

# Contractor's HSE BOOK



# Contents

Introduction.....	3
Objectives.....	3
1. <u>HSE POLICY</u> .....	4
2. <u>Visitors</u> .....	4
3. <u>HSE ASPECTS OF CONTRACT MANAGEMENT</u> .....	4
4. <u>QATAR POWER SAFETY RULES</u> .....	5
5. <u>GENERAL SAFETY</u> .....	5
6. <u>GENERAL SAFETY REQUIREMENTS – CONTRACTORS</u> .....	5
7. <u>WORK ON ROOFS</u> .....	6
8. <u>FLOORS OPENING</u> .....	6
9. <u>BARRIERS, GUARDS, SCREENS AND NOTICES</u> .....	6
10. <u>EXCAVATIONS</u> .....	6
11. <u>SCAFFOLDING AND SAFE MEANS OF ACCESS</u> .....	7
12. <u>LIFTING TACKLE, MACHINES AND HOISTS</u> .....	7
13. <u>ELECTRICAL EQUIPMENT</u> .....	7
14. <u>WELDING AND BURNING</u> .....	8
15. <u>ENVIRONMENTAL CARE AND HAZARDOUS SUBSTANCES</u> .....	8
16. <u>TRANSPORT</u> .....	9
17. <u>CONFINED SPACES</u> .....	9
18. <u>USE OF COMPRESSED AIR</u> .....	10
19. <u>USE OF FLAMMABLE LIQUIDS AND GASES</u> .....	10
20. <u>PROTECTIVE EQUIPMENT AND CLOTHING</u> .....	10
21. <u>NOISE</u> .....	10
22. <u>HIGH PRESSURE JET WATER WASHING</u> .....	11
23. <u>HIGH VOLTAGE ENCLOSURES</u> .....	11
24. <u>SMOKING</u> .....	11
25. <u>FIRE &amp; OTHER EMERGENCIES</u> .....	11
26. <u>Reporting of Accidents, Incidents, Near Misses, Unsafe Condition, Unsafe Practices, Fire etc.</u> .....	11
<u>RECEIPT</u> .....	12

## Introduction

This book contained minimum HSE guideline to be followed by all personnel at Qatar Power site into the work to be undertaken by contractors, hence lays out the safety objectives.

It is imperative that we have a safe and incident free work and personnel safety at the top of the agenda in all work activities.

## Objectives

***“Qatar Power HSE policy is no job that is of such importance that it cannot be completed safely”***

Qatar power has maintained excellent safety record since its inception and constantly improving upon safety standards. There is always room for improvement so further initiatives have been developed which will be presented later in this information book. With your support we can continue achieve with zero Lost Time Accidents and injuries by being proactive in the reporting and completing the actions associated with all safety issues.

# Safety, Health & Environmental

## **1. HSE POLICY**

The Management of Q Power Company is responsible under local legislation, ISO & OHSAS standards, for the health, safety and welfare of all its employees, contractors and the visitors. It discharges its responsibilities by controlling risks that could result in injury to people, loss, damaged to equipment or the environment. The Safety Management procedures developed from this policy take full account of the health and safety principles as set out in both standards, health and safety guidance and related HSE documents.

Implementation of this policy shall take place by means of a Health and Safety Management System as detailed in Q Power procedure which includes:

1. The designated responsibilities on employees for HSE
2. Effective means for the planning, organisation, controlling, monitoring, reviewing and auditing
3. Regular Review of the arrangements for ensuring the HSE of Q Power Station staff and others.
4. Commitment to continuously improve our HSE performance.

The co-operation and contribution of all Q Power staff as well as contractors are critical in the provision of a safe and healthy working environment. In particular, involvement in appropriate consultative mechanisms to take account of employee as well as contractors representations on HSE matters.

## **2. Visitors**

All visitors must report to the gate house where they will be issued with a visitor pass & site induction leaflet, which contained site basic HSE information, which may be requires by visiting person in-case of emergency and must be worn at all times while at site. Visitors pass should be handed over to the security before leaving the plant. This will facilitate assessing the list of persons present at site at any point of time.

## **3. HSE ASPECTS OF CONTRACT MANAGEMENT**

The Technical Officer, Q Power person to be responsible for liaison with the contractor on HSE aspects so that any operations by any party that affect any other with regard to HSE can be made known and acted upon.

Before the commencement of work on site, the Technical Officer will arrange a meeting with the Contractor's representative at which the implications and extent of the HSE requirements for the Contract will be discussed. This discussion will include but not limited:

- The name of the Contractor's Management and Site Representatives responsible for HSE.
- The Contractor is aware of potential hazards and precautionary procedures established on the site.
- The waste disposal arrangements, with particular reference to special requirements relating to the safe disposal of dangerous or hazardous substances.
- Precautions to be taken by the Contractor to protect others who may be affected by the Contractor's activities are fully examined and agreed to ensure that they are adequate.
- A system of regular communication will operate effectively between all concerned to ensure that any changes in circumstances and conditions of work are discussed and arrangements revised accordingly.

- Arrangements for emergency, communication, first aid and Meals etc.
- Equipment's with their test certificates (if applicable) and other tools must be fit for their activities.
- Contractor representative is responsible to provide all PPE to their direct or indirect staff.
- Principle contactor is responsible for his sub-contractor activities and any breach of Q Power site general or safety from system rules or any law of the country.
- Contractor staff involved in lifting activities must be trained & certified, in-case of mobile lifting machine must have appropriate driving licence.
- Induction of Contractors' staff upon arrival on site, prior to their work activities.

Minutes of the meeting shall also be circulated to the Contractor.

Any Representative of the Technical Officer or HSE Section will have the authority to stop the work if, in his / their opinion, it is necessary in the interests of safety of personnel or plant & apparatus. If it is subsequently shown that the Contractor has infringed any of the requirements, Q Power will accept no liability for any loss incurred by the Contractor due to the work being stopped on his account.

#### **4. QATAR POWER SAFETY RULES**

Work on this site is subject to Q Power Safety Rules and the Contractor shall comply with them, any work at site contractor must provide a Method Statement & Risk Assessment in order to obtain the safety document for work.

The Contractor shall supply to the Technical Officer a list of Persons whom he considers to be competent to receive Safety Documents. The nominated safety document acceptor (s) requires to attend a site organised computer based Safety Rule Course and face to face interview in order to understand the nominated person have understood the requirements of safety rules before authorisation in writing to accept the safety documents.

#### **5. GENERAL SAFETY**

In addition to the requirements specified in the Qatar power Safety Rules for establishing Safety from the System, the safety of persons at work shall also be achieved by maintaining at all times General Safety at and in the vicinity of the place of work. Before work or testing commences, it is the personal responsibility of the appropriate working party to satisfy themselves that safety precautions are taken to establish General Safety at and in the vicinity of the work place. Subsequent to the commencement of work or testing the Person in charge of the work or testing shall continue to maintain conditions which ensure General Safety. This Person shall also ensure that conditions of other work areas are not adversely affected by the activities for which he is responsible. The discharging of responsibility for General Safety will be achieved as part of the normal pattern of management delegation and control by ensuring that all activities are in accordance with appropriate instructions and guidance.

#### **6. GENERAL SAFETY REQUIREMENTS – CONTRACTORS**

Contractor's employees should be given induction training specific to the location and nature of the works such that they are alerted to site requirements, emergency procedures and any potential hazards and precautionary measures established on the site.

Every Contractor's employee shall be at all times under proper supervision when working on

premises managed by Q Power. Where a Contractor is both employer and employee, or where he has only one or two employees working on site (and accordingly does not have specifically designated supervisors) the contractor should ensure that both he and his employees are competent to work unsupervised.

The Contractor must ensure that all equipment brought to site is in good condition, is maintained in good condition and complies with the relevant statutory requirements and is used and/or erected safely. Personal protective clothing and equipment must be provided and maintained by the Contractor. The Contractor must ensure his workforce make proper use of such equipment.

Contractors must keep the site of their work clean and tidy and clear of obstructions. All floors and walkways must be kept clear of materials, in order that a secure footing can be maintained and to ensure that build-up of flammable materials does not occur. The Contractor shall ensure that safe means of access to and egress to & from the work place are used.

The Contractor shall at all times ensure that suitable precautions are taken so as not to pollute the atmosphere, ground or waters.

***All below mentioned work activities must be carried out by contractor with the knowledge of Technical Officer along with appropriate safety document prior to start of work, below is the minimum safety requirements for each of the activities as an example for full detail information's site procedures could be obtained by the working party:***

## **7. WORK ON ROOFS**

If it is necessary to carry out any activity on any building roof at site, before working on any roof, the roofing material must be identified and safe access and a safe workplace provided, for example by the use of crawling ladders, crawling boards, handrails and toe-boards. Materials shall be prevented from falling and notices, warning of overhead work, displayed at ground level when appropriate.

## **8. FLOORS OPENING**

Substantial secure barriers must be erected around any hole. Warning notices must be posted by day and suitable lamps displayed during hours of darkness. Suitable precautions must be taken to prevent danger to persons at lower levels. All floor sections must be replaced and secured as soon as practicable.

## **9. BARRIERS, GUARDS, SCREENS AND NOTICES**

Wherever barriers, guards and screens are erected, suitable notices shall be displayed to denote the hazard within the restricted area if required. The Contractor must not remove any barriers, guards, screens or notices without the permission of technical officer, unless the barrier has been erected by his own employees or Sub-Contractors in the course of the contract work.

## **10. EXCAVATIONS**

No site excavation shall be made without specific permission from technical officer and only in accordance with the Q Power Safety Rules. Prior to the commencement of any excavation work, the position of all underground services must be established. Work in the vicinity of underground services and method of excavation, is subjected to the approval of the safety controller.

Where the ground, weather or nature of the work is such that a collapse of earth may occur, suitable and sufficient shoring materials and support must be provided as required.

## **11. SCAFFOLDING AND SAFE MEANS OF ACCESS**

Temporary means of access and scaffold structures shall comply with the site requirements and best international practice. Scaffolds team or contractor shall produce evidence of training under a recognised Scheme and that they are competent to meet the required standards.

Scaffolding shall be moved, erected and used adjacent to exposed high voltage conductors only in accordance with the Q Power Safety Rules and in compliance with site procedures. All scaffold structures should carry a suitable scf-tag which bears the scaffold identity number, the safe working load of its platforms, the scaffold inspector's signature, and his unique identification code, and a clear indication of the safe seven day access period. Incomplete, alteration or dismantled scaffolds must carry a "Don't use" Scaf-tag holder, as information.

The Contractor shall maintain a register on site of all scaffolds and the dates of inspections of those for which he is responsible. No scaffolding shall be used by anyone unless it has been inspected for satisfactory condition within the previous seven days. If Q Power supplied scaffold which is considered to be defective or inspection expired, the technical officer must be contacted prior to the usage of scaffold.

For work at height which is of a temporary nature and where it is demonstrated that provision of a full scaffold is not reasonably practicable, safety harnesses must be used if the height is more than 2-meters and above.

## **12. LIFTING TACKLE, MACHINES AND HOISTS**

Only properly tested and marked lifting tackle and machines must be used. The Contractor must satisfy the technical officer that all lifting tackle, and machines, comply with the relevant statutory provisions, and shall make available certificates and inspection records when required.

Lifting tackle must be kept under strict control and not be left lying about on site. The equipment must be clearly marked to indicate its Safe Working Load (S.W.L.) and must not be exceeded. If there is any doubt about the weight of a load, it must not be lifted until the weight has been confirmed. The technical officer should be consulted if necessary.

Chains must not be shortened by knotting and lashings must not be used to lift equipment. Nobody shall ride on a hoist, unless it has been designed to carry passengers, and is fitted with interlock gates and safety devices required by statute.

Whenever lifting operations are in progress, the area immediately below the operation and adjacent to winching equipment shall be suitably barriered off and trained rigger must supervise the lifting activities.

## **13. ELECTRICAL EQUIPMENT**

The Contractor being responsible for providing and maintaining the whole of the installation on the load side of any point of supply made available by Q Power shall take all reasonable precautions to ensure the safety of persons on the site. The Technical Officer and or site safety personnel may require the disconnection or alteration of any parts which he considers dangerous.

All portable tools, hand lamps and other portable apparatus must be connected to the system by means of plugs and sockets of an industrial type. They shall conform to the types currently in use

on the site, and all portable appliances must be inspected and tagged by Q Power electrical section prior to the start of work.

All joints must be both electrically and mechanically sound - no twisting of conductors or taping will be permitted. Temporary electrical installations, including distribution boards, cabling and Switchgear shall be approved by Q Power electrical section and must comply with international best practices prior to connection to the site supplies system.

Routine test and inspection of all tools and equipment used by the contractor is a mandatory by the contractor competent person. Equipment which bear signs of damage or deterioration would not be allowed at site, if accidentally any portable equipment fall down, do not use return to store for inspection.

Electric heaters or radiators having exposed heating coils or elements must not be used. Supplies to welding equipment must be specially arranged, the connections must be sufficient in size for the duty to be performed, properly protected against mechanical damage, and in good condition.

Where a Contractor or Sub-Contractor wishes to work on his own plant or equipment for the purpose of repair, or for any other reason, he must first disconnect the equipment from all sources of supply providing power to the equipment.

#### **14. WELDING AND BURNING**

- A hot work permit should be obtained from the Technical Officer before starting any hot work on site.
- The work place must be kept clear of flammable materials.
- A sufficient number of fixed screens shall be provided by the contractor to protect persons from exposure to electric arcs.
- Contractors shall provide suitable portable extinguishers and fire blankets for the use of welding and burning staff.
- Screens or mats must be used to prevent hot metal falling below or on to adjacent equipment/personnel.
- Working areas should be inspected 1/2hr after work has ceased to ensure that smouldering is not taking place.
- Welding rods and spent rod ends must be kept in suitable containers and removed at the end of each working period.
- Gas cylinders must be fitted with flashback arrestors that have been approved prior to use.
- Gas cylinder valve keys shall be readily available at the cylinder to enable speedy closing of the valve in the event of fire.
- Cylinders shall be on portable trolleys capable of upright storage when in use, and when not in use e.g. overnight, shall be stored in a suitable compound at least 20ft from any source of flammable materials.
- Welding equipment must be isolated at the end of each work period.
- Trailing hoses and welding cables must be kept clear of walkways, and protected across roadways.

#### **15. ENVIRONMENTAL CARE AND HAZARDOUS SUBSTANCES**

- Qatar Power is committed to reducing the effects of ANY ACTIVITIES THAT MAY THREATEN THE ENVIRONMENT OR PEOPLE. Our policy is to eliminate or reduce to a minimum and control the use of, all potentially hazardous substances, PROCESSES AND WASTE PRODUCTS.
- A hazardous substance could be any product (fluid, powder, compound, gas etc.). It may be hazardous to health by its fumes/vapours, absorption into the skin, consumption and ingestion or general exposure. Hazards may be created when two separate substances that are safe on their own, are used in conjunction or close to each other. Even if the substance is common and you consider it safe, you must check first.

- No contractor shall bring any substance ( INCLUDING SOLVENT, CLEANERS, CHEMICALS, LUBRICANTS, PAINTS, ETC.) on site without the prior approval of the Chemistry and Environment Engineer
- The Contractor shall submit MSDS data sheets and assessment details for all substances he intends to be brought on to the site.
- All substances brought onto or used on site must have their containers clearly labelled with the contents, instructions for use, potential hazards and precautions during use. This applies to all containers so if the substance is transferred into a "working" container that must also be suitably labelled.
- No contractor shall dispose of any substance unless the method of disposal has been approved by the Chemistry and Environment Engineer.
- All waste or hazardous scrap must be put in area approved by Q Power.
- Do not tip any substances or fluid onto the ground or down any drain and do not put any substances or compound to any normal waste disposal container.
- IF UNSURE ABOUT ANY PROCEDURES CONCERNING SUBSTANCES ON SITE OR RISK TO THE ENVIRONMENT, DO NOT ASSUME - ASK!

## **16. TRANSPORT**

All road vehicles and mobile plant (cranes, fork lift trucks excavators etc.) used on, or brought onto site must be maintained in a safe condition and comply with all relevant local legislation. All the relevant valid paperwork and documentation relating to the vehicle must be made available for inspection on request. All drivers and operators of vehicles and mobile plant must be trained and competent in their operation. They must hold the appropriate valid driving licence to operate the equipment and the relevant documentation must be made available for inspection on request.

Vehicles and mobile plant should be driven carefully at all times, keeping to site speed limits and obeying traffic signs and signals. Drivers must pay particular attention when reversing to ensure that nobody is in danger. They also ensure that the elevated boom should be lowered enough not to hit any structures. Height restrictions at various locations are also provided to prevent any damages to plant structures.

All mobile plant (including Fork Lift Trucks) that are to be used within station buildings shall be fitted with both visual warning (e.g. flashing yellow beacons) and audible warning devices otherwise they will not be allowed within the site. Passengers must not be carried on any vehicle unless the vehicle is designed for that purpose.

Any mobile plant, especially crane once its requires to operate close to the transformers areas, information and permission must be obtained from technical officer, in order to ensure safety distances from live transformers. In such situations work must not start without the specific permission.

The speed limit for vehicles is 20 Km/ph which must be adhered to strictly.

## **17. CONFINED SPACES**

The potential hazards associated with entry into a confined space require a strict adherence to a formal, safe system of work. It is a statutory and company requirement that this be done under the control of a safety documents to work. Remember, a confined space can be a vessel, a

pipeline, even a hole in the ground, in fact anywhere where there is inadequate natural ventilation.

Gets an entry safety document from the permit office (Operation) responsible for the work you wish to enter. Obey all the instructions written on the safety document, which may require you to

wear breathing apparatus or use safety equipment such as lifeline, harness and protective clothing.

Ensure that a standby man is in attendance that is briefed to keep constant watch on you and is equipped and able to communicate or raise the alarm if necessary. Do not enter the confined space if you are the standby man. If needed, communicate to the control room and await qualified assistance. Only attempt to rescue anyone from a confined space unless you are a member of the rescue team, fully equipped with breathing apparatus, etc.

## **18. USE OF COMPRESSED AIR**

Air at the pressure commonly used to drive compressed air tool can cause severe personal injuries. Dust and grit can be blown into the eyes. A burst hose can whip about and cause severe physical injury. If compressed air is applied to equipment not designed to take the pressure, severe damage can result.

Use of compressed air in order to clean down clothing and skin is an extremely dangerous practice and is expressly forbidden. For other cleaning processes involving compressed air, suitable approved eye protection must be worn and suitable screens and barriers must be provided to protect others.

Appropriate precautions must be taken when handling compressed air equipment. Heavy duty hose clamps and couplings must be used.

## **19. USE OF FLAMMABLE LIQUIDS AND GASES**

- Any Contractor intending to bring on site and to use such materials must ensure that adequate fire fighting equipment is left adjacent to his store of such materials and to the place at which he is to use such materials. Advice on a safe storage area will be provided by the Technical Officer and/or site safety advisor.
- Such materials must not be stored anywhere else when on Q Power sites. These requirements will apply to all flammable materials e.g. acetylene, hydrogen, petroleum and diesel fuel.
- It is a requirement of Q power that flashback arrestors must be fitted to ALL flammable gas cylinders once in use.
- All gas bottles must be accommodated in suitably designed movable wheeled carriers to facilitate removal in case of fire. Also, such bottles and carriers must not be left in the vicinity of operating plant following their use, or overnight, but removed to a safe area outside of any building.

## **20. PROTECTIVE EQUIPMENT AND CLOTHING**

All personnel must wear protective equipment and clothing suitable to the task and location in which they are employed. The wearing of a quality Safety Helmets, Coverall, Safety Shoes & Safety glasses are mandatory beyond the blue line on road and rest of other PPE must be used according to the work activities requirements.

## **21. NOISE**

The Contractor shall comply with appropriate site procedures for the protection of hearing and control of noise. Hearing protection is compulsory in areas of the plant where the noise level exceeds 80 dB(A), signs are posted around the plant area wherever required. Equipment's in use which have high noise and activities, working party must comply with site noise policy.

## 22. HIGH PRESSURE JET WATER WASHING

The Contractor may only use high pressure water jetting apparatus or equipment with the permission of technical office and supported with safety document for work. The contractor staff involved must be trained and certified to use high pressure jet washing.

## 23. HIGH VOLTAGE ENCLOSURES

Ladders, long objects and cranes must not be used in the vicinity of exposed high voltage electrical conductors without the express written permission from the work permit office via technical officer. No one is allowed to enter or cross the fenced areas of high voltage enclosures.

## 24. SMOKING

Smoking is strictly prohibited at site, as this is also a legal requirement of Ras Laffan Industrial City, therefore only one designated smoking area is assigned for smoking at back side of main security gate.

## 25. FIRE & OTHER EMERGENCIES

The Contractor must familiarise himself with the site fire and other emergencies. Appropriate fire extinguishers and other fixed fire fighting equipment are available at site, which must not be tampered or obstruct.

- If you discover a fire that cannot be immediately stamped out or smothered, sound the alarm first and then tackle it with an extinguisher if you are trained and confident to do so. It is the first few minutes that count.
- Fire points, access points and roadways must be kept clear of obstructions.
- Weekly, alarms are tested at Q Power site on each Monday at 10am, rest of the time if fire alarm is sounded must be as genuine, leave your working area immediately and report to muster point.
- Fire alarm sound is continuous sound
- In-case of first aid, Q Power site is equipped with first-aid station at various locations.
- Muster point is located North corner of Admin building
- Site emergency phone number is 44996333, located in main control room

## 26. Reporting of Accidents, Incidents, Near Misses, Unsafe Condition, Unsafe Practices, Fire etc.

At Qatar Power, accident / incident / near misses / hazard reporting system are in place. All incidents, no matter how minor it is, need to be reported to the Station within 24 hours' time on 365 days basis. Reporting of incidents is being encouraged to staff, contractors and visitor. Incident reporting boxes are fixed around the station and being regularly checked by the safety section.

Keep in mind that reporting is very important element of Q Power HSE requirements, once reported It may then be possible to prevent a similar occurrence which may result in more serious consequences.

# QATAR POWER COMPANY

## SAFETY REQUIREMENTS FOR CONTRACTORS

### RECEIPT

I acknowledge receipt of the above Safety Booklet for  
Qatar Power Contracts

Contract Number and Description: .....

Name & Signed:.....

Contracting Company Name: .....

Contracting Company Telephone No.:.....

Date: .....