# Contractor Occupational Health and Safety (COHS) Handbook Guidelines

Edition 2023 Version 0

This material is intended to ensure strict compliance of this handbook/guidelines in order to avoid any health and safety incidents. All Contractors are required to view this important information, which will assist in understanding of PTCL Group health and safety requirements while providing any services. Whilst this contractor health and safety handbook gives you an overview, you should also make yourself familiar with your workplace responsibilities, OH&S requirements and the hazards associated with the kind of work you do.

ptcl | ufone 4G

## 1.0 Contents

## 2.0 DISCLAIMER

This handbook has been developed to assist contractors and their employees to work safely while providing services and abide by requirements relating to people and property. The purpose of the health and safety handbook is to provide contractors and their employees with information on health, safety and appropriate behavior whilst providing services to PTCL Group. While every attempt has been made to explain the guidelines and procedures, each contractor has a duty of care to ensure that their employees involved in the provision of services provide the required services in a manner that does not endanger and/or cause harm to themselves, others, property, equipment, and environment. This handbook refers to practices or procedures to enhance health or safety, in addition to any requirements under any statute, regulation, or standard. Over the time regulators may modify rules, interpretations, standards considering new technology, information, or circumstances; to keep apprised of such developments, or to review information on a wide range of occupational safety and health topics, which information will be provided to the contractors from time to time.

## 3.0 Purpose

This Handbook is designed to provide Contractor a reference guide for basic health and safety procedures and precautions to be used while performing work for the Business units, PTCL Group.

It cannot cover all the safety procedures for every situation or condition but does provide general guidance to reduce potential incidents and control losses. It is not intended to replace a contractor safety program nor summarize all the safety and health governing the contractor's operations.

The primary purpose of the Contractor Safety handbook is to prevent incidents and control losses. It is our intention that EVERY individual goes home in the same condition as they came to work. Arrive home safely with their family. Familiarization with this handbook will help accomplish our goal of an injury free workplace.

## 4.0 Introduction

These guidelines have been developed on PDCA (Plan Do Check Act) cycle to provide a minimum set of expectations for all Contractors engaged in work on behalf of Business units. It outlines the responsibilities and requirements for meeting Business units commitment to health and safety management. The focus of this handbook is on the proactive management of risk and the prevention of incidents. Compliance with the requirements of this handbook will support Business units, PTCL Group and its Contractor in fulfilling their health and safety obligations. The intent is to ensure Business units HSE expectations are communicated to contractors. It is a requirement of Business units that you and all your personnel comply with this handbook. By continuing to perform services for Business units, you are taken to have read, understood, and agreed to comply with these guidelines.

## 5.0 Definitions

Some of the relevant definitions for terms or words used in this document are given in this section. All other definitions not mentioned here shall follow their said act and regulation.

### 5.1 Hazard

Source, situation, or act with a potential for harm in terms of human injury or ill health, or a combination of these.

### 5.2 Risk

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)

### 5.3 Risk assessment

Process of evaluating the risk(s) arising from a hazard(s), considering the adequacy of any existing controls, and deciding whether the risk(s) is acceptable.

### 5.4 Safe

Free from any injury or ill heath

### 5.5 Occupational Ill Health

Identifiable, adverse physical or mental condition arising from and/or made worse by a work activity and/or work-related situation.

### 5.6 Near miss

An incident with clear potential for undesirable consequences, even though no actual consequences occurred.

### 5.7 Incident

Work-related event(s) in which an injury or ill health regardless of severity or fatality, occurred, or could have occurred.

### 5.8 Harm

Something that has the potential to cause loss including ill-health and injury, damage to property, environment and/or equipment.

**5.9 Injuries**

Death and / or injury or occupational disease suffered by a person which arises out of while working on the job site.

**5.10 Fatality**

Death resulting from a work injury or occupational illness.

**5.11 Permanent disability**

Permanent disability is a physical or mental impairment that indefinitely diminishes a worker's ability to perform the duties or normal activities that the worker performed before the accident or serious illness.

**5.12 Lost Workdays**

All days (whether consecutive or not) on which a worker is scheduled to work but is either absent or on restricted duty or unable to perform all the duties of his/her job because of injury or illness. Days away from work should include only those full days or shifts that are missed by the worker/contractor. No lost workdays are charged for fatalities.

**5.13 Restricted Work Case (RWC)**

Any work-related injury that results in restricting the employee to perform all or any part of his/her normal assignment during all or any part of the workday or shift.

**5.14 Medical Treatment Case (MTC)**

Any work-related injury in which treatment (other than first aid) is administered by a physician or by registered professional personnel under the standing orders of a physician. Medical treatment does not include first-aid treatment, even though provided by physician or registered professional personnel.

**5.15 First Aid Case (FAC)**

First-aid is limited to any one-time treatment and any follow up visit for the purpose of observation of minor scratches, cuts, burns, splinters and so forth, which do not ordinarily require prescription medication / medical care.

**5.16 Ill health**

Identifiable, adverse physical or mental condition arising from and/or made worse by a work activity and/or work-related situation.

**5.17 Shall**

The term "shall" indicate a mandatory requirement.

**5.18 Should**

The term "should" indicate a suggested/ optional recommendation.

**5.19 Contractor**

An external organization providing services to the company in accordance with agreed specifications, terms, and conditions.

**5.20 Project Engineer/Manager**

A qualified person having B.E Bachelor of Engineering from any recognized institute with 5 years of experience in relevant field.

**5.21 Contactor worker/employee**

A competent person employed by a contractor to perform assigned tasks at company work sites in accordance with agreed specifications, terms, and conditions.

**5.22 Competent Person**

A medically and physically fit person who is assigned, designated, and authorized in writing by the contractor to perform a specific type of duty or duties or to be at a specific location or locations, having relevant professional qualification, training, competency, experience, technical knowledge, certification or license or permit to perform assigned roles and responsibilities. That includes but not limited to Safety officer, Site Supervisor, Driver, Lineman, Fitter, Welder, Cable Jointer, Crane Operator, Rigger, Helper, and others as appropriate.

**5.23 Safety Executive/Officer**

A qualified person having a graduate degree and at least Institute of Occupational Safety and Health (IOSH) UK with 3 years of experience in oversight and implementation of OHS matters.

**5.24 Supervisor Electrical**

A qualified person having a Diploma (Electrical/Electronics) from any recognized institute with 3 years of experience in a relevant field.

**5.25 Equipment**

Any machine, power tool, and other tool used to perform the task.

**5.26 Tools**

A device, handheld, used to carry out a particular task.

**5.27 Project**

Task/project assigned by Business units i.e., installation, repairing and maintenance on PTCL Group Network, Sites and Public residential areas.

**5.28 Site**

Workplace or public residential site for FTTH, GPON, MSAG and cable laying including ariel and buried network etc. where task (installation, repairing, and maintenance) to be performed.

**5.29 Mobile Transport Ladder (MTL) Positioning**

Placing of MTL and positioning of ladder including ladder mounted vehicles on overhead for performing any task/activity.

**5.30 Barricade**

To physically secure workplace by safety cones and warning tape to avoid any irrelevant and unauthorized person including general public to enter.

**5.31 Deteriorated Pole/tower**

A pole/tower that is rusted above or beneath the ground level.

## 6.0 General Guidelines

To perform contract work, contractors must comply with all applicable and relevant Laws, Regulations, Statutory Requirements passed by the Government of Pakistan, Provincial level regulations and Business units PTCL Group Safety Procedure, etc.

## 7.0 Contractor Obligations

All contractors and their workers to minimum comply with the same workplace Health & Safety standards that apply to PTCL Group employees. Contractors shall ensure but are not limited to the following:

i. Provide copies of licenses, certificates, documents, and records as requested as evidence of appropriate management of workplace Health and Safety issues.
ii. Compliance with all applicable legal and contractual requirements
iii. Only qualified, licensed, and competent personnel perform the work.
iv. Work is performed in a manner that minimizes the risk to the health and safety of any person who might be involved in or affected by the work, including general public.
v. Provision of adequate resources to ensure that the work activities are carried out safely and without adverse impact on Health & Safety.
vi. Prior to commencement of the work, risk management documentation (e.g., site/activity-based Risk Assessments, Emergency Response Plans, etc.) for the activities to be carried out, and ensure implementation and compliance in the workplace.
vii. Any potential hazard identified at workplace Contractor is bound to stop the work immediately and inform/report to PTCL Group supervisor.
viii. Any incident that occurred at workplace Contractor is bound to inform/report immediately to PTCL Group supervisor.
ix. All machinery, tools, and equipment including personal protective equipment (PPEs) used to conduct the work, are inspected, and maintained as per PTCL Group Procedures and instructions.
x. Provision of insulated tools while performing work.
xi. Conduct toolbox talk at their locations/offices before movement/dispatching of the workers to the field.
xii. Maintain good housekeeping practices while performing the task. Unauthorized shutdown by Contractors and/or any team is not allowed and liable to strict disciplinary action, including blacklisting of involved Contractor.
xiii. Contractor shall ensure compliance of following standard operating procedures and ensure their workers are trained in:
    a. Inspection of equipment, tools, and vehicles.
    b. Line isolation
    c. Minimum Approach Distance (MAD)
    d. Work at height.

e. Loading unloading & transportation of heavy equipment.
f. Use of BL/fiber Ladder.
g. Projects/tasks of PM, borrowing, Fiber Laying, Maintenance, fault tracing.
h. Underground cable laying.
i. Cable jointing
j. Reporting of incident.
k. Tools
l. PPEs

a. Workers who use tools must be properly trained and authorized to use, adjust, store, and maintain tools properly. Electrical handheld tools shall be properly grounded or be of the double insulated type. All tools shall be free from defects and maintained in good condition.

b. The number of accidents involving the use of tools can be reduced by following basic safety principles:
    i. Keep all tools in good condition with regular maintenance.
    ii. Calibration of testing equipment shall be arranged on time as per manufacturer's manual.
    iii. Use the right tool for the right job.
    iv. Inspect each tool for damage before use.
    v. Operate according to the manufacturer's instructions.
    vi. Provide and use the proper protective equipment (PPE).
    vii. Safety guards and face shield shall/eye goggles be used while operating power- driven rotating tools.
c. Pliers, wrenches, etc. shall not be used without rubber gloves while working near live parts while maintaining the safe distance as defined in Instruction 9 of Ariel and buried network.
d. A Power-driven tool is a tool powered by an electric, hydraulic, or pneumatic power or by an internal combustion engine such as grinder! grinding machine, disc cutter, electric drilling machine, welding machine, hydro-jetting machine, bench grinding machine, air compressor, cutting machine, blowers, jack hammer, hydraulic jacks, and battery-operated drill machine, etc.
e. All such machines such as Grinders/drill machines shall always be used with Proper Plugs and shall not leave the cord end bare. with proper insulated wiring.
f. All Heavy Equipment drivers' operators shall possess a government license, valid for the type and size of the Heavy Equipment being operated.
g. When Contractor worker is working near a live energized power line minimum distance mentioned in Instruction 9 of HSE for Ariel and Buried network shall be maintained.

### 7.1 Poles and Structure

All poles and structure shall be carefully inspected before climbing to assure that they are in a safe condition for the work to be performed and that they can sustain the additional or unbalanced stresses to which they will be subjected. The types of abnormalities that should be checked are cracks, damages, and deteriorations in poles, towers and structure and its foundation.
Poles and structure are unsafe for climbing, they shall not be climbed until made safe by guying, bracing or use mobile elevated aerial platform, man-baskets, man-lift, or bucket mounted vehicle instead of ladder. Pole can be inspected by:

#### 7.1.1 Physical Method:

Visually inspect physical appearance of pole for any defects like pores/holes on rusted body, tilting or hopeless condition.

## 8.0 Safety Roles & Responsibilities

### 8.1 Contractor

1. Each contractor must have their own Occupational health and safety manual for their workers and equipment. If not, then they can use this contractor safety handbook and other safety guidelines and procedures provided in annexure of their contracts for understanding and educating their workers on the hazards and risks associated with their assigned task. The OSH management manual shall include but not limited to the following:
    a) Scope & Introduction
    b) OSH program and activities (safety awareness, toolbox talk, training, inspection, auditing etc.)
    c) OSH objectives and KPIs
    d) OSH Audit and inspection program
    e) Work permits/ if applicable.
    f) Emergency Response Plan
    g) Hazard Identification & Risk Assessment (HIRA)
    h) Incident reporting procedure
    i) Contractor shall ensure that there is no underage (Below 18 yrs) worker in their team.

2. Contractor shall ensure that all their workers have attended the Safety orientation program delivered by Project Department prior to start working on sites of Business units.

a) Competency Requirements

It is the responsibility of the Contractor to ensure that their workers shall be competent for those works/tasks stipulated by laws and Business units required competency such as:

I. Project Engineer/Manager
II. Safety Officer
III. Supervisor
IV. Lineman
V. Fitter
VI. Crane Operator
VII. Rigger
VIII. Welders
IX. Cable Jointers
X. Others as defined by laws or Business units from time to time.

b) Contractor shall nominate a competent safety officer/supervisor to ensure the implementation of all health and safety requirements in accordance with agreed specifications, terms, and conditions on each worksite.
c) Contractor shall nominate a Project Engineer/Manager to be in charge and coordinate the work with Business units personnel at worksite. The representative (s) shall supervise the scope of work awarded to them.
d) Contractor shall nominate a Site Supervisor to be in charge and coordinate the work with Business units personnel at worksite. The representative (s) shall always remain at the worksite to supervise the scope of work awarded to them. Site supervisor and safety supervisor can be the same person.
e) All personnel are to have a valid Company identity card always issued by the respective Contractor and national identity card and to produce them upon request.
f) Evaluate all activities before undertaking to ensure that the operation will be safe and effective.
g) Be familiar with the respective company's and HSE requirements before starting any project/task at site.
h) Contractor shall ensure that their workers immediately report all injuries, vehicle collisions, spills releases, near misses and unsafe conditions to the PTCL Group Supervisor/Manager.
i) Ensure that contractor Safety Officer holds pre-job safety meetings to discuss the project and anticipate HSE issues. Additionally, regular safety meetings will be conducted to review the project's progress and HSE issues.
j) Provide proof of training or other HSE documentation before commencement of the project/task.

k) Ensure equipment is in a safe working condition and properly maintained prior to the start of any work.

l) Ensure their workers are fit and healthy for the job.
m) Ensure no work shall be started in absence of Contractor Supervisor.
n) Ensure provision of insulated tools to his field staff.
o) Ensure provision of the required PPE (Full body harness, Live line tester, Rubber/leather gloves, working gloves, helmet with chin strip, Face shield, Safety shoes etc.) (**Annexure E)**

**8.2 Contractor Project Engineer/Manager**

1. Demonstrate a knowledge and commitment toward health and safety.
2. Ensure to meet the health and safety as per PTCL Group requirements.
3. Ensure Implementation of the applicable procedures as per site requirement.
4. Ensure their workers are competent to perform the job.
5. Ensure coordination with PTCL Group Manager/Supervisor.
6. Ensure equipment is in a safe working condition and properly maintained prior to the start of any work.
7. Conduct random inspections to ensure implementation of the safety program.

**8.3 Safety Officer**

1. Ensure workers are complying in accordance with specification, SOP and guidelines on agreed terms and conditions.
2. Ensure Implementation of the applicable SOP includes education regarding risk management.
3. Conduct risk assessment.
4. Conduct random inspections to ensure implementation of the safety program.
5. Report and investigate in case of non-compliances.
6. Stop work if any unsafe acts, unsafe condition observed.
7. Carry out portable equipment inspection as per requirement.
8. Ensure staff is well trained and competent to perform work safely.

**8.4 Contractor Site Supervisor:**

1. Identify hazards at workplace.
2. Ensure all workers are performing the work in complete PPEs.
3. Ensure verbal or written clearance from PTCL Group supervisor before starting of the job.
4. Ensure there is no stored energy.
5. Ensure controls are in place to prevent an incident as mentioned in the risk assessment of each activity.
6. Ensure implementation of the applicable PTCL Group procedures and guidelines.

7. Stop the job immediately if hazards are not under control and inform PTCL Group Supervisor/Manager immediately.
8. No work shall be started or carried out in the absence of Contractor/PTCL Group Supervisor.
9. If PTCL Group/Contractor site supervisor leaves the site for any reason (i.e., pray, Lunch or any other reason) work will be stopped.
10. Ensure that Lineman/Fitter/cable jointer while working at height must wear harness belt and anchor it, helmet with chin strip, safety shoes gloves, and use live line tester before starting of the job.
11. Ensure other worker at ground shall also wear and use the required PPE.

**8.5 Contractor Lineman/Ariel Fiber Laying:**

1. Shall not start work without instructions of PTCL Group/Contractor supervisor.
2. Before starting work on pole, he must check its condition by pole tapping method.
3. Shall thoroughly check Pole. along with foundation if found damaged then stop work and report it to Contractor/PTCL Group supervisor.
4. Shall wear uniform, vest, Safety Helmet with chin strip & face shield if applicable, safety harness, safety belt and gloves of appropriate sizes.
5. Ensure absence of supply through live line tester before starting work on any equipment.

**8.6 Contractor Crane Operator:**

1. Physically inspect crane and all accessories before starting of the work
2. Follow the rules of crane operations.
3. Follow the directions of the rigger.

**8.7 Contractor Rigger**

1. Inspect and prepare loads that need to be moved.
2. Tie the Latch with equipment and crane.
3. Setting align leveling heavy equipment select the appropriate rigging gears.
4. Give directions to crane operator during load lifting and moving.
5. Identify drop zones, barricade the area, and make sure the area clearance before lifting any load.

**8.8 Contractor Cable Jointer:**

1. Shall not start work without instructions of PTCL Group/Contractor supervisor.
2. Shall wear a proper uniform, vest, Safety Helmet with chin strip & gloves of appropriate sizes.
3. Ensure absence of supply through live line tester before starting work on any equipment such as poles, wire, support wires etc.

## 8.9 Contractor helper:

1. Shall follow the instruction of Contractor Site supervisor.
2. Shall wear all the applicable PPEs.
3. Make sure no transformer pole/electricity pole is used for any kind of work.
4. Shall not leave the site without permission.
5. If he observed any of the following is not performed by the worker/labor, then he shall inform his supervisor:
    a) Use of full body harness, safety belt, rubber leather gloves.
    b) Ensure absence of supply by live line tester.
    c) Use of mobile while working.

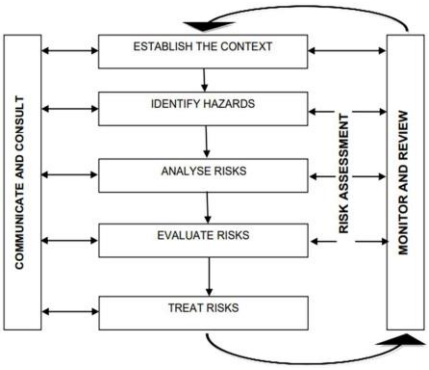
## 9.0 Project Safety Planning

## 9.1 Risk Assessment

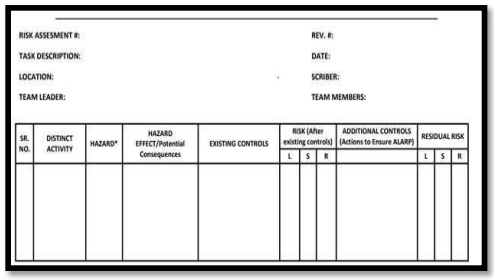

The key element of safety planning is a risk assessment process which identifies the hazards associated with a job/task/activity and defines the control measures needed to protect his worker also ensure the workers are aware of the control measures and they follow them.

The risk assessment should include:

- All significant hazards associated with the activity identified.
- Who may be harmed by the hazard including general public?
- How they might be harmed?
- The controls that are in place to prevent harm.
- Risk rating.
- Any additional controls that may be needed when/who is responsible for implementing these controls.



- Sample attached **(Annexure-A)**



RISK ASSESMENT #: REV. #:

TASK DESCRIPTION: DATE:

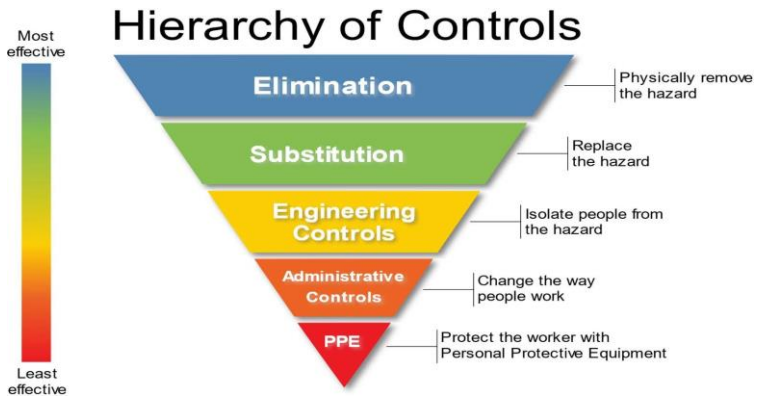
LOCATION: SCRIBER:

TEAM LEADER: TEAM MEMBERS:

| SR. NO. | DISTINCT ACTIVITY | HAZARD* | HAZARD EFFECT/Potential Consequences | EXISTING CONTROLS | RISK (After existing controls) | | | ADDITIONAL CONTROLS (Actions to Ensure ALARP) | RESIDUAL RISK | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | L | S | R | | L | S | R |
| | | | | | | | | | | | |

### 9.2 Hierarchy of Control

The following hierarchy to be followed for applying controls to reduce the risk.



### 9.3 Life Saving Rules (LSR)

It is a common set of Life Saving Rules that establishes a consistent approach in the prevention of any incident, which enables the standardization of common safety actions to reduce incident.

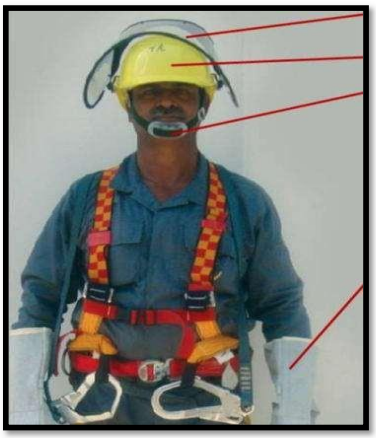
It provides workers while working on distribution network with the proactive measures as they can take to protect themselves and their colleagues from predictable incidents.

It is also intended to support existing OHS management systems, programs, and policies.

Therefore, it is essential for the contractor to ensure that their workers to be aware of these rules, as they will be able to apply controls and prevent workplace incidents. These Life Saving Rules must be developed in order to mitigate and reduce them to ALARP level. There are 7 rules which are given below:

#### 9.3.1 Working at Height

- Only designated workers are allowed to work at height.
- Use fall protection equipment while working 1.8m above ground.
- Inspect fall protection equipment before use.
- Anchor safety Harness at anchorage point at pole which can sustain your load.
- Use fall arrestor to prevent colliding with structure/ground and limit the forces on the body in case of a fall.
- Check the integrity of pole before working at height.
- Ensure pole top rescue as per procedure.



It educates Contractor team members of the potential hazards and its consequences during working at height and how to protect them by using of full body harness belt.

### 9.3.2 Avoid using Mobile Phones

- Don't use mobile phone while driving.
- Avoid all distractions.

It instructs Contractor team members to avoid using mobile phones while driving and working.


### 9.3.3 Prevent Dropped Object

- Follow relevant procedure for doing work safely.
- Use task related PPEs.
- Use drop tool kit to prevent tools from falling to the ground from height.
- Barricade area with warning cones and Tape
- Restrict unauthorized workers.

It educates Contractor team members about the importance of drop tool kit to prevent falling of objects from height.

### 9.3.4 Line of Fire

**Keep Yourself and Others Out of The Line of Fire**

- Supervision to be enhanced while performing tasks.
- Extreme care to be taken while performing job.
- Position yourself to avoid moving objects, moving vehicles.

- Extreme care to be taken while handling objects.
- Obey barriers and exclusion Zones.

It educates Contractor team members about taking proactive measures to keep themselves safe from any danger.

### 9.3.5 Isolation and PPE

- Ensure line isolation.
- Use insulted Tools.
- Wear face shield and Anti flash hood as per procedure while working online.
- Wear an anti-flash shirt.

It guides Contractor team members to perform proper isolation and wear PPEs as per given task to avoid any incident.

### 9.3.6 Use safety belts.

- Provision of seat belts for each worker.
- Always wear a seat belt.
- Defensive driving course.
- Don’t exceed speed limits and manage speed as per road conditions.

It educates Contractor team members to wear seat belts while driving and don't exceed speed limits for safe driving.

### 9.4 Signage and Warning

The contractor shall ensure that safety signage and warning is displayed to warn workers and general public who may be exposed to hazards in the workplace. Safety signs and warnings can assist in the communication of important instructions, reinforce safety messages, and provide instruction for emergency situations. Some are given as under but not limited to:

3. Prohibition Signs
4. Warning Signs
5. Danger Signs
6. Caution Signs


### 9.5 Toolbox Talk (TBT)

The purpose of a TBT is to identify, evaluate, and control hazardous situations. Therefore, the contractor must arrange and ensure such activity with their workers conducted before moving to any working site and starting of any job at site.

Five steps are suggested to conduct a Toolbox Talk

#### 9.5.1 Step 1 (Gather People):

- ✓ Contractor Supervisor shall ensure that all staff involved in the task or activity is present in the Toolbox Talk.

#### 9.5.2 Step 2 (Brief People):

- ✓ Contractor Supervisor shall brief the participants on the job or activity to be executed.
- ✓ Shall brief the participants of the hazards and associated risks with the task or activity. For possible topics and associated hazards refer to **Annexure- C.**
- ✓ Shall brief the controls to be implemented to eliminate the hazards and to minimize the risks at ALARP Level as identified.
- ✓ Shall brief the mandatory usage of PPEs during the job.
- ✓ Shall brief the Work Instruction for the execution of job.

#### 9.5.3 Step 3 (Involve People):

- ✓ Contractor Supervisor shall involve and discuss with the participants their feedback.

- ✓ Shall invite suggestions for improvement of safety while performing the task/activity.
- ✓ Shall use the local language for better understanding of the participants.

**9.5.4 Step 4 (Checking and Corrective Actions):**

- ✓ Contractor Supervisor shall check and verify that all required insulated tools, PPEs are available, appropriate, and fit for purpose.
- ✓ Shall ensure that all persons are competent, aware of the task, understand their roles and responsibilities and familiar with the hazards and controls to be implemented.

### 9.6 Safety Dispute Resolution

When a contractor worker encounters what they believe to be a safety hazard or are allocated work to perform that they consider to be unsafe, they shall immediately inform PTCL Group Supervisor at site and Contractor Manager. The work process shall not be carried out until the matter has been finally determined safe by all parties.

### 9.7 Stop Work Process

Where there is a concern that a hazard present at the site to any site worker, the worker must immediately contact PTCL Group/PQC Site supervisor and Safety officer with their concerns. PTCL Group/PQC Site supervisor and Safety officer immediately stop the work and will coordinate for review the situation to determine actions needed so that the project/task may proceed safely.

## 10.0 Transport Safety Management


All vehicles used by contractor must comply with PTCL Group requirements and shall also ensure vehicles i.e., crane, loader, MTL, forklift etc. must only be used for the intent purpose.

1. Ensure driver is trained, licensed, and medically fit to operate the variant of vehicle.
2. Ensure that all vehicles have proper seating arrangement with 3-point seat belts.
3. Ensure traffic rules to be followed.
4. Ensure speed limit to be followed.
5. Mobile phone is not used while driving.
6. Ensure that all vehicles and
7. accessories meet appropriate safety and manufacturer requirements.
8. Ensure that all vehicles are suitably inspected and maintained.
9. Ensure the manufacturers limit for passengers, and load to be carried are not exceeded.
10. Ensure vehicle have the availability and upkeeping of fire extinguisher and first aid box.
11. Anything noted to be not in proper working order should be reported taken out of service until properly repaired.
12. Fitness of Crane shall be certified from 3rd Party.
13. All lifting accessories such as web slings, shackle and eyebolt should be 3rd party certified.

**10.1 At sites:**

1. When you arrive at a site, the working area must be barricaded by placing safety cones and warring tapes.
2. Space for passing vehicle traffic and pathways needs to be arranged at the working site.
3. Ensure sufficient clearance around moving equipment/vehicle, energized electrical cables and equipment to eliminate the risk of entering the safe working zone.

**10.2 Loading, Unloading & Transportation of heavy Equipment (Cable Drums & PTCL Poles, Portable Gensets)**

Contractor shall ensure.

1. Safety Precautions to be applied in handling of Fiber Cable Coils by securing the load to protect the Field Staff and general public from any hazard during transportation process detail process covered in TR-192 A.
2. Loading, unloading and transportation operations of the heavy item on truck via Crane/ Loader/ Fork Lifter, should be completely safe and to eliminate the risk of accidents for field staff and Damaging of PTCL Group-assets, detail process covered in document TR-192 A.
3. Always barricade the area while performing loading and unloading activity.
4. Crane and truck should not be position on even surface.
5. Only the rigger shall communicate and give directions to crane operator.
6. Weather conditions, i.e., rainy, windy, or stormy should be assessed before staring the work of loading and unloading.
7. Ensure no worker shall sit in truck bed which is loaded with heavy equipment.
8. Ensure during transporting heavy equipment on truck bed must be secured with leashes and ropes.

**11.0 Safety Training**

**11.1 Worker Orientation**

The contractor shall ensure Safety Orientation is provided to their workers after induction of the assigned task/project before start of the execution and should include health and safety topics relevant to the project/task to be performed. As a minimum the following topics should be covered:

1. Safety policy

2. Personal Protective Equipment
3. Hazard identification
4. Use of Fire Extinguisher
5. First Aid
6. Cardiopulmonary Resuscitation (CPR)

**11.2 Mandatory Safety Trainings after induction**

This training should be conducted before assigning task/project to CSR, fitter and above designated workers. Therefore, Contractor shall ensure these workers are trained in the following.

1. Proper usage of PPEs
2. Electrical Safety
    a) Line Isolation
    b) Minimum Approach Distance
    c) Transformer poles not to be used.
    d) Identification of underground buried lines before starting of work
3. Work at height
    a) Fall Protection
    b) Use of Fibber Ladder
4. Hazard Identification & Risk Assessment assigned task/project.
5. Pole top rescue
6. Welding and cutting
7. Use of Power tools
8. Confined space

**12.0 Working at Height.**

**12.1 Safe use of Mobile Transport Ladder (MTL)**

Authorized Contractor worker has to perform placement of MTL ladder frequently on daily basis for work at height. The scope of MTL Placement is:

- Drop wire installation.
- Cleaning of high areas

- Working and maintenance of ceiling mounted pipes and wires
- Working on sprinklers and hydrants pipes
- Tree Pruning
- Other Hardware Installations

Therefore, Contractor site supervisor shall

ensure:

1. Inspection of MTL ladder against Daily Inspection Checklist **(Annexure F).**
2. If any repair is required in MTL ladder as per checklist, then MTL shall not be used at site and arranged its replacement.
3. The ladder is not loaded beyond its maximum load capacity.
4. MTL Ladder must be secured to avoid swinging or slipping.
5. Usage of appropriate PPE while climbing on ladder.
6. While climbing on ladder worker must hook/anchor his lanyard on every step
7. After reaching working height a CSR or authorized worker must hook lanyard above him on secure point.
8. Always maintain three-point contact (one hand & two feet or two hands & one foot) when ascending or descending a ladder.
9. Objects or loads that could cause loss of balance and falling are not carried.

### 12.2 Safe use of Bamboo / Fiber Ladder

BL/fiber Ladder can be used where MTL access is not possible in congested areas. There are three different scenarios for placing BL/fiber ladder in congested areas which are:

1. PTCL Poles and Structure
2. Consumer wall
3. Consumer service bracket.

#### 12.2.1 General instructions

When performing work under the aforesaid scenarios, the following precautions must be ensured by Contractor Site supervisor.

1. Each user must inspect ladders visually before using. (**Annexure D)**
2. Defective/broken ladder must not be used at site.
3. Place the ladder on a solid, flat base so that the feet do not sink into the ground.
4. Ladders may be secured to avoid swinging, slipping, or blown over.
5. Ladders must be maintained free of oil, grease, and other slipping hazards.
6. Ensure usage of appropriate PPE.
7. While climbing on ladder worker must hook/anchor his lanyard on every step
8. After reaching working height CSR must hook lanyard on secure point.
9. Always maintain three-point contact (one hand & two feet or two hands & one foot) when ascending or descending a ladder.

**10.** Ensure objects or loads that could cause loss of balance and falling are not carried.

**11.** Contactor shall ensure the inspection of all ladders before use and remove defective ladders. The ladder shall be properly secured at the top and provide stable footing while being used. Ensure ladders extend a minimum of 1 m (3 ft.) above the top landing point. In general, set ladders at a 4:1 slope. When climbing up or down any ladder, face the ladder and maintain three points of contact with hands free of materials.

### 12.2.2 Four Scenarios

**1. PTCL Group Pole**

a) Perform Pole Inspection and use pole tapping method.
b) The ladder must be tied with a rope at top and bottom of the pole.
c) After reaching working height Contractor worker to tie his front positioning belt through rung of ladder and pole.

**2. Consumer Wall**

a) Avoid using consumer wall and use A type ladder for work at height which must be held by two helpers or use scissor lift.
b) If using BL/fiber ladder, ensure strength of the consumer wall before placing.

**3. Consumer bracket**

a) Placing of ladder on consumer bracket is prohibited.
b) If necessary, use A type ladder which must be hold by two helpers or use scissor lift.

**4. Installation and Dismantling of Tower General Safety Requirements**

a) The Installation/dismantling must be carried out in day light.
b) The operation shall be performed at a wind velocity of less than 5m/s (<18km/h).
c) Detailed planning and methodology for the dismantling operations shall be finalized and approved prior to mobilization on site with PTCL Group HSE Team.
d) Proper skilled with relevant experienced team as mentioned earlier to be engaged for carrying out these activities.
e) It shall be ensured that the Representatives of the Contractor to be present at the site to oversee the smooth Installation and dismantling operation.
f) Designated stacking yard/spot for to be installed equipment and dismantled elements of the Guy mast shall be marked prior to start of Installation and dismantling operation and necessary wooden bottom/battens placed for stacking the dismantled elements.
g) The installation and dismantling methodology shall be rehearsed by all the members of the Installation and dismantling team under the supervision of the Contractor's Representatives.
h) It shall be confirmed that the boom height of the mobile crane and allowable safe working load is compatible with the height of the tower to be installed and dismantled.
i) On site stabilize the mobile crane on firm ground conveniently located for safe Installation and dismantling of the tower.
j) Make sure that all the necessary protection and safety measures are in place, such as ladder, platforms, warning tape, safety cones, warning sign, fire extinguisher, first aid kit, measuring tape and camera.
k) It shall be ensured that all PPEs; helmets, safety shoes, safety belt, safety harness, gloves and eye goggles are used during the dismantling operation.
l) Unauthorized persons shall not be permitted to trespass into the working area.
m) Only authorized persons shall be allowed to participate in the Installation and dismantling operation of

the mast to prevent any mishap.

n) Standard operating procedure shall be adopted to immediately stop the Installation and dismantling operation, in case of any malfunctioning of the mobile carne or if any other abnormality occurs during the process.

o) Photographs for the different stages/phases of the dismantling shall be taken to record the safe dismantling of the guyed mast and for preparation of report on the operation.

## 13.0 Emergency Situation

Two of the emergency situations unique to distribution networks one is which occurs at the Pole-Top i.e., electrocution, flash etc. which must be performed at height and other one is at ground level when any incident happens. There have been many cases of workers being injured and electrocuted while working at the top of a pole or other structure such as substation, bus bar installation in multi-story building etc. Therefore, Contractor shall ensure that their workers are aware and well trained for taking actions in the event of such situations.

Therefore, contractors shall ensure that their workers have received the proper training to perform these rescues and rescue equipment is available, properly inspected and maintained.

## 13.1 Pole Top Rescue

The following steps are suggested to be taken in case of this emergency.

Workers should not panic at the movement.

PTCL Group Site Supervisor instructions to be followed.

Do not put any other person at risk.

Procedure of Pole to rescue to be followed:

**Evaluate** the Situation:

- Call the victim.
- Call emergency services as soon as possible.
- Check pole or structure.
- Look for the source of the injury.

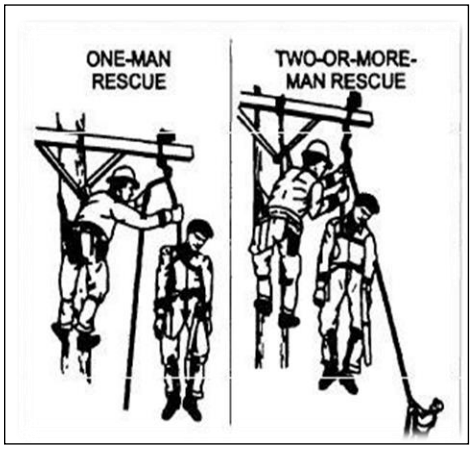
**Protect** from injury:

- Do not become a victim.
- Have all the necessary safety equipment.

**Climb** into position:

- Grab a hand line / rope.
- Climb on the pole with the help of MTL / Ladder.
- Right position to best help victim
- Usually slightly below their belt
- Clear the victim from any contact with energized wiring or equipment.

**Determine** victim's condition:




- Talk to the victim.
- Check for Breathing.
- Check for Bleeding.
- Check for life threatening injury.
- Is the victim conscious?
- Can the victim climb down?

**Get** the victim to the ground:

- Quickly, but safely
- If victim cannot climb down, use ½ inch hand line 100 feet (Approximate)
- Take one full wrap around a cross arm, and ensure that the rope is properly fixed around cross arm (If the cross arm is not available for rope holding, the other available suitable backets / hardware shall be used).
- Rig the victim by passing the hand line around the chest and tying three half-hitches (knot) close to the chest.
- Cut the victim's safety straps.
- Lower the victim to the ground slowly and gradually on smooth surface.

**Give** CPR and First Aid:

- Get air into lungs (if necessary)
- Stop bleeding (if necessary)

The following shall be required for the top pole rescue.

1. Safety Helmet (with Headlamp if required)
2. Rubber & Leather Gloves
3. Safety Harness
4. Safety shoes
5. Handline or ½" diameter rope 100 feet long
6. Knife / Cutter
7. Bamboo Stick (2 meter in length)
8. First aid kit

### 13.2 Emergency at ground

When any incident happens on the ground then contractor worker shall perform first aid and the initial process of assessing and addressing the needs of someone who has been injured or undergoes a critical medical condition. Therefore, immediate actions need to be taken.

**Check** the surroundings:

- Evaluate the situation.
- Are there things that might put you at risk of harm?
- Are you or the victim threatened by fire, toxic smoke or gasses, an unstable building, live electrical wires, or other dangerous scenario?
- Do not rush into a situation where you could end up as a victim yourself.

**Call** for help.

- Call authorities or emergency services immediately if you believe someone to be seriously injured.
- If you are the only person on the scene, try to establish breathing in the patient before calling for help.
- Do not leave the victim alone for an extensive amount of time.

**Care** for the person:

- Caring for someone who has just gone through serious trauma includes both physical treatment and emotional support.
- Remember to stay calm and try to be reassuring; let the person know that help is on its way and that everything will be alright.

**Give** CPR and First Aid:

- Get air into lungs (if necessary)
- Stop bleeding (if necessary)





**13.2.1 Emergency Response Plan**

Contractor shall develop Emergency response plan for implementation in emergency situations.

## 14.0 Safety Guidelines for Specific Activities

### 14.1 Electricity

Electricity if not used correctly can prove to be a high hazard that can result in electrocution with fatal consequences. 30mA and 50 volts is sufficient to bring about a cardiac arrest and resultant death. Business units projects will involve a range of electrical risks ranging from possible contact with power lines, power transformers, circuit breakers and switchgear at high voltage as well as low voltage equipment.

## 15.0 Electrical Safety- 6 Steps That Saves Life

These 7 Steps are essential to develop an electrically safe working condition so that workers performing job are at minimum risk of electrical & other hazards.

### Conduct On site TBT, identify specific on-site hazards and identify appropriatecontrols before start of work.

Before start of work, Supervisor/Team In charge shall ensure that:

1. Where relevant, shall ensure that PTW is available with required Isolation/Shutdown
2. Discuss the Job details and on-site hazards & its control with team members.
3. Determine & check appropriate tools and PPEs to be used for the job and perform their pre use and after use checks.

### 2. Use relevant PPEs

Determine and use relevant PPE with appropriate ARC rating to perform said job that will protect from injuries in case of any unwanted event.
Also perform pre-use checks and visual inspection of PPE before use.

### 3. Disconnect Supply from all Sources

Only Qualified/Authorized persons shall Perform all isolations/switching operations as per requirement while using appropriate PPEs from safe distance.
Avoid Distractions and perform isolation with complete focus.

### 4. Apply LOTO

To secure/prevent that isolated power sources do not get energized unintentionally, Locks and tags shall be installed on designated points of equipment.

### 5. Confirm Absence of Supply (Test before Touch)

Before Start of Work, it is crucial/mandatory to confirm absence of supply via Live Line Tester with use of appropriate PPE.
The following 3 Steps should be followed while confirming absence of supply.

1. Test Live line Tester functionality.
2. Test power sources for absence of supply
3. Retest Live Line Tester functionality

### 6. Apply Short & Ground

The last step for creating an Electrically safe working condition is to Apply Ground and Short to prevent reenergization.
While applying firstly connect grounding led to any source and then apply shorts and reverse action while dismantling.

### 15.1 Contact with overhead power lines.

Contact with overhead power lines also represents a significant hazard as they operate at high voltage. The most common causes of accidents are as a result of situations where physical contact with the OH line is made such as.

- Handling long bars
- Handling long ladders
- Operating MTL/cranes/excavator and other similar vehicles

Worker shall not go or take any conductive object within the minimum approach distances from any exposed energized conductor or equipment.

### 15.2 Portable Power Tools and Temporary Installation

Portable power tools and temporary installations can also present electrical risks if they are not properly installed, used, or maintained i.e., grinder, welding plant drills, lighting, generators etc.

Therefore, contractor shall ensure:

1. Power tools and temporary installation shall be of appropriate quality.
2. No deteriorated cable or flexible leads are being used.
3. Plugs and sockets are in good condition.
4. There are no taped joints in any cables and leads.
5. No visible burn marks on any equipment
6. All equipment is checked on a regular basis by a competent person and a record kept.
7. Safety guards are installed and maintained on rotatory tools.

### 15.3 Isolation

Isolation provides safe working portion to worker from danger to isolate all the current path including conductor/cable to avoid. Therefore, Contractor site supervisor must verify isolation step and ensure absence of supply before start of work on the line. Ensure usage of appropriate PPEs. (Lineman/Fitter while working at height must wear harness belt, helmet with chin strip, safety shoes, rubber, and leather gloves as per voltage requirement, uniform and use live line tester before starting of the job.)

### 15.4 Excavation for Underground Cable laying

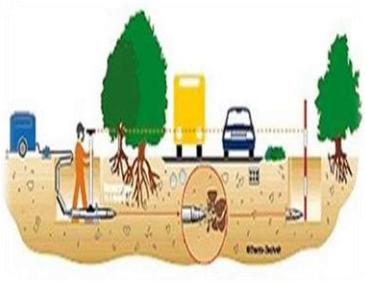
While performing excavations for underground cable laying there is a danger of utility services and power cables. Therefore, contact made with buried power cables may cause electrocution. Before performing excavation and underground cable laying Contractor site supervisor must ensure barricade work area by safety cones and warning tapes to avoid any mishap with public. Manual Cross pit must be performed in presence of PTCL Group site supervisor by Contractor worker on location marked by PTCL Group supervisor and ensure usage of appropriate PPEs (Excavation worker while working must use helmet with chin strip, safety shoes, safety HT rubber/leather gloves). Refer to detailed document TR-192 A Optical fiber cable laying (Direct- Duct buried)

### 15.5 Cable jointing

While performing cable jointing for underground cable there is a danger of electrocution and flash. Before performing cable jointing Contractor site supervisor must ensure absence of supply by live line tester and verify area barricading by safety cones and warning tapes to avoid any mishap. It also ensures usage of appropriate PPEs (uniform, helmet with chin strip, safety shoes and safety rubber/leather gloves as per voltage rating).

### 15.6 Boring Work

While performing Boring work there is a danger of utility services and power cables. Therefore, contact made with buried power cables may cause electrocution. Therefore, contact made with buried power cables may cause electrocution. Before performing Boring work Contractor site supervisor must ensure barricade work area by safety cones and warning tapes to avoid any mishap with general public. Manual trail pit must be performed in presence of PTCL Group site supervisor by Contractor worker on location marked by PTCL Group supervisor and ensure usage of appropriate PPEs (boring worker while working must use helmet with chin strip, safety shoes, safety HT rubber/leather gloves, uniform). There are two types of machine boring. Refer to detailed document TR-192 A for Direct-Duct Buried.



**15.7 Work Over or Adjacent to Water**

The following shall be ensured by the contractor:

1. Contactor shall provide adequate lifesaving and rescue equipment at every workstation where work is being carried over or adjacent to water.
2. Life vests shall be worn by contractors when working over water. A full body harness with double lanyard for 100% tie all the times shall be used to avoid fall hazard.
3. The contractor shall ensure that people that have fallen in water can easily and swiftly be rescued and/or brought to the shore.

**16.0 Manual Handling**

When contractor worker load/unload tools and material manually from contractor office to site or vice versa which could be result of muscle and back injury. So, Contractor is required to identify any hazards from manual handling and assess the risks associated with each activity to either eliminate or reduce. The contractor is to provide manual handling aids, such as trolleys, as necessary. Correct manual handling techniques are expected to be seen while undertaking the works.

The contractor shall ensure that their workers are well trained and informed about the proper method of manual handling. To assess the risk of manual handling the following factors need to be considered:

- the task
- the load
- the working environment
- physical capabilities of individuals
- handling technique

**17.0 Installation of Optical Fiber Cable**

Before starting work on pole Contractor site supervisor must perform pole inspection.
While performing installation of OFC (Optical fiber Cable) on ariel network. There is a danger of Fall from height and electrocution. Contractor site supervisor must ensure wearing of Full body harness with lanyard and front positioning belt which provides protection against falling hazard while working at height. He also checks absence of supply by live line tester of nearby overhead lines to avoid electrocution and ensure area barricading by safety cones and warning tapes to avoid any mishap. He ensures usage of appropriate PPEs (uniform, helmet with chin strip, safety shoes and safety rubber/leather gloves). Refer to detailed document on Laying Ariel Cable TR-192B and HSE Instruction 9 on Ariel and buried network.

**18.0 Material Storage**

Proper material storage and housekeeping are essential in maintaining smooth work and operation. Improper storage and housekeeping can lead to injuries and contribute to material damage as well. Storage of materials should be kept to a minimum so as not to increase any risk to the worker and any other person. Therefore, Contractor shall ensure that.

1. All stacked loads must be correctly piled and cross-tiered, where possible.

2. Precautions should be taken when stacking and storing material.
3. Stored materials must not create a hazard.
4. Storage areas must be kept free from accumulated materials that cause tripping,
5. All material should be stacked, placed on racks, blocked, interlocked, or otherwise secured to prevent it from sliding, falling, or collapsing.

6. Bags and bundles must be stacked in interlocking rows to remain secure.
7. Material should be properly tagged, and signage should be in place.

## 19.0 Personal Protective Equipment (PPE)

PPE used as the last defense line to minimize severity in case of hazard cannot be further controlled or mitigated.

### 19.1 Personal Protective Equipment

- Head Protection
- Foot Protection
- Face Protection
- Hand Protection
- Fall Protection
- Voltage Protection

Contractor shall comply with all PTCL group PPEs Policy & Guidelines.

The contractor shall comply with the PTCL Group standards and specifications and ensure availability of appropriate PPEs to their workers while performing their job. It is the responsibility of the contractor to ensure that their workers are using appropriate PPEs to avoid any incident and possibility of risk to their safety and health. No work shall be allowed at site without PPEs nor on Electricity Poles as per provided Instruction 9 on Ariel and buried network.

### 19.1.1 Head Protection

Head protection is required at all sites and must be worn by all people on site. Safety helmets need to be replaced when damaged or at the appropriate frequency as recommended by the manufacturer.

### 19.1.2 Foot Protection

Safety footwear shall be provided and worn by all people on site. It shall have toe and sole reinforcement. Any person not wearing such protection shall be excluded from the site.

### 19.1.3 Hand Protection

Working Gloves provide protection against several hazards to contractor personnel. This includes protection against cuts and abrasions, barrier protection when handling chemical substances. Whereas, Rubber and Leather Gloves provide a degree of protection from electrocution and arc flash, but these must be rated for the voltage being worked on such as HT (Class 2) or LT (Class 0).

### 19.1.4 Fall Protection

A system to protect workers from falls and injury or fatality when working at height. A full body harness with lanyard and front positioning belt provide protection against falling hazard while working at height.

### 20.0 Reporting

Whilst working on assigned task/project Contractor worker are bound to report all site potential hazards and incidents immediately to PTCL Group site supervisor. Contractor Supervisor should maintain record at their end and shall provide as and when required.

| Hazard | Nearmiss | Accident |
|---|---|---|
|  |  |  |
| Ladder step is broken, as shown in the picture- **Potential Hazard.** | The employee fell from height but sustained no injury. | The employee fell from height and sustained injury. |

**20.1 HSE WhatsApp Hotline**

Corporate HSE has a WhatsApp hotline for reporting of serious HSE violations and incidents, the hotline number is **+92 334 11 11 473(HSE)** and the reporting service is open 24/7.

**21.0 Fire Prevention**

The contractor shall ensure a suitable fire extinguisher CO2/DCP is available in their vehicle and workers of Contractor are aware to usage it and it to be located as close as practicable to the work areas.

## 22.0 Safety Reward and reprimand

A reward and reprimand shall be given to Contractor as per PTCL Group's existing capacity.

## Annexures

## 23.0 Annexure A

**Risk Assessment (Sample)**

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Annexure A- Risk Assessment- Form | | | | | | | Doc # | | | |
| | | | | | | | | Rev | | | 0.0 |
| | | | | | | P: Probability | | | | | |
| Assessor: | | | | | | S : Severity | | Assessment Date: | | | |
| | | | | | | *RR: Risk Rating | | | | | |
| | | | | | | **RR: Residual Risk | | | | | |
| # | Hazards | Risks | Who, How | Risk Rating | | | Control Measures | Residual Risk | | | Revieiw Date |
| | | | | P | S | *RR | | P | S | ** RR | |
| 1 | | | | | | | | | | | |
| 2 | | | | | | | | | | | |
| 3 | | | | | | | | | | | |
| 4 | | | | | | | | | | | |
| 5 | | | | | | | | | | | |
| 6 | | | | | | | | | | | |

## 24.0 Annexure C

### 24.1 POSSIBLE TOPICS OF A TOOLBOX MEETING.

**Permit to Work System:**

- What permits are required?
- What other permits may affect this work?

**Procedures/Work Instructions:**

- Are personnel familiar with the procedures/work instructions that apply to the task?
- Should temporary work instructions be raised?

Commented [MARH&S&O1]: Remove the permit to work system points

### 24.2 Workplace Hazards/Risk Assessments:

- Identify potential hazards for the task, e.g.
- High Voltage
- Low Voltage
- Isolation and testing required.
- Slippery surfaces
- Hot surfaces
- Cold surfaces
- Confined area
- Safety barriers that must be removed
- Obstructed walkways
- Working at Height / Head height obstructions.
- Securely lashed gas cylinders
- Placement of electrical cables and hoses
- UV radiation from welding
- Crane/forklift operations
- Chemicals to be handled.
- Manual handling involved, e.g.
  - ✓ Weights of objects to be lifted.
  - ✓ Path of movement
  - ✓ Size/shape of object
  - ✓ Access to initial/final position
- Lighting.
- Hazardous substances (e.g., asbestos)
- Radioactive sources
- Electrical installations
- Underground electrical/ process live systems
- Working at height- utilization of relevant safety gears

### 24.3 Means of communications to be established:

- Clear Communication between Contractor and PTCL Group regarding activity to be performed including isolation, PPEs, tools, vehicle, MTL ladder, use of BL etc .

**24.4 Effects from the prevailing weather conditions, e.g.**

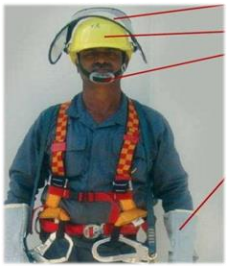
- Wind impacts:
  - ✓ Crane operations (swinging loads)
  - ✓ Dust (eye hazards)
- Temperature impacts:
  - ✓ Fluid loss from the body (heat stroke)
  - ✓ UV radiation
  - ✓ Sunburn (both direct and reflected from stainless steel surfaces and water)
- Rain impacts:
  - ✓ Electrical hazards (welding, extension leads, portable electrical tools, overhead lines, underground live lines, etc)
  - ✓ Slippery working surfaces
  - ✓ Poor road conditions

**24.5 Contingencies to be agreed:**

- Failure of communications
- Loss of power
- General emergency alarms
- Accidents
- Failure of MTL
- Overhead electrical wire broken.

## 25.0 Annexure F

**PPEs**

| Sr. # | Name | Usage | Picture |
|---|---|---|---|
| 1 | Uniform | For all the field staff at site |  |
| 2 | Full body harness with front position Safety Belt & Lanyard | For Work at Height |  |
| 3 | Safety Helmet with Chin Strip | • For all the field staff at site |  |
| 4 | Face Shield | • For use in following activities:<br>○ IPC Connection<br>○ Metering Work<br>○ DB Connection<br>○ Welding |  |
| 5 | Safety Shoes | • For all the field staff |  |

| | | | |
|---|---|---|---|
| 6 | Safety Gloves (Rubber & Leather) | • For all network jobs (i.e. Laying of cable, Dismantling) Rubber gloves are made of quality rubber. These rubber gloves protect your hand from harmful materials that may render harm to the skin. The Leather Gloves can resist sparks and moderate heat. The risk of cuts and abrasions also can be minimized by wearing leather gloves. |  |
| 7 | Working Gloves | • For material handling<br>• For handling of dismantled conductor |  |
| 8 | Warning tapes and cones | • Barricading working area for all activities as per LI policy |  |

## 26.0 Annexure G

**Daily MTL Ladder Inspection Checklist**

MTL No. Date of Inspection

| S. No. | Inspection (Items to be Checked) | Observation | | | Rejection Criteria |
|---|---|---|---|---|---|
| | | OK | Repair Required | | |
| | | | Yes | Risk | |
| 1 | **Ladder Wire rope**<br>• Condition of the Wire rope used for pulling the ladder must be checked | | | High | • if the strands of wire rope are damaged/broken |
| 2 | **Turn Table Supporting Brackets**<br>• Supporting Brackets should be not be out of shape or worn out. | | | High | • Supporting bracket is deformed/ broken |
| 3 | **Turn Table rollers**<br>Turn table rollers should be free to roll | | | Low | • Rollers jammed/damaged/ missing |
| 4 | **Ladder Swing Lock**<br>• Ladder swing lock should be without any repairs (without any joint/welding)<br>• Mounting hole should be without any repair | | | High | • Ladder swing lock is repaired/ damaged<br>• Mounting hole cracked / broken |
| 5 | **ladder Lock in Rest**<br>Check the functionality of standing ladder lock, lock handle broken/not functioning | | | low | |
| 6 | **Sliding Ladder Locking Dogs**<br>• Both locking dogs should hold ladder step properly.<br>• Reverse strip of locking dogs should not disturb the down movement of ladder. | | | High | • Dogs slip and not hold the ladder properly<br>• Reverse strip disturb the down movement |

| | | | | | |
|---|---|---|---|---|---|
| 7 | **Sliding Brackets and Rail**<br>• Sliding bracket should have positive contact with rail and it should cover more than half the width of rail on both sides.<br>• Play in the fixed and sliding ladder should not cause the contact area of Brackets to be less than half the width of rail on both sides.<br>• Sliding brackets should be securely mounted on the ladder and should not be loose.<br>• Rail should not be bent and should be at 90° with side panel. | | | High | • Contact area less than half the width of rail.<br>• If contact area of sliding bracket is less than half the width of rail due to play.<br>• If sliding brackets are loose<br>• If Rail is tilted or not at 90° with side panel |
| 8 | **Ladder Gear Box**<br>• Check the condition of the ladder gear box. If the gear box shows cracks on body or the secondary and primary gear are slipping the ladder, ladder should not be operate | | | Medium | • Crack On gear Box<br>• Primary and Secondary Gear worn out.<br>• Gear Box outer body screws are missing |
| 9 | **Gear Shaft & Bearing Block**<br>• Gear Shaft and fixed ladder connecting brackets to be in good condition<br>• Bearing blocks of the gear rod should be checked for damages. | | | Medium | • Gear Shaft and Fixed ladder have cracks or broken welding seam<br>• Bearing blocks have cracks on the outer body |
| 10 | **Anti-Flipping Brackets**<br>• Anti Flipping brackets installed (at least one on each side) | | | High | • If Anti Flipping bracket is missing. |
| | • Anti Flipping brackets should be properly tightened with bolts | | | Low | |