INTEGRATED MANAGEMENT SYSTEM

PERSONAL PROTECTIVE EQUIPMENT PROCEDURE

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SUMMARY VERSION CONTROL

VERSION NO.	NATURE OF AMENDMENT	PAGE NO.	DATE REVISED
1.0	New Procedure		

Note: Only latest amendments and/or additions are reflected in italics in the body of the document.

DOCUMENTATION SIGN-OFF SHEET

I, the undersigned hereby approve this procedure.

ROLE	CAPACITY/ FUNCTION	SIGNATURE	DATE
Process Owner:	**GM: SHEQ, Risk & Security**		11 June 2020
Accepts document for adequacy and practicability. Comments:			
Approval Committee:	**Governance Committee**		12/06/2020
Approves document for use. Comments:			

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1. PURPOSE

TPT is committed to ensuring their processes and activities do not pose risk to its employees or contractors it associates with. In line with this commitment, the Personal Protective Equipment SOP has been established to ensure that right protection is used to prevent any exposure to workplace hazards and that this protection is used correctly to avoid the risk of injury due to incorrect use or application.

TPT fully understands that PPE is not a substitute for more effective control methods; the hierarchy of controls will be followed as per standard practices and PPE use will be considered only when other means of protection against hazards are not adequate, feasible or do not exist.

Personal protective equipment will therefore be provided, used, and maintained when it has been determined that its use is required to ensure the safety and health of our employees and that such use will lessen the likelihood of occupational injury and/or illness.

2. APPLICABILITY

This SOP is applicable to all TPT employees, visitors and contractors; at the administration offices where the need has been identified and at all terminals and operational areas in line with the risk or hazard being managed.

3. REFERENCE DOCUMENTS

The Occupational Health and Safety Act stipulates that an employer must provide a healthy and safe work environment. Although the Act prescribes and advocates the use of engineering controls to eliminate or reduce the hazard, use of personal protective equipment is allowed under certain conditions where the risk of injury is not fully eliminated by the other approved control mechanisms.

Further on Section 43 of the Act makes provision for the Minister of Labour to make regulations pertaining to the types and manner of use of personal protective equipment. A number of regulations which cover aspects of personal protective equipment have been published or incorporated into the Act.

The *General Safety Regulations* make provision for an employer to issue a wide range of personal protective equipment. However, the employer is still expected to undertake a risk assessment, and to take practical steps to remove or reduce exposures prior to issuing personal protective equipment.

The *Environmental Regulations* for Workplaces make provision for use of personal protective equipment by workers who are exposed to cold working conditions or use of hearing protection devices by workers in a noise zone.

The amended *Lead and Asbestos Regulations* require workers in lead or asbestos areas to be provided with respiratory protection to reduce exposures to below permissible exposure levels and the *Hazardous Chemical Substances Regulations* are designed to protect workers against exposure to hazardous chemical substances. Among control measures prescribed in these Regulations is the use of personal protective equipment.

Where an employer fails to provide personal protective equipment or where an employee fails to make use of personal protective equipment supplied by employer in terms of the Act, either or both are guilty of an offence. Below is a list of some of the acts and regulations where the PPE requirement is contemplated.

Table 1

Duties	**Reference**
General Duties of Employers to their Employees	OHSA, Section 8
General duties of Employers to persons other than their Employees	OHSA, Section 9
The need to supply PPE and facilities(and the scope of this PPE and facilities) to Employees	OHSA, General Safety Regulations 2
PPE applicable in the use and storage of flammable liquids	OHSA, General Safety Regulations 4 OHSA, Construction Regulations 23
PPE applicable to working in confined spaces	OHSA, General Safety Regulations 5
PPE applicable when there is working in danger of engulfment	OHSA, General Safety Regulations 7
PPE applicable for welding, flame cutting, soldering and similar operations	OHSA, General Safety Regulations 9
PPE applicable to Fall Protection	OHSA, Construction Regulations 8
PPE applicable to suspended platforms	OHSA, Construction Regulations 15
PPE applicable to ventilation	OHSA, Environmental Regulations for Workplaces 5, Mineral Act Regulation 10.11.1

Duties	Reference
PPE applicable to working at low temperatures	OHSA, Environmental Regulations for Workplaces 2
PPE applicable when working with asbestos	OHSA, Asbestos Regulations 5
PPE applicable to Information and training with regards to PPE	Hazardous Chemical Substances Regulations 3
PPE applicable to respirator zones	Hazardous Chemical Substances Regulations 8 and Lead Regulations 9
PPE and facilities applicable in terms of Hazardous Chemical Substances	OHSA Hazardous Chemical Substances Regulations 11
PPE and Facilities in terms of exposure to lead	OHSA Lead Regulations 12
PPE applicable to exposure to noise	OHSA Noise-induced hearing Loss regulations 3, 5 and 12, Mineral Act Regulation 4.17.3
PPE applicable when working with Hazardous Biological Agents	OHSA Regulations for Hazardous Biological Agents 4
Issuing of PPE	Minerals Regulations 4.17.3 and 4.17.4
Disposal of PPE	National Environmental Management: Waste Act, No. (Act 59 of 2008).Section 16

4. DEFINITIONS AND ABBREVIATIONS

Definitions and terms used in this SOP may be interpreted to have the following meaning (Table 2).

4.1 Definitions

Definition	Meaning
PPE	Safety Devices or safeguards worn or held by an individual to protect them against one or more environmental hazards (EEC Commission 2006:6). Includes all equipment designed to provide protection to the wearer from potential hazards to the eyes, face, hands, head, feet, ears, and extremities. As further defined in the General Safety Regulations Section 2 (3) (a) to (e).

Definition	Meaning
Eye/Face Protection	Equipment designed to provide protection to the face and eyes during exposure to such hazards as flying particles, molten metal or sparks, liquid chemicals, acids or caustic liquids, or potentially injurious light radiation (i.e., lasers, welding, etc.) including the transference of droplets due to close human to human contact.
Foot Protection	Equipment designed to provide protection to the feet and toes during exposure to situations with the potential for foot injuries such as falling or rolling objects, chemical or liquid exposures, piercing objects through the sole or uppers, and/or where the employee's feet are exposed to electrical hazards.
Hand Protection	Equipment designed to provide protection to the hands during exposures to potential hazards such as sharp objects, abrasive surfaces, temperature extremes and chemical contact. Hand protection is selected based upon the hazard and performance characteristics of the gloves.
Hazard/Risk Assessment	The process utilized to identify hazards in the workplace and to select the appropriate Personal Protective Equipment to guard people against potential hazards.
Head Protection	Equipment designed to provide protection to the head during exposure to potential hazards such as falling objects, striking against low hanging objects, or electrical hazards.
Hearing Protection	Equipment designed to provide protection to an individual's hearing during exposure to high noise levels which are equal to or exceeds 85dB (A).
Respiratory Protection	Equipment designed to provide protection to the wearer from potential inhalation hazards such as vapours, mists, particulates, and gases.
Chemical Protection	This is PPE designed to provide protection against contact with hazardous chemical substances.
Heat and Flame Protection	This is PPE designed to provide protection against radiant heat, flames, molten metal etc.
Flame Resistant Clothing	Clothing made of a material that, due to its inherent properties or as a result of treatment by a flame retardant, will slow, terminate or prevent flaming combustion.

Definition	Meaning
Fall Arrest Equipment	Equipment used to arrest the person in a fall from an elevated position, including personal equipment, body harness, lanyards, deceleration devices, lifelines or similar equipment, but excludes body belts.
Noise-rating Limit	Means the value of the 8-hour rating level, 85 dB (A) at and above which hearing impairment is likely to result.
Respirator Zone	Means an area where the concentration of an airborne hazardous chemical substance exceeds the recommended limit for that substance.
Attenuation	Means the proven capability of hearing protectors to reduce the equivalent noise level to which the wearer thereof is exposed.
dB (A)	A unit of measurement of sound pressure level.
Noise Zone	Means an area where the equivalent noise level is equal to or exceeds 85 dB (A).
Suspended Platform	Means a working platform suspended from supports by means of one or more separate ropes from each support.

4.2 Abbreviations

- PPE – Personal Protective Equipment
- SOP- Standard Operating Procedures
- OHSA – Occupational Health & Safety Act
- DB – Decibel
- EEC - European Economic Community
- EN – European Standards
- EC – European Commission
- EU – European Union
- SABS – South African Bureau of Standards
- CE – European Conformity Mark
- SANS – South African National Standards
- ISO – International Organisation for Standardisaton

5. PROCEDURE

5.1 Role of PPE

In keeping with the "Zero Injury" vision and the "Duty of Care" principles, TPT will continuously evaluate the risk associated with its processes, machines and materials and ensure that effective controls to mitigate them are in place and effective. In doing so, it will provide the necessary skill

to ensure that all employees are aware and educated to identify the risk associated with their tasks and the correct way to implement controls to reduce it. The application of the Hierarchy of Controls given below will be the governing approach to risk management.

5.2 Hierarchy of Risk Controls

Risk and hazard assessment will be conducted at all levels of the business. The operational risk management methodology as per Transnet Integrated Management System Operational Risk Management Procedure for addressing controls will remain the same throughout the business. This approach is spelled out in the graph below. PPE will be the last means of control.

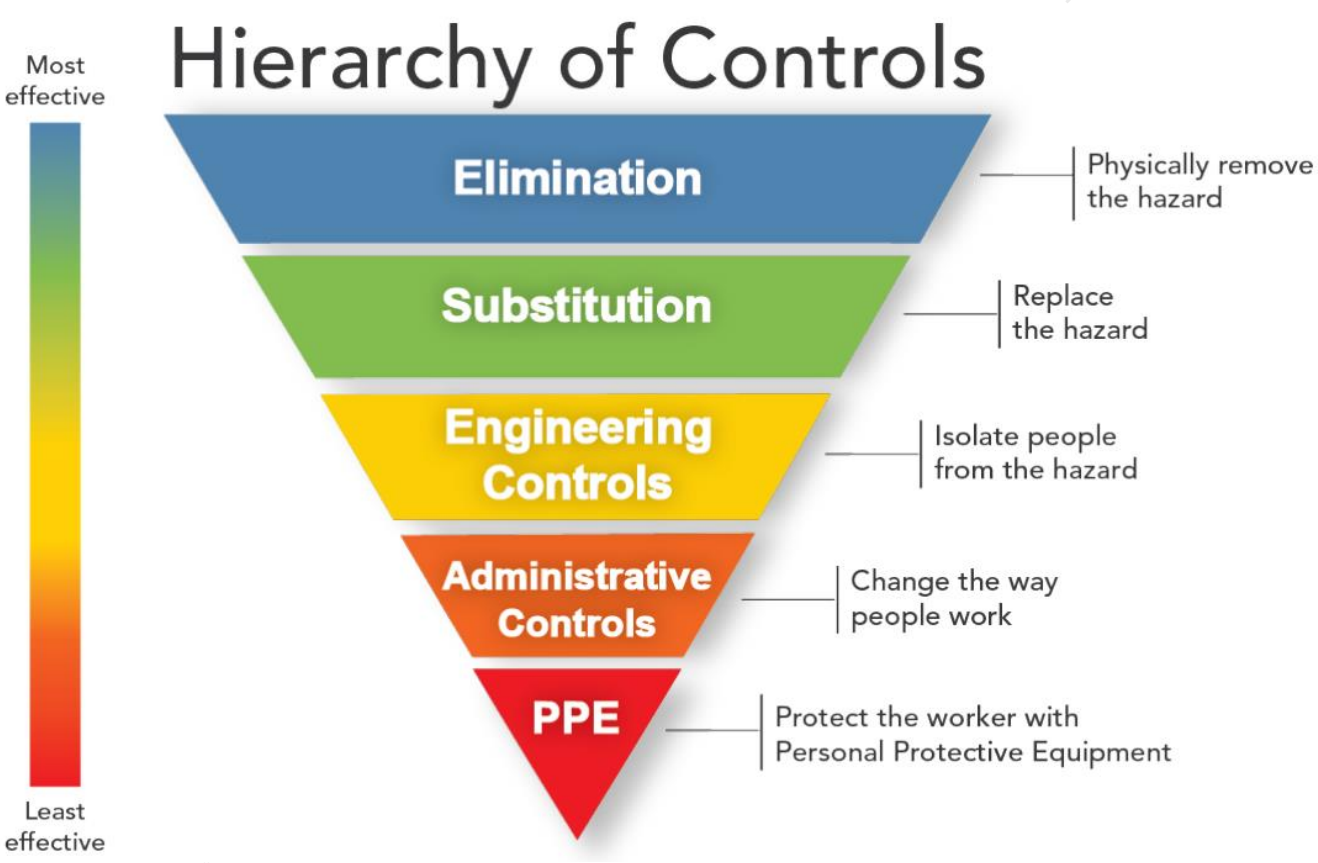

Figure 1

Table 3

Preference	Controls	Examples
1	Eliminate	Removing the hazard, e.g. taking a hazardous piece of equipment out of service.
2	Substitute	Replacing a hazardous substance or process with a less hazardous one, e.g. substituting a hazardous substance with a non-hazardous substance.
3	Isolation	Restricting access to plant and equipment or in the case of substances locking them away under strict controls.
4	Engineering	Redesign a process or piece of equipment to make it less hazardous. Isolating the hazard from the person at risk, e.g. using a guard or barrier, dampening or isolation noisy equipment, improving lighting and implementing at-source ventilation
5	Administrative	Adopting standard operating procedures (SOPs) or safe work practices or providing appropriate training, instruction or information.
6	Personal Protective Equipment	This is recognised as the least effective control. Provision and use of personal protective equipment could include using gloves, glasses, earmuffs, aprons, safety footwear, and dust masks.

5.3 Categories of PPE

PPE is divided into categories which are driven by the kind of risk one is being protected from.

5.3.1 Category 1 - Simple PPE

This category is designed to protect people from minimal risks. These include:

- Superficial mechanical injury
- Contact with cleaning materials of weak action or prolonged contact with water
- Contact with hot surfaces not exceeding 50°C
- Damage to the eyes due to exposure to sunlight (other than during observation of the sun)
- Atmospheric conditions that are not of an extreme nature

5.3.2 Category 2 - Intermediate PPE

This category covers risks other than those defined by neither Category 1 nor Category 3. This includes but is not limited to:

- All equipment protecting hearing (whether worn in or over the ear)
- All eye protectors and filters
- All helmets

- All items of clothing and/or accessories (whether or not detachable) designed and manufactured to provide specific protection
- All equipment and/or accessories (whether or not detachable) designed and manufactured specifically to protect the foot and/or the leg and to provide anti slip protection
- All equipment and/or accessories (whether or not detachable) designed and manufactured specifically to protect the arm and/or the hand
- Protective equipment (such as garments, etc.) against static electricity
- All PPE designed and manufactured to protect the wearer against vibrations

5.3.3 Category 3 – This is complex PPE

This category is designed to protect people from risks that may cause very serious consequences such as death or irreversible damage to health. It aims to protect against the following risks:

- Substances and mixtures which are hazardous to health
- Atmospheres with oxygen deficiency
- Ionising radiation
- High-temperature environments the effects of which are comparable to those of an air temperature of at least 100°C
- Low-temperature environments the effects of which are comparable to those of an air temperature of -50°C or less
- Falling from a height
- Electric shock and live working
- Harmful biological agents
- Drowning
- Harmful noise

5.4 Standards applicable to PPE Selection and Supply

The use of European (EN) Standards is not compulsory, many countries use it as a means to provide evidence that the PPE complies with the essential requirements of the EC Directive and to provide proof that it conforms to one or more of these standards. The specific regulation is iterated below.

Regulation (EU) 2016/425 on personal protective equipment (herewith referred to as 'the Regulation') was published in the Official Journal of the European Union of 31 March 2016 and entered into force on the 20th of April 2016**.**

Regulation will be fully applicable from 21 April 2018, with the exception of Articles 20 to 36, on notification of conformity assessment bodies, and of Article 44, on Committee procedure, which apply from October 2016. In addition, Article 45 (1) on penalties applies from 21 March 2018**.**

5.4.1 Compliance of PPE with the new Regulation

As from 21 April 2019, all personal protective equipment placed on the market shall comply with the requirements of the PPE Regulation, being accompanied by the EU declaration of conformity (Article 15, Annex IX) and instructions for use as foreseen under Annex II, point 1.4, based, for category II and III products, on the EU type-examination certificate (Annex V) and, when applicable, on quality assurance approval decisions in accordance with the relevant conformity assessment procedures (Article 19, Annexes V, VII and VIII).

As a general rule, PPE may be placed on the market after the full applicability of the PPE Regulation (21 April 2019) on the basis of an EC type-examination certificate and/or an approval decision in accordance with the PPE Directive, until 21 April 2023. After that date, the validity of the certificate/approval decision expires in any case and a new certificate/approval decision in accordance with the Regulation is needed.

5.4.2 Incorporating EN and SABS Standardised PPE within TPT

Where possible, PPE acquired for use within TPT will conform to the relevant EN and SABS standards and will be accompanied by the necessary CE and SABS certification documentation.

CE Marking

The CE marking affixed to PPE should be as follows:

SABS Marking

The SABS marking affixed to PPE should be as follows:

5.5 PPE Technical Documentation to be supplied by the manufacturers

This documentation must comprise all relevant data regarding the means used by the manufacturer to ensure that a PPE product complies with the Basic Requirements relating to it.

In the case of all PPE categories, the documentation must contain in particular:

The manufacturer's **Technical File** which shall consist of:

- Overall and detailed plans of the PPE, accompanied, where appropriate, by calculation notes and the results of prototype tests in so far as necessary for the verification of compliance with the Basic Requirements, and; -
- An exhaustive list of the Basic Requirements and of the harmonized standards or other technical specifications, taking into account in the design of the model.
- A description of the control and test facilities used in the manufacturer's plant to check compliance of PPE with the harmonized standards, or other specifications, and to maintain quality level.

5.6 Employer Responsibility

During the sourcing process, the responsibility to verify and confirm that the sourced PPE is accompanied by documentation in the form of a Technical Specification to prove that it complies with requirements will remain with the end user and/or line management. This is in line with the requirements of section 8 of the OHS Act.

5.7 PPE Compliance Technical Specification to be adhered to by end users

The Technical Specification guidelines will be adhered to by all users of PPE within TPT, in particular the aspects of:

- Instructions for use.
- Limits to use.
- Instructions for storage.
- Instructions for cleaning/maintenance.

The Stores personnel should be knowledgeable regarding the requirements of the technical specifications and ensure that all PPE they receive is accompanied by the relevant paperwork as proof of compliance.

Supervisors should be knowledgeable of the technical specifications of the PPE that is issued to employees in their care and that all adhere to these specifications.

SHEQ Officers should be knowledgeable of the technical specifications of the PPE issued to employees and should develop and present safety-training sessions to cover these aspects. They

are responsible for monitoring compliance to ensure that all the other parties are holding to their end of the requirement.

5.8 *Standards applicable to PPE*

All PPE products purchased will conform to either ISO standards, European Union (EN) standards and where applicable, equivalent South African National Standards (SANS).

In this manner, the quality of PPE products will be guaranteed by means of conformity assessment bodies (testing, certification and inspection laboratories). The list of standards for specific groups of PPE is shown in table 2; note that this may not be exhaustive.

Table 4

Category of Protection	EN Standard No.	Description	Other Standards
Head Protection	EN 397	Specification for industrial safety helmets	ISO 3873 ANSI Z89.1 SANS 1397
	EN 812-A1	Specification for industrial bump caps	
	EN 14052	Specification for high performance industrial helmets	
	N/A	Specification for protection against the sun (sun brim, over existing head protection)	UV 801
	EN 1078	Specification for cyclists helmets	
	N/A	Specification for motorcycle helmets	SANS VC8016:1984
	EN-ISO 11612	Specification for flame resistant head protection	
	EN 50365	Specification for electrically insulating helmets for use on low voltage installations	ANSI Z89.2
	EN 470-1	Specification for skull & neck protection on welding/allied processes	
	EN 1149-5	Specification for anti-static head protection	
	EN 467	Specification for chemical head protection	
	EN 465	Specification for chemical head protection with spray-tight connections	
	EN 14605	Specification for chemical head protection with permeation resistance	
Eye Protection	EN 166	Specification for personal eye protection	ANSI Z87.1
	EN 169	Specification for filters used in eye protection for welding & related techniques	SANS 50169

Category of Protection	EN Standard No.	Description	Other Standards
	EN 170	Specification for ultra violet filters	
	EN 171	Specification for infrared filters	
	EN 172	Specification for sun-glare filters for industrial use	
	EN 175	Specification for equipment for eye, face & neck protection during welding/allied processes	SANS 1400
	EN 207	Specification for laser radiation filters	
	EN 208	Specification for eye protection equipment on laser adjustment work	
	EN 379	Specification personal eye protection for automatic welding filters	
	EN 1731	Specifications for mesh-type eye/face protectors against mechanical hazards & heat	
Ear/Hearing Protection	EN 352-1	Specification for ear muffs	
	EN 352-2	Specification for ear plugs	
	EN 352-3	Specification for ear muffs attached to safety helmets	
	EN 352-4	Specification for level-dependent ear muffs	
	EN 352-5	Specification for active noise reduction ear muffs	
	EN 352-7	Specification for level dependent ear plugs	
	EN 458	Recommendations on the selection, use, care & maintenance of hearing protectors	
Respiratory Protection	EN 136	Specifications for full face masks	SANS 50136
	EN 137	Specifications for self-contained open-circuit compressed air breathing apparatus with full face mask	SANS 50137
	EN 138	Specifications for fresh air hose & mask/mouthpiece	SANS 50138
	EN 139	Specifications for Compressed air line & mask/mouthpiece	SANS 50139
	EN 140	Specifications for half masks & quarter masks	SANS 50140
	EN 143	Specifications for particle filters	SANS 50143
	EN 145	Specifications for self-contained closed-circuit breathing apparatus (compressed oxygen or oxygen-nitrogen)	SANS 50145
	EN 149	Specifications for filtering half-masks against particles	SANS 50149

Category of Protection	EN Standard No.	Description	Other Standards
	EN 269	Specification for powered fresh air hose with hood	
	EN 405	Specifications for valve filtering half masks against gas or particles	SANS 50405
	EN 1827	Specifications for filtering half mask without inhalation valves (with separable filters against gas or particles)	
	EN 12083	Specification for filters with breathing hoses (non-mask mounted filters)	
	EN 12941	Specifications for powered filtering devices with helmet/hood	
	EN 12942	Specification for powered filtering device with full, half or quarter mask	
	EN 14387	Specification for filters - gas and combined	
	EN 14435	Specifications for self-contained open circuit compressed air breathing apparatus with half-mask designed to be used with positive pressure only	
	EN 14593-2	Specification for compressed air line BA with demand valve - half mask	
	EN 14593-1	Specifications for compressed air line BA with demand valve - full mask	
	EN 14594	Specification for continuous flow compressed air line BA	
	EN 402	Lung governed demand self-contained open-circuit compressed air BA with full face mask or mouthpiece (for escape)	
	EN 13794	Specification for self-contained closed-circuit breathing apparatus for escape	DIN 58647-7
	N/A	Specification for respiratory protective devices for use against chemical, biological, radiological and nuclear (CBRN) agents; negative pressure air purifying devices with a full face mask	BS 8468-2
Hand Protection	EN 420	General requirements for gloves	
	EN 381-7	Specifications for protective gloves for chainsaws	
	EN 388	Specifications for protective gloves against mechanical risks (abrasion, cutting, etc.)	
	EN 407	Specifications for protective gloves against thermal risk (heat and/or fire)	
	EN 421	Specifications for protective gloves against ionizing radiation/radioactive contamination	
	EN 511	Specifications for protective gloves against cold	
	EN 659	Specifications for protective gloves for fire fighters	

Category of Protection	EN Standard No.	Description	Other Standards
	EN 374-1	Specifications for protective gloves against chemicals and micro organisms	SANS 416
	EN 12477	Protective gloves for welders	
	EN 10819	Gloves for vibration & impact of mechanical origins	
	EN 60903	Specifications for gloves of insulating material for live working	
	EN 60984	Specification for sleeves of insulating material for live working	
	EN 1082-1	Specification for gloves and arm guards protecting against cuts and stabs by hand knives, chain mail gloves and arm guards	
	EN 1082-2	Specification for gloves and arm guards made of material other than chain mail	
	EN 14328	Specification for gloves and armguards protecting against cuts by powered knives	
	EN 1149	Specification for gloves with anti-static properties	
General Protection	EN 342	Protection against cold (more than -5°C).	
	EN 343	Protection against foul weather	
	EN 381-11	Specifies the requirements for upper body protectors	
	EN 381-9	Specifies the requirements for protective gaiters	
	EN 381-7	Specifies the requirements for protective gloves	
	EN 381-5	Specifies the requirements for leg protectors	
	EN 381	Protection for users of hand-held chainsaws	
	EN 381	Protection for users of hand-held chainsaws	
	EN 412	Protection aprons against hand knives	
	EN 471	Protection against low-visibility hazards (High visibility, warning clothing)	SANS 50471
	EN 510	Protection against entanglement in moving parts	
	EN 1073-1	Protection against radioactive contamination	
	EN 1149-1	Protection against electrostatic discharge to avoid incendiary	
	EN 14058	Garments for protection against cool environments	

Category of Protection	EN Standard No.	Description	Other Standards
Heat and Flame Protection	EN 469	Protection for fire fighters	
	EN 470-1	Protection clothing for use in welding, grinding and cutting	
	EN 531	Protection clothing for industrial workers exposed to heat (includes molten metal splash in foundries - levels D (Alum) & E (Iron).	
	EN 533	Protection against limited flame spread - limited materials	
	EN 1486	Fire-fighting specialised clothing	
Chemical Protection	EN 465	Liquid chemicals (spray-tight) Type 4 equipment	
	EN 466	Liquid chemicals (liquid-tight) Type 3 equipment	
	EN 467	Liquid chemicals (partial body e.g. Apron, sleeves & hoods)	
	prEN 943-1	Liquid and gaseous chemicals Type 1 (gas-tight) + Type 2 (non-gas-tight)	
	prEN 1511	Liquid chemicals for limited life/use (liquid-tight) Type 3 equipment	
	prEN 1512	Liquid chemicals for limited life/use (spray-tight) Type 4 equipment	
	prEN 1513	Liquid chemicals for limited life/use (partial body)	
	prEN 13034	Liquid chemicals for limited performance/re-usable Type 6	
	prEN 13982-2	Partial-tight limited life/re-usable Type 5 against solid particles	
	EN 14126	Protective Clothing against infective agents	
	EN 14605	Protective clothing against liquid chemicals	
		Footwear and gaiters for use in molten metal foundries	BS 4676
	EN 344-2	Additional requirements for protection against water, cut resistance & metatarsal protection	
Foot Protection	EN 344-1	Requirements & tests methods for safety footwear	
	EN 345-2	Additional requirements for protection against water, cut resistance & metatarsal protection	EN ISO 20345
	EN 345-1	Additional requirements for protection against IMPACT at 200J	EN ISO 20345
	EN 346-2	Additional requirements for protection against water, cut resistance & metatarsal protection	EN ISO 20346
	EN 346-1	Additional requirements for protection against IMPACT at 100J	EN ISO 20346

Category of Protection	EN Standard No.	Description	Other Standards
	EN 347-2	Additional requirements for protection against water	EN ISO 20347
	EN 347-1	Occupational footwear without safety toecaps	EN ISO 20347
	EN 349	Footwear protecting against molten metal splash	EN ISO 20349
	EN 381	Protection against hand-held chain saws	
	prEN 13287	Slip resistance specifications for footwear	
	EN 14404	Specifications for knee protectors for work in the kneeling position	
	EN 15090	Footwear for fire fighters	
	EN 17249	Specifications for safety foot wear with resistance to chainsaw cutting	
	EN 50321	Specifications for electrically insulated footwear for working on low voltage installations	
	EN 341	Personal protective equipment from falls from heights – descender devices	SANS 50341
	EN 353-2	Specifications for guided type fall arrestors on a flexible anchorage line	SANS 50353-2
Fall Arrest Protection	EN 353-1	Specifications for guided type fall arrestors on a rigid anchorage line	SANS 50353-1
	EN 354	Specifications for lanyards	SANS 50354
	EN 355	Specifications for Energy absorbers	SANS 50355
	EN 358	Specifications for Work positioning systems-belts and lanyards	SANS 50358
	EN 360	Specifications for retractable type fall arrestors	SANS 50360
	EN 361	Full body harness	SANS 50361
	EN 362	Specifications for Connector	SANS 50362
	EN 363	Personal Fall protection systems	
	EN 364	Test method for fall arrest equipment	
	EN 365	General requirements for the instructions for use and the marking	
	EN 795	Anchorage devices	
	EN 813	Specifications for sit harness	
	EN 1891	Specifications for low stretch kernmantle ropes	

Category of Protection	EN Standard No.	Description	Other Standards
	EN 12841	Specifications for rope adjustment devices	

5.9 Labelling of PPE Products

It is important that all EN Specified PPE be labelled with the correct labels. These labels typically display the following information regarding an item of PPE:

- Manufacturer
- Performance class
- Size
- Style Number
- Care instruction
- Relevant EN standard and Pictogram
- Supplier examination number
- Composition of the material
- Body measurements
- Code for internal traceability

5.10 Stores Function

Stores controllers must ensure that they are knowledgeable with the contents displayed on these labels and inform all recipients of these contents before issuing the PPE.

An example of such a label is shown in figure 2 below.

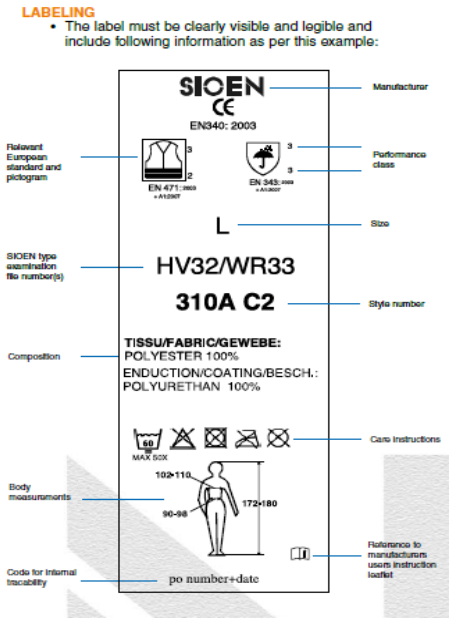

Figure 2

5.11 Managing PPE

The management of PPE within TPT will be the overall responsibility of the Stores function together with line management.

The scope of management of PPE within TPT will cover the following areas:

- Conducting a PPE needs analysis will be done by Risk or SHEQ Officers
- Compiling PPE profiles will be conducted by Head of Departments with the assistance of Health/Wellness Officer/Manager
- Wearing of PPE
- Limitations of PPE
- Inspecting PPE
- Caring and storage of PPE
- Replacing PPE
- Disposal of PPE
- Providing PPE training will be conducted by responsible supervisors

5.12 Conducting a PPE needs analysis

The purpose of conducting a PPE needs analysis is to identify suitable PPE to provide protection against identified hazards and to gain the information necessary to develop PPE profiles.

The PPE Needs analysis process steps are shown in **figure 3 below:**

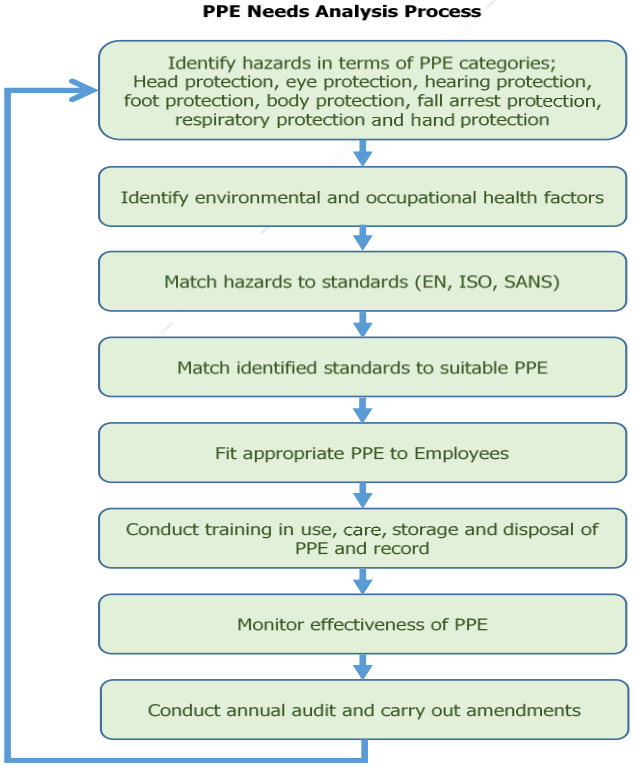

Figure 3

A PPE needs analysis must comply with the following criteria:

- It must be conducted at least annually or whenever new work processes are introduced that present new hazards within the workplace.
- It will be coordinated and managed by the responsible terminal SHEQ Officer.
- It must be conducted by persons knowledgeable with the areas that are being surveyed.
- All categories of protection must be surveyed.
- The "Hazard identification and personal protective equipment selection form" (Annexure 1) must be used for this purpose.
- The results of this analysis will be forwarded to SHE/Risk Manager for consolidation.

5.13 Compiling PPE profiles

Head of departments and line Management will be responsible for the compilation and updating of PPE profiles.

The results of the PPE needs analysis will be consolidated by SHE/Risk Manager and this information used to compile PPE profiles.

The "PPE profile per Occupation" form **(Annexure 2)** will be used for profiling purposes. TPT Risk and Health Department HQ will approve all PPE profiles developed by the various terminals before implementation.

5.14 Introducing PPE to employees

Employees must be involved in the selection of specific models of PPE. This assistance in selection will be carried out by means of introducing approved models into the workplace for trials in which workers have the opportunity to evaluate various models. The trials will be done based on employee surveys results for PPE and complaints received. Based on this information, it will be decided to either follow the Request for Information ('RFI") process or procuring certain PPE as indicated by employees on the survey results. The employee surveys will be conducted on the annual basis and this will be taken into consideration on the following issue or when entering into a new contract.

In this way, much information regarding fit, comfort, and worker acceptability will be gained. When choosing PPE, workers should select among two or three models, allowing for personal preferences. PPE should be individually assigned.

5.15 Issuing of PPE

- The Stores Function will be solely accountable and responsible for the issuing process and including a system of recording of all issued PPE to employees or any other persons.
- The PPE will be issued to employees on an annual basis as per the category or level of occupational exposure utilizing the methodology indicated in **Annexure 3.**
- Line Management will be responsible for ensuring that PPE issued to employees will provide sufficient protection against identified hazards and risks.
- PPE will be issued to employees free of charge.
- All PPE issued to Employees will be recorded by means of a PPE Issue Record (Electronic or paper-based) managed by the Stores Function as per **Annexure 4.**
- Copies of these completed records must also be placed on the Employee's personal record for traceability.
- The returning of PPE for replacement must also be recorded on **Annexure 4**.
- Visitors to designated areas must be informed in advance of the PPE requirements for the area/section/terminal to be visited and where this could not be done due to urgency or emergency situation; it is the responsibility of the Project Manager or Area/Section Manager to provide the required PPE utilizing their cost centre. The PPE that would have been provided to visitors will have to be returned to the relevant Project Manager and/or Area/Section Manager.
- Employees will be prohibited from commencing work without the required or appropriate PPE. They will be considered as exhibiting non-compliance towards their legal duty and will be dealt in accordance with the company's disciplinary procedures in this regard.

5.15.1 Process for issuing of Special Safety Boots

Employees requiring special safety boots needs to do the following:

- Consult with the Podiatrist at their own cost to determine the medical condition that requires the special medical shoe.
- Obtain a letter from the Podiatrist detailing the medical condition and recommendations for special medical shoe should be handed to the onsite clinic for consideration by the Occupational Medical Practitioner and further recommendations.
- The employee shall ensure that the EAP manager receives the letter as recommended by OMP makes necessary follow up on the arrival of the shoes.
- The Occupational Medical Practitioner should assess the medical condition presented by employee as per the Podiatrist recommendations and make the necessary recommendations

for the attention of the employer. Further communicate the recommendations with the employer through the onsite clinic process.

- The Employee Assistance Program Manager will receive the letter from the clinic for noting and further communication and communicate the letter to the employee's line management and Supply Chain through Stores Function to kick start the process of procuring the safety boots as per the specifications based on the recommendations letter.
- The Stores Function should keep a copy of the recommendations letter on the employee's file. Once the procured and received, the Stores Function will issue the special boots to the respective employee and ensure that **Annexure 4** is completed.
- The Stores function, Clinic and EAP/Health Managers should keep a register of all issued special boots for record keeping and monitoring.

5.16 Wearing of PPE

- Employees shall carry out their responsibility regarding PPE as stated in the OHS Act Section 14. This responsibility will be included in employees' letters of appointment and job descriptions. Failure of employees to adhere to this legal requirement amounts to a criminal offence in terms of the OHS Act.
- Supervisors will monitor that employees are wearing PPE that is suitable for the task allocated and in a correct manner on a daily basis, in order to meet the legal requirements stated in the OHS Act.
- Areas where PPE is required to be worn, must be designated and the appropriate mandatory signs in accordance with SANS 1186-1 symbolic safety signs, displayed in a prominent manner.
- Management and supervisors must wear the appropriate PPE at all times on operational areas where the PPE signage has been designated.
- All Employees will wear the appropriate PPE at all times in the correct manner within their places of work.
- Employees will inform their Supervisors before commencement of work of any underlying medical condition that may affect their ability to wear or use PPE.
- Employees, who do not conform to the wearing of PPE after having been reminded and corrected, will be subject to the company's disciplinary procedure.
- All visitors must be trained in the correct wearing of PPE and must wear the appropriate PPE when entering a place of work. This PPE will be checked and/or issued by TPT as part of the induction training of visitors.

5.17 Limitations of PPE

The wearing of PPE will only be considered as a last option after considering all the other controls in the risk hierarchy.

PPE presents the following limitations:

- PPE may be uncomfortable to wear and may interfere with the execution of tasks.
- Dust and gas masks may make clear voice communication difficult.
- PPE identified to be worn must be properly sized for each individual employee in order to provide maximum protection.
- PPE must be regularly inspected and maintained in good condition to be effective.
- In the case of respirators and/or dust filters, these must only be worn for the period that they remain effective, taking the toxicity levels of the workplace into account.
- Dust and gas masks will only be effective if correctly fitted and if they provide a proper seal.
- Dust and gas masks are not suitable for wearing by men with unshaven beards, beards or moustaches as these prohibit a secure air tight seal between face and mask.
- Glasses must not be worn inside a face-piece unless they are specially designed for the purpose, as the ear pieces will prevent a good seal.
- Face pieces are also unsuitable for people who wear contact lenses. Workers who wear glasses or contact lenses should be supplied with air-supplied hoods or helmets.
- PPE provides no protection for those nearby, if they are not also wearing PPE.

5.18 Inspecting PPE

- Users of PPE will inspect their PPE on a daily basis before using it for the day. The inspection criteria prescribed by the manufacturer will be used during this inspection.
- All deficiencies identified regarding PPE will be reported immediately to the responsible Supervisor. Where these deficiencies render the PPE unsafe for use, it must be replaced immediately and the replacement recorded on the PPE issue record.
- PPE will also be inspected by Health and Safety Representatives as part of their monthly inspection routine.

5.19 Caring and storage of PPE

Proper care of PPE is the responsibility of every user thereof:

TPT will provide the following facilities as a means of assisting employees in the caring of their PPE:

- Facilities for the cleaning of PPE as required, e.g. laundering of contaminated overalls.

- Sanitation facilities for items that may need to be shared, e.g. safety boots for Contractors or visitors. The sanitation may be performed on site or at an off-site facility.
- Clean, dry storage areas free from any contamination, for PPE when not in use.
- Clean lockers for storing personal clothes and PPE in cases where Employees need to change into PPE at work.
- All users of PPE will be trained in the caring of PPE and will be responsible for the care and storage thereof.
- All PPE issued to short-term contractors or visitors will be sanitized before being reissued.
- When caring for PPE, the manufacturer's instructions will be followed.
- No user of PPE will repair or replace any item of PPE, unless properly trained and authorized to do so.

Annexure 5 provides guidance in the inspecting, caring and storage of PPE.

5.20 Evaluating effectiveness of issued PPE

The effectiveness of the PPE issued to employees will be evaluated on an on-going basis. This evaluation will include the effectiveness in providing the required protection against workplace hazards, as well as the degree in which employees find the wearing of PPE to be to be comfortable enough.

5.21 Consider physical comfort of PPE (ergonomics)

If a PPE device is unnecessarily heavy or poorly fitted, it is unlikely that it will be worn. Note also that if a PPE device is unattractive or uncomfortable, or there is no allowance for workers to choose among models, compliance is likely to be poor. When several forms of PPE are worn together, interactions must be kept in mind. Use every opportunity to provide flexibility in the choice of PPE as long as it meets required legislation and standards.

5.22 Evaluate cost considerations

The cost of PPE is often a concern. Some programs use disposable respirators because they appear to be inexpensive. However when the use is evaluated over time, it is possible that a dual cartridge respirator would be more economical. Engineering controls might prove an even more cost effective solution in the long term and should be considered before PPE.

5.23 Review standards

Performance requirements of all standards must be reviewed to ensure that exposure to injury will be minimized or eliminated by using PPE. If PPE is exposed to hazards greater than those for which it is designed, it will not deliver adequate protection.

5.24 Check the fit

- When the selection has been made, the "fitting" component should be put in place. The key is to fit each worker with PPE on an individual basis. At the time of fitting, show each worker how to wear and maintain PPE properly.
- Individual fitting programs should be carried out by qualified personnel. For example, for eye protection this qualified person could be an optometrist, an optician, a manufacturers' representative or a specially trained staff member, such as a nurse.
- When safety glasses sit halfway down the nose, protection from the hazard of flying particles is reduced, sometimes to the point where no protection is given. The calculated degree of protection will not be achieved in practice unless the PPE is worn properly at all times when the worker is at risk.

5.25 Replacement of PPE

5.25.1 Replacement of PPE due to sub-standard

In the case where employees complain about sub-standard PPE in terms of its comfort, effectiveness or durability, this feedback should be channeled to the Stores, Risk and SHEQ Managers as persons responsible for the selection and purchasing of PPE for the workplace.

Sub-standard PPE does not provide sufficient protection to employees and must be returned and replaced as soon as possible. These complaints should then be investigated following a Transnet Integrated Management System Occurrence and Non-Conformance Procedure 013 and a decision made on whether the claim/complaints are valid or not.

If the decision is made to replace the problematic PPE, a needs analysis should be conducted to determine the exact needs for specific PPE for a workplace.

Replacement PPE should now be sourced. It is important that the various specifications for PPE be investigated when carrying out this step.

Where a decision has been made to replace a category of PPE, e.g. safety shoes, this should be done for all the employees involved, so that none should have to continue to wear substandard PPE, with its inherent risks.

A replacement process is shown in **figure 4**.

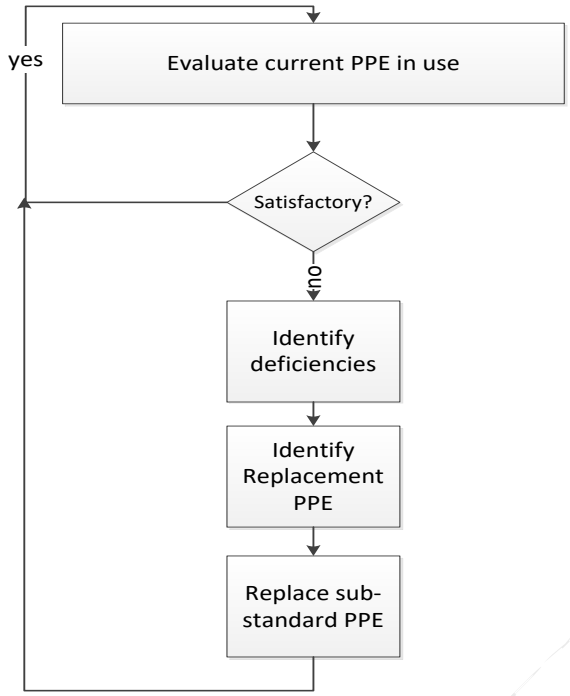

Figure 4

5.25.2 Replacement to Lost/Misplaced of PPE

In the case where PPE has been lost any occurrence report in terms of the Occurrence and Non-conformance Management Procedure 013needs to be completed by the employee and handed to the Supervisor in order to be filed with the stores.

An occurrence will then be investigated by the supervisor and other relevant parties in order to determine the circumstances around the occurrence. Based on the outcome of the investigation, a decision will be made on whether the allegations are valid or not. Valid meaning the employee has done his/her utmost best to care, safe keep the PPE item/s and it was not due to employee fault or negligence that resulted in the item being lost. Not valid meaning an investigation outcome indicates that the loss of the PPE item was due to employee's fault or negligence.

Should the decision be that the complaint is valid, the PPE item will be replaced and the PPE Issue Record will have to be completed.

Should the decision be that the complaint is not valid, the employee will pay 50% contribution or excess towards the procurement of a new PPE item.

5.26 Disposal of PPE

The disposal methods for different categories of PPE are shown in table 4:

Table 5

Type of PPE	**Disposal Method**
Hard hats	General waste
Safety goggles and face shields	General waste
Hearing protectors, ear muffs	General waste
Variphones	Electronic waste
Dust masks	General waste
Respirator cartridges	Hazardous waste
Overalls (non-chemical use)	General waste
Overalls chemical use	Hazardous waste
Disposable wear (non-chemical use)	General waste
Disposable wear (chemical use)	Hazardous waste
Disposable wear (Biohazard use)	Hazardous waste
Disposable wear (Radiation exposure use)	Hazardous waste
High visibility clothing	General waste
Safety boots	General waste
Gloves (non-chemical or bacterial exposure)	General waste
Gloves (Chemical or bacterial exposure)	Hazardous waste

5.27 Providing PPE training

Supervisors with the assistance of SHEQ officers will be responsible for PPE training within their sections/area/departments in order to meet the legal requirements stated in OSH Act

Employees will be trained in the following aspects of PPE:

- The purpose of PPE
- The legal requirements for wearing PPE
- The correct type of PPE for each job application

- How to inspect PPE
- How to report defects in PPE identified during inspections
- The dangers of wearing defective PPE
- How to clean PPE
- The limitations of PPE
- How to size and fit PPE correctly
- How to wear PPE correctly
- How to store PPE correctly
- How to dispose of PPE correctly

PPE training/retraining will be presented in the following cases:

- Where Employees are not adhering to the guidelines for the correct wearing, caring and storing of PPE.
- On at least a six-monthly basis.
- For all new Employees or Contractors.
- Where there are changes in the workplace or changes in the types of PPE to be used which would render previous training obsolete.
- When retraining occurs, a PPE Training Record Sheet will also be completed.
  All PPE training provided as a result of the above will be recorded on the PPE Training Record Sheet **(Annexure 6)** and this will be filed on the employee's personal file.

5.28 Role players in implementing this SOP/buy in and support.

Top management including Terminal Managers and Head of Departments will act as champions in terms of the implementation of this SOP and will promote it to all levels of employers within TPT.
Middle management will actively engage themselves in ensuring the implementation of this SOP at all levels of Employees reporting under them.
Supervisors will ensure that the guidelines within this SOP are adhered to by Employees within their working areas on a daily basis.
Employees will be actively involved in the process of implementing this SOP on a consensual basis and their feedback on the successfulness or non-successfulness of aspects of this SOP will be sought and used as feedback to improve the SOP.

5.29 Developing Employee profiles

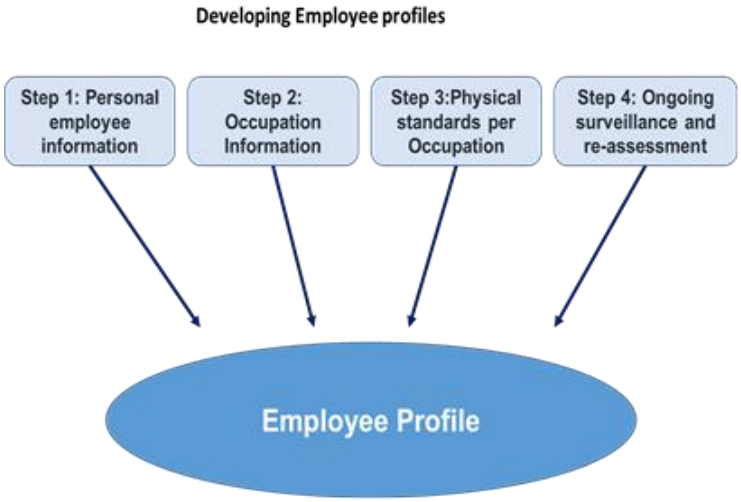

Figure 2

At the heart of an effective PPE SOP is the collection, management, maintenance and availability of employee information.

Employees are ultimately the end-users of PPE and a broad range of information is required to effectively integrate legislative requirements, safety and health requirements, cost control, usage compliance and the specific requirements of a particular occupation and/or employee activity.

To implement an effective PPE SOP the following information are required from all employees.

Step 1: Personal employee information

This refers to employee information in the HR department.

Step 2: Occupation Information

The different occupations within TPT are documented. These occupational templates are then applied to an individual employee, taking into account factors specific to them, such as work area conditions.

Step 3: Physical standards per Occupation

This refers to the occupation physical standards for a particular occupation. This has both an impact on what PPE is selected (limitations and ergonomic issues) and the record keeping of the employee's performance results. This info is therefore crucial for later occupation health management requirements. The objective of risk assessment is to see whether the current or planned arrangements are adequate in all circumstances.

Areas covered could include:

- Materials, (consideration given to: storage, use, handling, disposal, exposure)
- Machinery / Equipment, (consideration given to: start-up, use, shut-down, maintenance)
- Processes, (consideration given to: frequency, heat, cold, noise)
- People, (consideration given to: age, physical build, quantity, special needs, language)
- Premises, (consideration given to: location, access, egress, traffic routes, lighting)
- A risk assessment should look at all activities, not only production or processes, but anywhere where hazards may occur (i.e. offices, canteens, toilets etc.)

Step 4: Ongoing surveillance and re-assessment

Survey is used to gather information not available from either the HR department or the Occupation Templates. Further, surveys are useful in applying templates to specific employees. This also includes ongoing surveillance and re-assessment of programmes.

5.30 High level view of an Employee Profile

In the table 5 below, we outline a high-level view of what information the employee profile needs to contain.

Table 6

Class of Information	Detail Area
Employee Details	Employee personal information
	Identify employees with a first Aid Certificate And Competent To Administer First Aid
	Identify different Employee Unions and their Members
	Identify Safety Representatives, Supervisors Or Occupational Officers
	Record of Employee's Previous Employer's Details
Contact Information	The different contacts for the employee in case of a serious injury or hospitalization.
Medical Status	Identify pre-existing employee health conditions in case of compensation claims submitted.
	Verify employee compensation claims' validity
	Number and identity of hospitalized employees.
	Number and identity of employees booked off due to illness.

Class of Information	Detail Area
Workplace Information	Record of every occupation the employee was assigned to with a start and end date.
	Record of every workplace where the employee has worked with a start and end date.
Activities	Every activity related to the employee's occupation with a start and end date.
	Previous employee activities with end date.
Associated Risks	General and specific risks associated with the employee.
	General and specific hazards associated with the employee.
Incidents	Incidents associated with the employee.
Stock Profile	The employees' stock personal profile of personal protective equipment assigned to the employee.

An example of a Personal Employee information template is attached as **Annexure 7.**
An example of an Occupational Information Template is attached as **Annexure 8.**

5.31 Reviewing the use of PPE

5.31.1 Implementation and usage reports in terms of PPE

Implementation and consumption reports will be generated as part of the SAP Inventory Control System managed by the Stores Function. This should provide information to the company on among others:

- The frequency of issuing of each type PPE.
- The persons to whom PPE was issued.
- Where the frequency of issuing was exceeded.
- Costs of issuing PPE per person, plant/department, per organization.

5.31.2 Updating profiles and PPE products

An audit of all aspects of the PPE analysis process (figure 1) will be conducted annually. The results of this audit will indicate:

- The status of hazards, environmental and occupational health criteria.
- The status of PPE needs.

- The status of appropriate standards to meet the needs.
- The need for new/additional PPE.
- Training delivered.

Where the results of the audit indicate the need for amendments to SOP and process steps, these changes will be brought about, approved and implemented.

ANNEXURE 1- HAZARD IDENTIFICATION AND PERSONAL PROTECTIVE EQUIPMENT SELECTION

TPT-IMS-COR-ANN.009.009.1

Terminal	
Department/Section	
Job title	
Brief description of job	
Date of survey	

Head Protection

Types of possible hazards (Tick where applicable):

Suspended loads that could fall	
Overhead beams or loads that could be hit against	
Energized electrical wires or equipment that could be made contact with	
Sharp objects or corners at head level that could cause injury	
Having to crouch down under machines	
Bruises and cuts from impacts against physical objects in the work place	
Flying objects including objects swung from a crane or similar device or from explosions	
Abrasions and lacerations caused by minor bumps to the head	

Other hazards identified:

Other specific requirements (e.g. chinstrap, accessories to be mounted on hardhat etc., ventilation etc.)

Recommended PPE

Eye Protection

Types of possible hazards (Tick where applicable):

Chemical Splashes	
Metal Splashes	
Dust Particles	
Smoke and fumes	
Bio Aerosols	
Chemical Sprays	
Flying Objects: Low velocity	
Flying Objects Medium Velocity	
Flying Objects High Velocity	
Sparks	
Radiation from Welding	
Radiation: Infra-Red from furnaces	
Radiation Ultra Violet	
Radiation: Laser	
Exposure to Sunlight	
Electric arcs	

Other hazards identified:

E.g. Welding Fumes

Other specific requirements required

E.g. Scratch resistance, fog resistance, side shields

Recommended PPE

Respiratory Protection

Types of possible hazards (Tick where applicable):

Dusts with coarse solid particles, non-toxic e.g. calcium carbonate	
Solid and/or liquid aerosols that are hazardous or irritating, e.g. silica, sodium carbonate	
Toxic solid and/or liquid aerosols, e.g. beryllium, radio active particles	
Toxic gases, vapours, fumes	

Type of gas, vapour, fume

Toxicity level (ppm/mg/m$^{3)}$ measured

Other hazards identified:

Other specific requirements

Recommended PPE

Hearing Protection

Types of possible hazards (Tick where applicable):

Machinery noise	
Noise form Electric Furnaces	
Noise from overhead travelling cranes	
Noise from casting and rolling processes	
Noise from blast furnaces	
Noise from handling raw and product materials	

Other hazards identified:

Other specific requirements required

Recommended PPE

Foot Protection

Types of possible hazards (Tick where applicable):

Hot ground surfaces	
Heavy falling or rolling objects	
Crushing objects	
Sharp edges or points puncturing soles and injuring soles of feet	
Electrical shock from exposed electrical wires	
Unusually slippery conditions	
Contact with toxic or corrosive materials	
Exposure to oil and other lubricants	
Wet working conditions	
Danger of laceration	
Molten metal splashes	
Exposure to heat	

Other hazards identified:

Other specific requirements

E.g. anti-static qualities

Recommended PPE

Hand Protection

Types of possible hazards (Tick where applicable):

Exposures to sharp edges, splinters, etc.	
Exposure to chemicals	
Skin absorption of chemicals (permeation through the glove material)	
Exposure to extreme heat when handling products	
Exposure to radiant heat	
Exposure to welding, cutting flames	
Exposure to sparks	
Exposure to severe abrasions	
Exposure to tearing	
Exposure to cold	
Exposure to electric connectors	

Other hazards identified:

Specific criteria for gloves required (Tick most appropriate criteria on the scale indicated, where 1 is low, and 5 extremely high)

Heat and radiation	**1**	**2**	**3**	**4**	**5**
Degree of resistance to burning (flammability)					
Degree of resistance to contact heat					
Degree of resistance to the heat of a flame					
Degree of resistance against radiating heat					
Degree of resistance to a small amount of melting metal spray					
Degree of resistance to a large amount of melting metal spray					
Degree of soiling					
Degree of resistance against exposure to oil and other lubricants					
Mechanical Risk					
Degree of resistance against abrasion					
Degree of resistance against cutting by a sharp object					
Degree of resistance against being torn					
Degree of resistance against being punctured					

Other Specific Requirements

Additional Information

Types of Chemicals to which gloves will be exposed
Measured temperatures of floor surfaces, ambient air temperatures, radiant heat, temperatures of materials handled,

Recommended PPE

Body Protection

Types of possible hazards (Tick where applicable):

Exposure to heat and flame	
Exposure to heat radiation	
Exposure to chemicals	
Exposure to rain	
Exposure to electric arcs	
Exposure to dust	
Exposure to moving vehicles and equipment in low light conditions	

Other hazards identified:

Additional Information

Exposure temperatures
Types of dusts present
Radiation temperatures

Other specific requirements

E.g. anti-static qualities, must be disposable, reflective qualities of clothing etc.

Recommended PPE

Fall Arrest Protection

Types of possible hazards (Tick where applicable):

Working on suspended platforms	
Working on towers	
Working on equipment at heights	
Working on silos	
Working on conveyor systems at height	
Working on constructions at height	

Other hazards identified:

Other specific requirements

E.g. anti-static qualities, must be disposable

Recommended PPE

CERTIFICATION

I certify that this hazard identification and personal protective equipment selection process was conducted in accordance the provisions of the TPT PPE SOP.

Name: _____

Position: _____

Signature: _____

Date: _____

ANNEXURE 2: PPE PROFILE PER OCCUPATION

TPT-IMS-COR-FRM.009.009.2

Organization/Entity	
Division/Department	
Date	

Job Title	PPE Category	PPE Description and product name	EN Standard(s)	Issue Frequency	Costing

ANNEXURE 3: CATEGORIES OF OCCUPATIONS
TPT-IMS-COR-ANN.009.009.3

1. OPERATIONS OCCUPATIONS

Operations High Exposure Occupations	Hard Hats	2 Piece Overalls & T-shirts	Thermal Jacket & Pants	Safety Boots	Socks	Rain Suits	Reflector Vests
name of the occupation	1-1-1-1	4-2-2-4	1-0-0-1	1-1-1-1	4-4-4-4	1-0-0-1	1-0-0-1

Operations Medium Exposure Occupations	Hard Hats	Overalls	Safety Boots	Thermal Jacket & Pants	Socks	Rain Suits	Reflector Vests
Name of the occupation	1-0-1-0	2-0-2-0	1-0-1-0	1-0-0-1	4-4-4-4	1-0-0-1	1-0-0-1

Operations - Low Exposure Occupations	Hard Hats	2 Piece Overalls & T-shirt	Safety Boots	Thermal Jacket & Pants	Socks	Rain Suits	Reflector Vests
name of the occupation	1-0-1-0	0-0-0-0	1-0-0-1	1-0-0-1	4-4-4-4	1-0-0-1	1-0-0-1

2. TECHNICAL OCCUPATIONS

High Exposure Technical Occupations	Hard Hats	2 Piece Overalls & T-Shirts	Safety Boots	Thermal Jacket & Pants	Socks	Rain Suits	Reflector Vests
Name of the occupation	1-1-1-1	4-2-2-4	1-1-1-1	1-0-0-1	4-4-4-4	1-0-0-1	1-0-0-1

Medium to Low Exposure Occupations	Hard Hats	2 Piece Overalls & T-shirts	Safety Boots	Thermal Jacket & Pants	Socks	Rain Suits	Reflector Vests
Name of the occupation	1-0-1-0	2-0-2-0	1-0-1-0	1-0-0-1	4-4-4-4	1-0-0-1	1-0-0-1

3. ADMINISTRATIVE OCCUPATIONS

Admin Medium Exposure Occupations	Hard Hats	Overalls	Safety Boots	Thermal Jackets & Pants	Socks	Rain Suits	Reflector Vests
Name of the occupation	1-0-1-0	0-0-0-0	1-0-0-1	1-0-0-0	4-4-4-4	0-0-0-0	1-0-0-1

Admin Low Exposure Occupations	Hard Hats	2 Piece Overalls & T-shirts	Safety Boots	Thermal Jacket & Pants	Socks	Rain Suits	Reflector Vests
Name of the occupation	1-0-0-0	0-0-0-0	1-0-0-1	0-0-0-0	4-4-4-4	0-0-0-0	1-0-0-1

ANNEXURE 4: PERSONAL PROTECTIVE EQUIPMENT (PPE) ISSUE RECORD TPT-IMS-COR-FRM.009.009.4

(Complete one sheet per order)

Terminal	
Region	

PPE ISSUED

ID/SAP Number	
Employee Name	
Occupation	
Department/Area/Section	
Date Issued	
Date of Next Issue	
PPE Material No.	
PPE item description	
Size no (If applicable)	
Manufacturer and model name	
Applicable Standards	
Category of protection	
Date of Replacement	
Date that item was returned for replacement	
Name of Recipient	
Signature	

ANNEXURE 5: INSPECTING, CARING AND STORAGE OF PPE TPT-IMS-COR-FRM.009.009.5

Hard Hats: It is recommended that safety helmets be cleaned regularly. In general, normal washing methods using warm water and soap are adequate. The use of solvents, very hot water, or harsh abrasives is not advisable.

Inspections shall be done prior to each use. Check for proper fit. Insure that there are no cracks, dents, holes, or gouges in the hat. Check all inner fitting straps and adjusting devices. Inspect the hat for signs of contamination or degradation due to exposure to chemicals. Helmets showing damage or deterioration to the shell should be immediately withdrawn from service and discarded (completely destroyed). Helmets with sound shells but with damaged or defective harness components should be withdrawn from service and the complete harness and cradle replaced

Repairs by a competent person shall be made to any defective equipment before use. If repairs cannot be made, replace that piece of equipment with an approved device.

Store in a clean, dry place.

Clothing: Wash contaminated clothing in hot water with detergent

Inspect chemical protective clothing before each use. Check for tears, holes, degradation, defects, or other damage.

Most Chemical Protective Clothing (CPC) is disposable and should be properly discarded after use. Non-disposable CPC shall be properly decontaminated after each use. Lab coats and other CPC should be laundered by a commercial laundry.

Store in a clean, dry place.

Eye protection: Inspect eye and face protection before each use. Inspect for cracks, tears, scratches that would impair eyesight, and other defects.

Clean eye and face protection with mild soap and water. Do not use ammonia, alkaline cleaners, abrasive cleaning compounds, or solvents. Avoid rough handling that can scratch lenses. Scratches impair vision and can weaken lenses.

Store your safety glasses in a clean, dry place where they cannot fall or be stepped on. Keep them in a case when they are not being worn.

Replace scratched, pitted, broken, bent or ill-fitting glasses. Damaged glasses interfere with vision and do not provide protection.

Replace damaged parts only with identical parts from the original manufacturer to ensure the same safety rating.

Footwear: After each use, safety footwear should be sprayed off with a hose; dipped in water; or cleaned with soap, water and a cloth or brush, depending on the type of shoes and how dirty they are. (For full-grain leather, clean with a damp cloth or sponge and a mild detergent).
A good tip is to stuff safety boots full of newspaper at the end of a shift. The printing ink acts as a disinfectant and helps to sanitize the inside of the boot and the paper absorbs moisture to help dry out the perspiration. This will help to reduce the risk of fungal infections.
Cleaning helps performance, especially in the case of slip-resistant shoes. Use a brush or hose to clean mud and dirt from the bottom of slip-resistant shoes so they maintain their traction.
Inspect foot protection monthly, checking for tears, holes, and other defects.
Store in a clean, dry place.

Leather footwear: If you wear safety footwear made with leather, experts advice using shoe grease, oil or other moisturizing cream available at shoe stores and other retailers to prevent drying out and cracking. As always, consult the manufacturer's instructions first. If there are no instructions, visit the manufacturer's Web site or a shoe retailer.

Respirators: Before putting on your respirator, give it a check. It should be clean; it should have all its parts; it should not have any damage that would affect its function. For example, respirators with overstretched straps, earmuffs with dry, crinkly padding; and hard hats that are discoloured all need to be repaired or replaced before use.
Dry on a rack or clean surface or hang from a clothes line. Position the respirator so that the face piece rubber will not "set" crookedly as it dries.
Store the respirator at the end of each shift to protect it from dust, sunlight, heat, extreme cold, excessive moisture, and chemicals.
Clean and disinfect shared respirators after each use.
Permit only trained and qualified personnel to repair respirators.

Gloves: *Storing.* You should store rubber-insulated gloves and sleeves in a cool dark area; nowhere near steam pipes, radiators, or other sources of heat. Do not store them in the same room where electrical testing is done. If you're storing your gloves in glove bags, make sure you place the gauntlet end in the bottom of the bag, and hang the bag from a peg.
Keep gloves clean and store them out of direct sunlight to prevent degradation. Store chemically resistant gloves flat, not folded, so they do not develop kinks or cracks that could allow chemicals

to penetrate more easily. Discard disposable gloves after each use. Inspect gloves before each use for cracks, holes, and leaks. Replace gloves whenever they show physical defects or degradation, or are permanently stained. Normally, you can throw out uncontaminated gloves with the regular trash. If gloves are chemically contaminated and cannot be cleaned, handle them using the disposal procedure that applies to that specific chemical.

Cleaning. You can wash your rubber gloves by hand or in a washing machine to remove dirt. Use tap water and mild soap or mild non-bleaching detergent. After washing, rinse them in clear water and dry thoroughly at an air temperature not exceeding 150DegrF.

The other CRITICAL time to replace a piece of safety equipment is AFTER A SAVE. If a concrete block falls on your hardhat, and your hardhat saves your head, REPLACE YOUR HARDHAT. It will only save you once. Ditto fall protection equipment: if you fall, and your harness and lanyard save you, REPLACE YOUR FALL PROTECTION RIG. The whole thing: harness, lanyards, all of it. It will only save you one time.

PPE shall be washed or cleaned separately from any other clothing in order to avoid sediments of unknown fibres which may reduce the protection properties. Especially the hook part of touch and close fasteners may affect the surface of clothing during washing procedures and may create unwanted pilling. It is therefore recommended to cover carefully all touch and close fasteners before washing. This can be done either by closing of all fasteners or by covering of the fasteners with corresponding counterparts.

Fall Protection: Inspect personal fall arrest systems before and after each use. Check for damage, defects, and degradation. Be sure to check connection points such as buckles, D-rings, etc.

Keep fall protection equipment as clean as possible to facilitate inspection of the equipment.

Store in a clean, dry place.

Plastic components of harnesses may deteriorate more rapidly under aggressive service conditions and in these cases harnesses should be replaced at intervals not longer than 2 years.

ANNEXURE 6: PPE TRAINING RECORD SHEET

TPT-IMS-COR-FRM.009.009.6

Section/Department/Area	

Date	**PPE Training Provided**	**Person Trained**		**Trainer**	
		Name	**Signature**	**Name**	**Signature**

ANNEXURE 7: EMPLOYEE DETAILS
TPT-IMS-COR-FRM.009.009.7

Surname	
Name	
Sex	
ID No	
Passport No (if applicable)	
Date Of Birth	
Date Employed	
Exit Date	
First Aid Certificate Number	
First Aid Institution	
Certificate Renewal Date	
Safety Representative (Y/N)	
Occupational Officer (Y/N)	
Supervisor (Y/N)	
Union Name	
Employment Type	
Previous Employer's Detail	

Contact Info

Contact Name	
Contact Type	
Work Telephone	
Home Telephone	
Mobile Number	
E-Mail Address	
Residential Address	
Residential Area Code	

Postal Address	
Postal Code	
Emergencies - Contact Name	
Contact Type	
Work Telephone	
Home Telephone	
Mobile Number	
E-Mail Address	
Residential Address	
Residential Code	
Postal Address	
Postal Code	

Current Medical

Condition	Start Date	End Date

Add more records if needed

Medical History

Condition	Start Date	End Date

Add more records if needed

Pre-Existing Health Conditions

Condition / Status	Start Date	End Date

Add more records if needed

Occupation – Current

Occupation Title	Start Date	End Date

Add more records if needed

Occupation – History

Occupation Title	Start Date	End Date

Add more records if needed

Workplace – Current

Workplace	Cost Centre	Start Date	End Date

Add more records if needed

Workplace – History

Workplace	Cost Centre	Start Date	End Date

Add more records if needed

Activities – Current

Activity	Start Date	End Date

Add more records if needed

Activities – History

Activity	Start Date	End Date

Add more records if needed

Risks Associated With Employee

Risk Description	Preventative Actions Required	Actions Taken	Occupation	Workplace	Activity	Date Rectified

Add more records if needed

Risks Associated With Employee

Hazard Group	Pre Rating	Pre-Rating Date	Hazard Details	Preventative Measure	Post Rating

Add more records if needed

Incidents Associated With Employee

Incident No.	Incident Date	Incident Description	Injuries	Classification	Date Finalised

Add more records if needed

Employee PPE Stock Profile

Stock Description	Company Item Code	Replacement Cycle

Add more records if needed

ANNEXURE 8: EXAMPLE OF OCCUPATION INFORMATION TEMPLATE (STEP 2) TPT-IMS-COR-FRM.009.009.8

This example will demonstrate what information is needed per occupation.

We use occupation templates to make the work required of implementing a PPE SOP less. In the table below we provide an example of such a template for the occupation: Nursing Aid.

Occupation	Aid, Nursing
Synonyms	Auxiliary working force, nursing Nurse, practical Nurse, auxiliary Practical nurse Service nurse Unregistered nurse
Brief Description	A healthcare worker who performs simple tasks to assist medical, nursing, midwifery and dental professionals or associate professionals in their duties.
Detailed Description	Cares for patients and children in private homes, hospitals, sanatoriums, industrial plants and similar institutions: Bathes and dresses bed patients, combs hair, and otherwise attends to their comfort and personal appearance. Cleans room, and changes bed linen. Takes and records temperatures, pulse, and respiration rate. Gives medication as directed by physician or nurse, general duty (medical ser.), and makes notation of amount and time given. Gives enemas, douches, massages, and alcohol rubs. Applies hot and cold compresses and hot water bottles. Sterilizes equipment and supplies, using germicides, sterilizer, or autoclave. Prepares food trays, feeds patients, and records food and liquid intake and output. Cooks, washes, cleans, and does other housekeeping duties in private home. May give injections. May care for infants and small children in private home. For practical nurses meeting state licensing requirements see Nurse, Licensed Practical
Occupation - risks	Slips, trips and falls on wet floors, in particular during emergency situations Punctures and cuts from sharp objects (in particular needle-sticks and cuts by blades)

	Burns and scalds from hot sterilizing equipment, or contact with hot water and steam pipes Electrical shock from faulty or improperly grounded equipment, or faulty insulation Electrical shock from faulty or improperly grounded equipment, or faulty insulation Injuries to legs and toes by falling heavy objects, e.g., medical instruments Injuries to legs and toes by falling heavy objects, e.g., medical instruments Acute back pain, resulting from awkward body position or when performing over-strenuous movements when handling heavy patients Acute poisoning due to accidental release of a chemical agent
Physical risks	Exposure to radiation from x-ray and radioisotope sources
Chemical risks	Exposure to chemicals during an accident (contact with scattered or spilled chemicals, leaking agents and unidentified chemicals) Skin defatting, irritation and dermatoses because of frequent use of soaps, detergents disinfectants, etc. Irritation of the eyes, nose and throat because of exposure to aerosols containing washing and cleaning formulations (some of them alkaline) in the air or by droplets of washing liquids Irritation of the eyes, nose and throat because of exposure to aerosols containing washing and cleaning formulations (some of them alkaline) in the air or by droplets of washing liquids Chronic poisoning because of long-term exposure to medications, sterilizing fluids (e.g., glutaraldehyde), anesthetic gases, etc. Latex allergy caused by exposure to natural latex gloves and other medical devices
Biological risks	Hazard of contracting a communicable disease from the patients Infections due to the exposure to blood, body fluids or tissue specimens possibly leading to blood-borne diseases such as HIV, Hepatitis B and Hepatitis C.
Ergonomic, psychosocial and	Fatigue and low back pain due to the handling of heavy patients and to prolonged working in a standing posture

organizational factors	Stress, strained family relations and burnout due to shift and night work, overtime work, and contact with sick patients, in particular accident victims and their relatives Exposure to severely traumatized patients, multiple victims of a disaster or catastrophic event or severely violent patients may lead to post-traumatic stress syndrome.
Preventative Practices	Wear shoes designed for nurses, with non-slip soles Handle sharp objects with extreme care; use special safety receptacles to store used hypodermic needles until disposal Install ground fault circuit interrupters; call qualified electrician to test and repair faulty or suspect equipment Comply with all safety instructions on the installation and periodic inspection of electrical medical equipment Keep all passages clearly visible and uncluttered Provide lifting aids for the lifting and transport of heavy patients; consult an occupational safety specialist on the safe handling of heavy patients Wear a radiation dosimeter (badge or other) when exposed to radiation; comply with all safety instructions to reduce exposure to a minimum Install air conditioning in the emergency room, with effective general ventilation, to alleviate heat stress, and remove smells, gases and vapours Provide eye flushing bottles or fountain Workers sensitive to natural latex must use non-latex gloves and avoid contact with other latex products Follow established appropriate infection control precautions assuming blood, body fluids and tissue are infectious Routinely use barriers (such as gloves, eye protection (goggles or face shields) and gowns) Wash hands and other exposed skin surfaces after coming into contact with blood or body fluids Follow appropriate procedures in handling and disposing of sharp instruments or needles Procedures and counseling services should be available to workers exposed to post-traumatic stress syndrome