Personal Protective Equipment (PPE) Procedure
HSE Management System

PTCL Group

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Contents

1. Purpose:

The purpose of this procedure is to ensure the appropriate selection, use, cleaning, maintenance, storage, and disposal of Personal Protective Equipment (PPEs). It is required to ensure that appropriate PPE is made available to individuals where necessary.

Wherever feasible, health and safety risks should be eliminated or controlled without relying on Personal Protective Equipment (PPE). However, PPE may be necessary in certain circumstances, for example when it is not feasible to eliminate and reduce risks or as an interim measure until more effective controls can be implemented. For the wide variety of PPE used at PTCL Group to be effective, its selection, use, cleaning, maintenance, storage, and disposal need to be systematically managed.

2. Scope

This procedure applies to all operations of PTCL Group. All PTCL Group Routine (R), Non-routine (N) and Emergency (E) activities. All Group PTCL personnel, contractor personnel, visitors, or community and OSPs (Outsource Service Providers) that may interact with or be affected by any aspect of company activities at all facilities.

3. Definitions:

a. End User: It refers to the individual employee or worker who directly uses the PPE while performing tasks or duties. End users are typically front-line workers exposed to hazards requiring PPE for safety (e.g., technicians, engineers, field workers).

b. Earmuff: A form of personal hearing protection, comprising pairs of rigid cups that fit over the outer ear.

c. Eye protection: Glasses, goggles and other devices incorporating side shields which have been specifically designed to protect the eyes against impact and particulate hazards, splashes of hazardous liquids and/or exposure to harmful radiation.

d. Feasible: Technically possible without endangering product quality or any other key business needs. Achievable without an expenditure of resources so large as to be disproportionate to the anticipated reduction in HSE risks or adverse HSE impacts.

e. Fit test: The use of a challenge agent to evaluate the fit of a PPE on an individual.

f. PPE: Personal Protective Equipment – any specialized clothing or equipment worn by an individual, designed to provide protection against specific hazards. It includes respirators, hard hats, safety shoes, gloves, face shields, chemical splash goggles, safety harnesses and protective clothing, such as aprons, laboratory coats, and acid-resistant body suits.

g. **Risk assessment:** A systematic examination of activities or processes to identify the probability of HSE adverse events, such as injuries, illnesses and harm to the environment or the business, together with an evaluation of their potential consequences.

h. **Safety footwear:** A type of shoe or boot worn for protection against a variety of hazards, including impact, electrical shock, heat and cold.

i. **Gloves:** Gloves are a form of personal protective equipment designed to protect the hands from hazards such as cuts, abrasions, chemical exposure, extreme temperatures, and electrical risks. Different types of gloves are used depending on the nature of the work, including but not limited to, rubber gloves for chemical protection, insulated gloves for electrical work, and cut-resistant gloves for handling sharp objects. Gloves must be selected based on the specific hazard, regularly inspected for signs of wear or damage, and replaced as needed to ensure proper protection.

j. **Hard Hat/Helmet:** A helmet is a form of personal protective equipment designed to protect the head from injuries due to falling objects, impact, or other potential hazards. It must meet the safety standards relevant to the industry and be worn in high-risk areas to ensure worker safety. Helmets should be regularly inspected for damage and wear and replaced as necessary to maintain effectiveness.

k. **Safety Belt/Harness:** A safety belt is a form of personal protective equipment designed to prevent falls from heights by securing the wearer to a stable anchor point The safety belt, often part of a broader fall arrest or fall restraint system, must be securely fastened, regularly inspected for wear, and used in accordance with safety guidelines to ensure the effective prevention of falls and minimize injury risks.

l. **Classes of PPEs:** the classification of PPE into **Class 0, Class 1, Class 2**, etc., usually refers to specific standards for **electrical protective equipment** and the level of protection they offer against electrical hazards. These classes are typically defined by standards e.g. **IEC 60903** or **ASTM D120** and are related to the voltage levels they can safely handle.

m. **Class 0:** Class 0 PPE is designed to protect against low-voltage electrical hazards. It includes rubber gloves, sleeves, and other insulating gear tested for resistance to electrical shock. Maximum voltage usage is 1,000 volts AC / 1,500 volts DC.

n. **Class 1:** Class 1 PPE offers higher protection and is used for medium-voltage electrical work. Workers handling equipment at these voltage levels need this class of protection. Maximum voltage usage is 7,500 volts AC / 11,250 volts DC.

o. **Class 2:** Class 2 PPE is meant for higher voltage applications, typically in industrial or utility work where the risk of electrical shock from higher voltage circuits exists. Maximum voltage usage is 17,000 volts AC / 25,500 volts DC.

p. **Non-conformity:** A non-conformity refers to the failure to meet specified requirements, standards, or expectations in a process, product, or system. Non-conformities are typically identified during audits, inspections, or assessments and should be followed by corrective actions to resolve the issue and prevent its recurrence.

4. Abbreviation:

PPE:	Personal Protective Equipment
M & L:	Material & Logistics /Warehousing & Logistics
ANSI:	American National Standards Institute
ISO:	International Organization for Standardization
ASTM:	American Society for Testing and Materials
EN:	European Norm (European Standards)
IEC:	International Electrotechnical Commission
OEM:	Original Equipment Manufacturer

5. Roles and Responsibilities:

5.1. PTCL Leadership Team:

To provide all necessary resources for the implementation of the PPE's procedure at PTCL Group.

5.2. Corporate HSE & Sustainability Team:

5.2.1. To perform random inspections/Site Observer Tour (SOT) to check compliance on use of PPE by the field staff.

5.2.2. To conduct Toolbox Talk (TBT) periodically as per plan to create awareness about use of PPE.

5.2.3. Periodically reviewing, updating, and evaluating the effectiveness of the PPE procedure.

5.2.4. Support functions in budgeting process of PPEs.

5.3. Functional HSE:

5.3.1. Conduct risk assessment of activities performed by field teams and identify appropriate PPE.

5.3.2. Develop Specifications for Tendering of required PPE as per hazards and risks involved.

5.3.3. To ensure random inspections/ Site Observer Tour (SOT) are conducted to check compliance on use of PPE by the field staff.

5.3.4. To ensure Toolbox Talk (TBT) are delivered as per plan to create awareness about use of PPE.

5.3.5. Ensure and arrange Trainings and awareness for employee on use of PPE and know how to detect and report any fault.

5.3.6. Develop instructions and guidelines for PPEs on departmental level.

5.3.7. Develop instructions and guidelines for specialized PPE's.

5.3.8. Ensure periodic follow-up with M&L and departments to check PPE's expiry and/or end of shelf life etc.

5.3.9. Lead and support functions in budgeting process of PPEs.

5.4. Zonal VPs and Director's:

5.4.1. To ensure timely budgeting of PPEs for their function/department to be done with the help of functional HSE.
5.4.2. Ensure issuance of PPE from M&L to the field staff and maintain record including issuance, manufacturing dates, shelf life, purchase date, expiry date etc.
5.4.3. Ensure maintaining issuance record of PPE's for 5 years.
5.4.4. Enforce safety Instructions and guidelines issued by corporate & functional HSE Department.
5.4.5. Random inspections to ensure regular use of PPE. Conduct Site Observation Tour (SOT) for sites.
5.4.6. Devise a plan to collect damaged/ faulty PPE during use and get replacement within their function/department and ensure its implementation.
5.4.7. Ensure to conduct TBT through their nominated Managers and executives in each region and shares record of these sessions with functional HSE department.
5.4.8. Proactively identify the need of PPE's through risk assessment and as per the demand in field to M&L.
5.4.9. In case of any non-conformity of PPE's, action will be taken as per company policy.
5.4.10. PPE requiring replacement or additional requirement shall be identified by the Line as per requirement of risk assessment.
5.4.11. Ensure to share PPE's requirement of the respective department to the line/functional HSE at least 6 months before the stock's depletion.
5.4.12. Implementation of this procedure in their respective departments, including service providers working for their departments.

5.5. Field Staff/ End User:

5.5.1. Must use identified PPE's for work.
5.5.2. Appropriate use of PPE's.
5.5.3. Attending training and awareness sessions on PPE's.
5.5.4. All PPE's shall be inspected by the workers on daily basis before use.
5.5.5. Take good care of PPE's. When not in use, store PPE in an appropriate place. During storage, protect from direct sunlight, Cut, abrasion, and Chemicals etc.
5.5.6. Follow safety instructions issued by corporate and functional HSE Department.
5.5.7. Loose clothing shall be avoided due to entanglement hazard.
5.5.8. Not to make modifications of any kind to PPE i.e., putting the name down and painting PPE.
5.5.9. Ensure usage of PPE's in line with personal hygiene and occupational health requirements.
5.5.10. Use PPE for its intended job only and avoid misuse.
5.5.11. Timely report PPE loss, damage, or any fault to the concerned line manager for replacement after checking.

5.6. Warehousing & Logistics:

5.6.1. Storage of PPE's shall be carried out as per OEM instructions.

5.6.2. Ensure to maintain record including issuance, manufacturing dates, shelf life, purchase date, expiry date etc.

5.6.3. Escalate the PPE's quantity which is near to expiry and/or end of shelf life to functional HSE or custodian at least before 12 Months of its expiry date and periodic follow-up.

6. Standard Procedure & Protocols:

6.1. PPEs Requirement:

6.1.1. The respective Departmental Manager will identify areas / tasks / processes for which PPE is required through following:

i. Survey of work areas and activities.

ii. Risk assessment process.

6.1.2. Risk Assessments should consider risks to all parts of the body i.e., to the:

i. Eyes and face.
ii. Head.
iii. Hands and arms.
iv. Feet.
v. Ears (i.e., hearing)

a. Record and document the use of PPEs which identified in risk assessment to ensure its implementation.

b. Minimum PPE requirements (as per Table 1) should be used for reference of carrying out the identified tasks in the template.

Table-1: Selection of PPE

Body Part	Type of Hazard	PPE Required
Head	Falling objects, impact, overhead electrical shock	- Hard hat (insulated for electrical work)
	Exposure to heat or sun	- Wide-brim hat or cap
Eyes & Face	Flying objects, particulate matter, chemical splashes	- Safety glasses - Goggles (for chemical or dust protection) - Visor/ face-shield.
Ears	Continuous noise exposure above limits from machinery or equipment	- Earplugs - Earmuffs
Hands	Electrical Shock, Cuts, abrasion, impacts, puncture etc.	- Electrical Gloves - Working gloves - Chemical-resistant gloves

		- Cut resistant gloves
Feet	Falling objects, sharp objects, slippery area	- Steel-toe shoes - Slip-resistant shoes, Gum Shoes
	electrical hazards	- Insulated shoes of required class
Whole Body	Falls from height	- Full-body harness - Lanyard and lifeline - waist belt/ safety belt
Arms	Electrical shock	Protective Sleeves

6.2. Selection of PPEs:

6.2.1. The respective VPs & Directors will ensure that:

a. If PPE is required, an evaluation should be completed to ensure that it is selected in accordance with the findings of the relevant risk assessments. Depending upon the type of PPE and the nature of the activity, some or all the following criteria should be considered during selection (Table-1 can be used for reference and selection of PPEs):

- **i.** Nature of the hazard and the activity involved.
- **ii.** Degree of protection required.
- **iii.** Relevant occupational exposure limits.
- **iv.** How easy it is to put the PPE on and to use it.
- **v.** Whether the PPE impairs the employee's ability to work.
- **vi.** Health status of the employee.
- **vii.** Whether the size and shape of the PPE provides a good fit for the employee.
- **viii.** Other PPE is being used at the same time.
- **ix.** Training required.

b. Selection of PPEs should be finalized after consulting the employee who will be using it; PPEs need to be convenient and appropriate to the employee.

c. Functional HSE approved list of PPES should be periodically reviewed to determine whether the PPE is still the most appropriate and can therefore remain on the list.

6.3. Provision of PPEs and feasible Controls:

6.3.1. Provide PPE to control remaining risk only after all other feasible controls have been applied or as an interim measure until more effective controls can be implemented.

6.3.2. All Directors must ensure that PPE should be used to control health and safety risks only in one of the following cases:

a. after all other feasible controls have been applied.
b. as an interim measure until more effective controls can be implemented

Where PPE is used as an interim measure, action plans should be developed and implemented to ensure that other control measures are introduced as soon as is feasible.

6.4. PPEs selection & elimination of additional risk:

6.4.1. Ensure that selected PPE will not introduce significant new risks and is compatible with other PPE being used at the same time.

6.4.2. All department managers must ensure that selected PPEs do not pose additional risk and are compatible with other PPEs used during the activities.

6.4.3. PPE's specifications are available in Annex-1 of this procedure which can be adopted after discussion with functional HSE and as per work requirement.

6.5. PPEs provision as per required size & fit for purpose:

6.5.1. Ensure that PPE is provided to the employee and is of appropriate type, size ,shape and fit for purpose for each individual.

6.5.2. All Departmental Managers must ensure that all PPE should be provided to PTCL Group employees as well as third party staff as per requirement and risk assessment. In addition, it is important to ensure that PPE is of appropriate type, size, shape and fit for purpose for each individual employee. This will ensure that:

a. The PPE provides maximum protection.
b. The user is as comfortable as possible.
c. Any effects on the user's ability to carry out his work are minimised.
d. New health and safety risks are not introduced.

6.5.3. For PPE that is manufactured in different sizes (e.g., gloves, safety footwear, and overalls) an adequate range of sizes of PPEs should be made available. Involving the relevant employees in the selection process should help to ensure that the range of sizes selected is appropriate.

6.6. Provision of Information & Training:

6.6.1. Provide information and training to employees on the selection, use, cleaning, maintenance, and storage of PPE.

6.6.2. Departmental Managers must ensure that before being assigned a task where PPE is required, employees should be provided with appropriate information and training in the:

a. Risk Assessment
b. Nature of the hazards involved.
c. Selection of suitable PPE.
d. Limitations of the PPE.
e. Fitting and use of PPE.
f. Cleaning, maintenance, and storage of PPE.
g. Replacement and disposal of PPE

6.6.3. Information and training should also be provided to supervisors to enable them to ensure that PPE procedures are correctly implemented. All information and training provided should be appropriate to the specific activities to be undertaken and the types of PPE to be used.

6.6.4. Re-training/Refresher Training in PPE usage should be given:

a. Before a new type of PPE is issued.
b. when changes in the activity/ risk assessment or workplace make existing PPE or previous training obsolete.
c. when a lack of understanding regarding PPE is evident.
d. periodically, based on a formal assessment of training needs.
e. Required by internal audit or after any incident.

6.6.5. PPE requirements should be included in Standard Operating Procedures (SOPs) and written work instructions. To enable this to happen, relevant risk assessments and documents should be consulted.

6.7. Cleaning, maintenance, and storage:

PPE may become contaminated with hazardous materials during use. Depending on the type of PPE used, procedures shall, therefore, be established for its cleaning and maintenance as required. Only single use disposable items are exempt from this requirement. Provision shall be made to avoid contamination of other areas of the workplace or of employees engaged in cleaning or maintenance activities. In some circumstances it may be necessary to provide complete changes of clothing to avoid transfer of harmful agents to the domestic environment. Additionally, some PPE may require scheduled checks and maintenance by a qualified/certified third party or supplier.

6.8. Disposal:

Used PPE can be contaminated with hazardous agents and disposal procedures need careful consideration. In addition, PPE can be damaged due to inappropriate use/storage or sudden damage due to impacts, falls, etc. Depending on the circumstances, equipment may need to be treated as hazardous waste and/or damaged equipment.

6.9. Review/ Continual improvement and effectiveness:

Review the justification, selection, use and maintenance of PPE on a regular basis to ensure its continual effectiveness.

Departmental Managers should review PPE use:

a. prior to significant changes to work tasks and in the workplace environment.
b. at regular intervals appropriate to the risks involved, and at least every three years.

7. Distribution List:

All Department

8. Annexure:

Annex-1: PPE's Specification

Proposed Specification of PPE's

Below specifications can be adopted after discussion with respective functional HSE representatives who will decide as per risk assessment and work requirements.

PPE list and recommended brand/model	Required product performance standards and technical specs
(1) Long composite insulating gloves Class 2 Dielectric, mechanical resistance (no need any leather over gloves), and protection up to the shoulder.	**Standard:** **Electrical protection:** ASTM D120 or EN 60903:2003- IEC 60903:2014 Class Designation 2 or PPE Category III (Regulation. EU 2016/425) ST HT 126 A compliant Categories: R (acid, oil and ozone), C (extremely low temp) and F (Leakage current) **Technical Specs:** Proof test voltage (V)/AC 20 000 Max operating voltage (V)/AC 17 000 **Accessories to be supplied:** Each pair to be supplied with transport bag from OEM. Pneumatic tester recommended by OEM for the type to be supplied for every 200 gloves.
(2) Composite insulating gloves Class 2 Dielectric and integrated mechanical protection: no need of mechanical protection.	**Standard:** **Electrical protection:** ASTM D120 or EN 60903:2003- IEC 60903:2014 Class Designation 2 or PPE Category III (Regulation. EU 2016/425) **Technical Specs:** Category RC (Resistant to Acid, Oil O-Zone & Low Temperatures) Proof test voltage (V)/AC 2 500 Max operating voltage (V)/AC 500

	Accessories to be supplied: Each pair to be supplied with transport bag from OEM. Pneumatic tester recommended by OEM for the type to be supplied for every 200 gloves. Fingerless cotton under gloves supplied from OEM with each pair of gloves.
(3) Dielectric head protection having electrical insulation 20000 V AC with transparent Small Visor.	**Standard:** **ANSI Z89.1 Type 1 Cass E** EN 12249 **Technical Specs:** Meets Class E (Electrical) protection standard. Proof tested at 20,000 volts. **Accessories to be supplied:** Equipped with quick release buckle and adjustable and removeable chin strap. Rear adjustable size system and headlamp clips. Transparent Small Visor.
(4) Linesman Safety Helmet with Chinstrap & EVO Spec (Visor)	**Standard:** CE, EN 50365 EN 397 EN-166 **Technical Specs:** Un-vented Meets EN 50365 Class 0 10KV standard. Accessories to be supplied: Integrated EVO Spec visor, chin strap and adjustable ratchet. **Color:** Blue
(5) Dielectric safety Helmet with chinstrap and integrated visor Bidder to quote any certified helmet brand/model with technical data sheet/brochure which shall meet respective American/European/Canadian standard to offer dielectric protection up to 11KV.	**Standard:** Equivalent ASTM,ANSI, BS EN, CSA **Technical Specs:** Shall meet respective standard as mentioned above to offer level of dielectric protection up to 11KV. Accessories to be supplied:

	Integrated visor, Chin strap and adjustable ratchet. **Color:** White or Blue
(6) Helmet for work at height. (without Visor)	**Standard:** EN 397 **Color:** Yellow
(7) Work positioning belt.	**Standard:** EN 358 **Technical Specs:** Galvanized steel positioning rings. **Accessories to be supplied:** Not required.
(8) Harness combined with positioning belt.	**Standard:** EN 361 for Harness and EN 358 for positioning belt **Technical Specs:** Sternal and dorsal attachment point. Work positioning rings. **Accessories to be supplied:** Not required.
(9) Fall arrestor with QUEEDY connectors.	**Standard:** EN 355 **Technical Specs:** Double elastic sling version Maximum length 90 cm. **Accessories to be supplied:** One compatible connector supplied by same OEM supplying fall arrestor and harness.

(10) Adjustable work positioning lanyard.	**Standard:** EN 358 **Technical Specs:** Maximum length 1.30 meters. Preassembled Tango or QUEEDY connector both are acceptable. **Accessories to be supplied:** Compatible connector supplied by same OEM supplying adjustable work positioning lanyard.
(11) Backpack to store and transport fall protection equipment and tools.	**Technical Specs:** 600 D Polyester **Capacity/Max load:** 28 Liters/8 Kg
(12) Leather safety footwear for industrial usage	**Standard:** EN ISO 20345: 2011 Impact resistance of toecaps: SB. Slip resistance: SRC. Penetration resistance: P. **Technical Specs:** Shoe type: Shoe Upper material: Leather Sole material: Rubber **Accessories to be supplied:** Not required.
(13) Class II footwear Class 2 footwear, with a other performance category of SB.	**Standards:** EN 20345:2011 (Personal Protective Equipment – Safety footwear). EN 50321-1:2018 (Live Working-Footwear for electrical protection – Insulating footwear and overboots) for performance Class 2 AC. Other performance Categories: SB (Safety Basic, protective toecap that can withstand a 200-joules impact).

(14) Working gloves	**Standards:** EN 388 Abrasion resistance: Level 3 Blade cut resistance: Level 4 Puncture resistance: Level 4 Tear resistance: Level 4