours worked during the period.

• TRCF (Total Reportable Case Frequency): Is the number of reportable case frequency per million man-hours worked during the period.

RTAF (Road Traffic Accident Frequency): Is the number of road traffic accidents per million man-hours driven during the period.

LTOIF (Lost Time Occupational Illness Frequency): Is the number of Occupational illness per million man-hours worked during the period.

TROIF (Total Reportable Occupational Illness Frequency): Is the number of all occupational illness whether they have resulted in deaths, permanent total disabilities, permanent partial disabilities, lost workday cases, restricted work day cases per million man-hours worked during the period.

MSDS (Material Safety Data Sheet): Is the information sheet provided with the material by the manufacturer that shows the properties of material, Safe use, PPE to be used, First Aid in case of affecting to users etc.

SHOC (Safe Handling Of Chemical): Is the information provided by the Shell International to show the same as above.

STOP (Safety Training Observation Program): Is the Du Pond training program to observe and identify the unsafe act/unsafe condition at the work site that enables to provide the required training for employees.

Threat: Any factor that has the ability to release a hazard.

PPD (Permanent Partial Disability): Is any injury results complete loss, permanent loss of limb of body or permanent impairment of function of the body.

FAC (First Aid Case): One time treatment and subsequent observation of minor injury, which do not require a care by a doctor. Such cases are considered as First Aid Case even it was provided by a doctor.

PTD (Permanent Total Disability): Is any injury incapacitates an employee permanently results termination of the employment.

MTC(Medical Treatment Case): Is any reportable injury involves neither lost work day case nor restricted work day case but which requires treatment by a doctor. It does not include first aid case even if it was given by a doctor.

ECC (Emergency Control Centre): Is the centre where emergency controller establishes his office and manages all emergency situations.

25.0 HSE Monitoring Plan 2017

SI. No	Action	Responsible for Action	Frequency
1	Site Inspection	Site Supervisor	Daily
2	Conducting TBT	Site Supervisor	Daily
3	Vehicle Inspection	Transport In-Charge/HSE Team	Monthly
4	Site Office Inspection	Site In-Charge/HSE Team	Quarterly
5	Site Storage Facility Inspection	Site Supervisor/HSE Team	Quarterly



6	Refresher Training on Critical Activities	HSE Team	Quarterly
7	Updating HSE Statistics	HSE Team	Monthly
8	HSE Award Function	HSE Team	Monthly
9	Conducting HSE Campaign	HSE Team	Monthly
10	HSE Camp meeting	HSE Team	Monthly
11	Journey management	Site supervisor	Monthly
12	Chemical and Hazardous waste management	Site Supervisor	When required

26.0 VEHICLE MANAGEMENT

The vehicle management plan of Majan Technical Supplies and Services LLC applies to all personnel, contractors and visitors operating vehicles within the MTSS operations area. All light and heavy vehicles are registered, insured and roadworthy for using in any area of Oman.

In addition to all standard equipment being in good working condition, all vehicles in MTSS are equipped with the following as minimum.

- First aid kit
- Fire extinguisher
- Flashing light
- At least one spare wheel and tyre
- Wheel changing tools
- Jack and triangle

Pre-start Inspection.

The following must be checked and be in operational condition prior to drive the vehicle.

- Light, reflectors and indicators
- Reversing alarm
- Tyres (pressure and condition)
- Wheel nuts
- Fuel, oil and water levels
- Windscreens and windows
- Mirrors
- Wipers
- Horn
- Flashing beacon
- Tool kit and jack



Besides this all the company vehicles were monthly inspected and maintained properly in a well desired manner.

27.0 TOOL BOX TALKS

Tool Box meeting is a short daily, weekly, or monthly meeting usually (but not always) to discuss safety matters in an informal and clear manner. Holding Tool box meetings is an excellent and quick way of increasing safety involvement and awareness at grass root level.

The basic idea is to provide a direct method of communication and exchange of information between, management, supervision and the shop floor with the purpose of improving safety and health by involving workers in issues that are important to them. It is an ideal way to get employees involved in matters relating to their own safety, finding solutions to problems, as well as building a committed and productive team.

At MTSS project sites, site supervisors or team leaders used to conduct daily Tool box meeting briefing the safety precautions and work procedures to all employees.

28.0 Key Personnel

➤ Head Office : +968 24597053

≻ G.M. : 92813001

➤ Safety Dept : 94669679

➤ Admin Dept : 95961577

> Site In Charge : 95618171