



STANDARD OPERATING PROCEDURE FOR PERSONAL PROTECTIVE EQUIPMENT (PPE)

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SUMMARY VERSION CONTROL

VERSION NO.	NATURE OF AMENDMENT	PAGE NO.	DATE REVISED
1.0	New SOP		
2.0	Changed the document from Personal Protective Equipment (PPE) Procedure to Standard Operating Procedure for Personal Protective Equipment (PPE)	All	25 /08/2022
2.0	Heading 3. Reference Documents, divided the documents into internal and external documents	6	25 /08/2022
2.0	Listed PPE specific SANS reference numbers	6 - 7	25 /08/2022
2.0	Inclusion of new heading 6.4 Procurement of PPE	15	25 /08/2022
2.0	Inclusion of new heading 6.5 Issuing of PPE	16	25 /08/2022
2.0	Amend clause 6.8 to include boiler suit (one piece overall)	17	25 /08/2022
2.0	Included new heading 6.9.6.1 Flame Retardant Rain Suits	20	25 /08/2022
2.0	Included new heading 6.9.6.2 Flame Retardant Thermal Jackets	20	25 /08/2022
2.0	Inclusion of the new heading 6.9.6.3 Flame Retardant Reflective Vests / Bibs	20	25 /08/2022
2.0	Revised clause 6.9.7 Respiratory Protection to include A2 Organic Vapour Cartridge respirators to be used for protection against organic vapours	21	25 /08/2022
2.0	Inclusion of the new heading 6.9.8 Arc Flash Protection	21 - 22	25 /08/2022

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

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1. PURPOSE

To ensure appropriate provision and use of personal protective equipment in addition to other forms of control, to further minimize the risk of harm to Transnet Pipelines personnel, customers, contractors, visitors and suppliers.

2. APPLICABILITY

- This procedure is applicable to Transnet Pipelines employees, its contractors, visitors, or any other person needing to enter an area where PPE is identified as a requirement to mitigate against harm to a person.
- This procedure will apply to all sites under the control of Transnet Pipelines inclusive of all depots, workshops, buildings and servitudes where the risk is identified, and PPE is required.

2.1 NOT IN SCOPE

Flame retardant clothing (FRC) requirements do not apply to areas where there is no potential for flash fire exposure, unless specifically indicated, FRC would not apply in the following areas:

- Administrative Buildings
- National Operations Centre (NOC)
- TPL School of Pipelines
- Head Office
- Non – Operational areas of the facility
- Parking areas

PPE free zone will be areas where individuals are unlikely to be exposed to hazardous conditions or substances due to work activity being performed or prevailing environmental conditions and where such signage is displayed.

3. REFERENCE DOCUMENTS

Internal documents:

- Operational Risk Management Procedure: TRN-IMS-GRP-PROC-004
- Compliance Obligation Procedure: TRN-IMS-GRP-PROC-005
- Operational Planning and Control Procedure: TRN-IMS-GRP-PROC-009

External documents:

- Occupational Health and safety Act No. 85 of 1993
- Railway Safety Management System – Part 1, SANS 3000 -1:2016

NAME	REFERENCE NUMBER
Chemical resistant gloves	SANS 416
Work Wear suits	SANS 434
Protective and Safety Gum boots, all made from rubber	SANS 492
Personal protective equipment and protective clothing against the thermal hazards of an electric arc flash.	SANS 724
Barrier creams	SANS 1282
PVC Gumboots: Part 1, Injection-moulded Gumboots	SANS 1320
Sun Brim	SANS 1387
Industrial Safety Helmet	SANS 1397
Equipment (including oculars) for eye, face and neck protection against non-ionizing radiation arising during welding and similar operations - Welding helmets, hand shields, goggles and welding spectacles	SANS 1400
Eye-protectors for industrial and non-industrial use	SANS 1404
Hearing protectors Part 1 Earmuffs	SANS 1451-1
Hearing protectors Part 2 Ear plugs	SANS 1451-2
Hearing protectors Part 3 Earmuffs	SANS 1451-3
Sunscreen products	SANS 1557
Prescription Eyewear	SANS 1644

NAME	REFERENCE NUMBER
Safety Footwear	SANS 20345
Respiratory protective devices – Full face masks - Requirements, testing, marking	SANS 50136
Respiratory protective devices – Half masks and quarter masks – Requirements, testing and marking	SANS 50140
Respiratory protective devices – Mouthpiece assemblies - Requirements, testing and marking	SANS 50142
Respiratory protective devices – Particle filters – Requirements, testing and marking	SANS 50143
Respiratory protective devices – Filtering half masks to protect against particles –Requirements, testing, marking	SANS 50149
Full body harnesses	SANS 50361
Reflective Vests/bibs	SANS 50471

4. DEFINITIONS AND ABBREVIATIONS

4.1 Definitions

Contractor an employer (Organization) or a person who performs any work and has entered into a legal binding business agreement or contract to supply a product or provide services to Transnet.

Employee any person who is on an indefinite (permanent) contract of employment or on a fix term contract or any person who works for Transnet and who receives, or who is entitled to receive any remuneration, and other person who in any manner assist in carrying on or conducting the business of Transnet.

Engineering Controls physical engineering interventions that will create a physical barrier between human interactions and interface with identified hazards.

Hazard a source of or exposure to danger.

Hazard Assessment conducting inspections of workplace or tasks to determine if hazards are present.

IMS Operational Coordinator is an internal appointee tasked with the responsibility of ensuring that the duties of Transnet Pipelines as an employer contemplated in the applicable pieces of legislation such as OHS Act, are properly discharged.

Line Manager is an employee who directly manages other employees and operations – It includes Supervisor, Team Leader, Managers, etc.

Off Site is any other area outside of the defined TPL operating premises where TPL personnel, contractors may be engaged in operating, maintenance and / or repair work.

Personal Protective Equipment is a special type of clothing or devices that are used to protect workers from exposure to a variety of workplace hazards.

PPE Forum

It is a medium where ideas and views on PPE matters are exchanged and experiences with regards PPE matters identified and resolved. The forum is constituted with Labour, HR-EAP, ER, OPS, TECH, Risk, Procurement, SHE Representatives.

Primary Area

Primary Area is the area where pipelines intake, deliveries, receipt, intermixture processing, rail operations, as well as road tankers loading, and offloading operations are taking place. Where products (petrol, jet fuel, diesel, crude oil, intermixture, etc.) are stored, loaded, offloaded, or handled and where exposure to hazardous conditions or substances are likely due to a work activity being performed or prevailing environmental conditions.

These are areas within Intake Stations, Delivery Depots, Booster Pump Stations, Terminals, Pump Station, Through Station, Workshops in operations depots, Intermixture Refractionator Plant fence lines, off site and servitude included where production and storage facilities, pipelines and related equipment are located and operated. The areas include where field work is being performed on behalf of TPL. **These areas generally include but not limited to:**

- Fenced area with vessels or pipes containing hydrocarbons
- Loading gantries
- Rail loading areas
- Plant area
- Manifold
- Pump slabs
- Tank farms and related equipment
- Pipelines or vessels with hydrocarbons
- Offices (with potential for flash fire, hazardous condition or substances exposure)
- Block Valves
- Exposed Pipelines
- Test centers or laboratories

Risk Assessment process of hazard identification, risk analysis, risk evaluation and risk mitigation planned and implemented per task / activity.

Workplace a place where work is carried out for Transnet.

4.2 Abbreviations

dBa	Decibel
EAP	Employee Assistance Programme
EN	European Norms
ER	Employee Relations
EXCO	Executive Committee
IMS	Integrated Management System
ISO	International Organization for Standardization

NOC	National Operations Centre
OHS Act	Occupational Health and Safety Act, Act 85 of 1993
OPS	Operations
PPE	Personal Protective Equipment
SABS	South African Bureau of Standards
SANS	South African National Standards
SHEQ	Safety, Health, Environment and Quality
SOP	Standard Operating Procedure
TECH	Technical
TIMS	Transnet Integrated Management System
TOMS	Transnet Occurrence Management System
TPL	Transnet Pipelines

5. ACCOUNTABILITY, RESPONSIBILITY AND AUTHORITY

<p>EXCO</p>	<ul style="list-style-type: none"> • Ensure compliance with legislation and ensure that systems are in place to manage potential risks in relation to PPE. • Ensuring that the organization complies with the PPE Procedure and that the appropriate controls are implemented and applied • Ensure that adequate resources are provided to ensure compliance with the PPE procedure requirements.
<p>Line Manager</p>	<ul style="list-style-type: none"> • Ensure that this procedure is fully implemented. • Ensure that signs are posted in conspicuous locations at the workplace, including on plant and equipment, wherever a requirement is identified and confirmed to use PPE. • Implementing and enforcing PPE use in the workplace. • Providing the required PPE and ensuring that it is available to employees. • Ensuring that employees are trained on the proper use, care and retention of PPE. • Ensuring that defective or damaged PPE is returned, disposed of and immediately replaced. • Ensure contractors and subcontractors supply appropriate PPE for their own workers. • Maintain any PPE records as required by this procedure. • Ensure that PPE is worn by all employees and used correctly • Dispose of PPE in line with procedure. • Inspect and examine employees PPE for wear, damage or failure.



<p>Visitors & Suppliers</p>	<ul style="list-style-type: none"> • Adhere to TPL PPE requirements for entry into a primary area • Provide own basic PPE i.e., safety boots, flame retardant Conti suits and hard hat • Properly wearing PPE as required
<p>Employees</p>	<ul style="list-style-type: none"> • Properly wearing PPE as required, ensuring a good fit. • Use appropriate PPE at locations where signage requires its use and or when risk assessment identifies the need • Attending required training sessions, for the safe use of the specific PPE • Perform pre-use inspection for wear, damage, or failure prior to PPE use • Reporting any wear, damage, or failure to line management immediately • Properly caring for, cleaning, maintaining, and inspecting PPE as required • Properly store PPE as per manufacturer's recommendations
<p>Contractors</p>	<ul style="list-style-type: none"> • Supply all mandatory and other specific PPE to its employees. • Ensure issuance is recorded – PPE register. • Ensure that PPE issued is adequate for the workplace hazards. • Maintain PPE in a clean and reliable condition. • Ensure that PPE is worn by all its employees. • Ensure that PPE is inspected. • Dispose PPE in line with the requirements of this procedure
<p>Procurement</p>	<ul style="list-style-type: none"> • Acquire instructions on use, fitting and maintenance of PPE from suppliers. • Purchases of PPE made in line with this procedure and predefined standards and specifications.
<p>PPE Forum</p>	<ul style="list-style-type: none"> • Approve any changes to PPE requirements.

	<ul style="list-style-type: none"> Investigate and approves requests for deviation in relation to PPE
SHEQ Team	<ul style="list-style-type: none"> Ensure that this procedure is reviewed and updated at planned intervals or upon request as informed by changing circumstances and conditions. Ensure that the changes to this procedure are widely communicated. Ensure standardization. Evaluate the level of compliance to the requirements of this procedure through internal audits.

6. STANDARD OPERATING PROCEDURE

Personal Protective Equipment is considered as the last resort, in instances where the workplace hazard cannot be removed through elimination, substitution, engineering and administrative controls. Full implementation of the elements outlined in the Personal Protective Equipment Procedure will minimize potential injuries as a result of exposure to workplace hazards. Adherence to this SOP is mandatory

6.1 STANDARD

- Transnet Pipelines shall not require or permit any employee and / or contractor to work unless such an employee and / contractor is issued with the required personal protective equipment and makes proper use thereof.
- The correct required PPE must always be worn
- Symbolic signs indicating PPE requirements must be prominently displayed at entrances or designated areas on the premises where additional PPE is required. These signs must comply with the applicable national standard.
- All persons shall comply with and wear the appropriate PPE as specified in work permits, mandatory signs, procedures, specifications, and risk assessments.
- Task specific PPE in addition to standard PPE shall be determined through risk assessment



- No person working in close proximity to moving machinery shall wear any loosely fitting outer clothing, any jewelry or ornament, any watch or key - chain, and loose - hanging hair or anything which may be caught up in the moving parts of such machinery.
- All PPE issued shall comply with the applicable SANS standard
- PPE must be stored in accordance with the manufacturer's requirements and / or recommendations.

6.2 HAZARD ASSESSMENT FOR PPE

- Each facility will perform a hazard assessment of the workplace to determine if hazards are present, or are likely to be present, which necessitate the use of PPE.
- In order to assess the need for PPE, a walk – through assessment must be conducted using the prescribed **PPE Hazard Assessment form, TRN – IMS – TPL – FRM – 001.1** to identify sources of hazards to all persons.
- Each assessment will be documented using the Hazard Assessment Form, **PPE Hazard Assessment form, TRN – IMS – TPL – FRM – 001.1** which identifies the work area assessed, the person conducting the assessment, findings of potential hazards, and date of the assessment, the forms will be kept in the safety files. It will assist to determine proper selection of PPE.
- Hazard assessment information leads to the development of the **PPE matrix** which lists required PPE by task, see **Annexure 8.2, TRN – IMS – TPL – GDL – 001.1**.
- The hazard assessment and resulting PPE matrix is designed to be an evergreen document.

6.3 PPE SELECTION

- PPE requirements for a particular task or for a particular area must be determined through a risk assessment for that task or area.
- PPE is selected based on risk assessment and exposure to a hazard. It is important that a risk assessment be undertaken to ensure that the best PPE is selected for each activity and location.
- Once the hazards of a workplace have been identified, IMS Coordinator will determine if the hazards can first be eliminated or reduced by methods other than PPE, i.e., methods that do not rely on employees' behavior, such as engineering controls.
- All PPE will be of safe design and construction for the work to be performed and will be maintained in a clean, well maintained and reliable condition.
- Careful consideration will be given to the comfort and proper fit of PPE in order to ensure that the right size is selected and that it will be used.

6.4 PROCUREMENT OF PPE

- Procured PPE must be compliant to applicable SANS specifications.
- Where non-complying PPE is delivered, the delivery should not be accepted and in the event that it is picked up late, a nonconformance report must be issued for the Supplier to rectify within 30 days.
- A list of approved alternative PPE suppliers must be at hand should there be quality issues with the quality of PPE.
- Ensure adequacy of PPE supplies at the stores so that it is readily available when required.
- Purchases of PPE made in line with this procedure and Transnet Pipelines PPE specifications.
- All PPE to comply with the relevant SANS standard requirements after being tested against required international standards. Tested as per standards listed in Transnet Pipelines PPE specifications.
- To check the quality of a PPE is to conduct testing to assess compliance with relevant test standards. To ensure that the product is fit for purpose and performs in the manner it is intended to. Supplier must submit the following documents:

ITEMS	REQUIREMENTS
Product description	<p>A description of the product(s) must be provided by the supplier. It must include:</p> <ul style="list-style-type: none"> o brand or trade name, o model or product reference, o intended use, o a list of the materials used to manufacture the product, o expected lifetime, approximate number of washes o approved storage conditions
Test reports	<p>Official test reports (all pages, in English) originating from accredited test labs. Accredited facilities should be ISO 17025 certified.</p> <ul style="list-style-type: none"> o Signed Test reports should clearly indicate the accredited laboratory name and accreditation (to be able to check authenticity of test reports). o Test standard must be within the scope of the accreditation of the laboratory. <p>Detailed material technical data sheet from the original material manufacturer</p>

6.5 ISSUING OF PPE

- PPE shall be issued to personnel in line with the Transnet Pipelines PPE Matrix.
- The quantities and the frequency of issuing PPE to personnel is outlined on the Transnet Pipelines PPE Matrix.
- Depending on the activity undertaken or work area, additional PPE may be issued as informed by the risk assessment.
- When issuing PPE, careful consideration must be given to the comfort and proper fit in order to ensure that the right size is selected and used.
- Where PPE is damaged, the employee would return the soiled/contaminated/damaged /worn PPE to their First Line Manager (Supervisor) to be issued with new PPE.
- A log of PPE issued must be kept.

6.6 INFORMATION, INSTRUCTION AND TRAINING

Any employee required to wear PPE shall be provided with information, instruction and training which is appropriate to the PPE being worn. The employee will be instructed in the correct use and care of PPE at point of issue of the PPE.

Periodic retraining will be offered to PPE users as needed. The training will include, but not limited to the following subjects:

- Manufacturer's manuals must be always followed, when in doubt the employee must request information or training as the case may be.
- When PPE needs to be used (per PPE Matrix)
- What PPE needs to be used (per the PPE Matrix)
- How to properly put on, remove, adjust, and wear PPE
- The limitations of PPE
- The proper care, maintenance, useful life, and disposal of PPE

Training of each employee will be documented using the **training attendance register (TRN – IMS – GRP – ATR – 008 – 3)** and **Annexure 8.1 PPE training certification form (TRN – IMS – TPL – FRM – 001.2)**. The document certifies that the employee has received and understood the required training on the specific PPE he / she will be using. Completed documents must be emailed to HR Enquiries (HREnquiries@transnet.net) – To be saved / stored on the employee's file.

6.7 CLEANING, REPLACING AND MAINTENANCE OF PPE

- Employees shall follow necessary guidelines in accordance with the manufacturer to ensure that PPE is always in a good level of cleanliness, well maintained and safe for use.
- Employees must regularly inspect, clean, and maintain their PPE according to the manufacturers' stipulated guidelines.



- If an item of PPE has worn out, has become damaged, or is found to be defective in any way, it must be replaced. Defective PPE must be returned to stores with the knowledge of the line manager or supervisor and disposed of correctly.
- Contaminated and defective PPE shall be properly stored and handled in the same manner as hazardous waste and shall be disposed of as hazardous waste.

6.8 MANDATORY PPE WHEN ENTERING PRIMARY AREAS

As a minimum, the following PPE must always be worn by all persons (including visitors) when accessing Transnet Pipelines Primary areas:

- Dromex DW – D59 FA, 100% cotton, flame retardant and Acid resistant SABS approved conti suit with long sleeves, fully zipped up at all times. Materials meeting the requirements of SANS 434, antistatic properties EN 1149 with silver reflective strip (50mm in width) on each sleeve around upper arm and each leg, meeting the requirements for EN471 conti suit or,
- Dromex DW – D59 FA - O, 100% cotton, flame retardant and Acid resistant SABS approved conti suit with long sleeves, fully zipped up at all times. Materials meeting the requirements of SANS 434, antistatic properties EN 1149 with silver reflective strip (50mm in width) on each sleeve around upper arm and each leg, meeting the requirements for EN471 boiler suit (one piece overall).
- Clothing worn under the overall must be 100% cotton – Compliant Golf shirts are stock items, available at the stores.
- Safety footwear with steel toe cap, oil and hydrocarbon resistant sole, anti-perforation sole, anti-static, anti-slip sole and breathable leather uppers.
- Socks 100% cotton, antistatic used in conjunction with safety boots and / or shoes.
- Hard hat with chin straps meeting requirements of SANS 1397
- Flame retardant clothing shall always be worn in or close to areas where hydrocarbons are present in any pipeline or vessel.
- Flame retardant clothing shall also apply where there is foreseen exposure to hydrocarbons with the potential to produce flash fire.
- Thermal Jackets – Parka Dromex DW D59-SABS Flame retardant acid resistant 100% cotton (inclusive of the lining of the jacket).

6.9 USE OF PPE – DIFFERENT TYPES

This section addresses general PPE requirements, including eye and face, head, foot, leg, hand, arm, body (torso) protection, and protection from drowning and fall protection.

Types of PPE may include overalls, protective footwear, gloves, goggles, face shields, safety glasses, hard hats, safety harnesses, ear plugs and earmuffs or any other similar safety equipment necessary to render persons safe.

6.9.1 Head Protection

- Hard hats should be worn in areas where there is potential for head injuries. Head injuries are commonly caused by impact from falling or flying objects, falling or walking into hard objects, tripping and falling onto sharp or protruding objects.
- All hard hats shall bear the SABS mark and meet the requirements of SANS 1397.
- Hard hats shall have an adjustable three-point webbing chin strap in accordance with SANS 1397.
- All persons working at elevated positions must always wear hard hat with chin strap and shall apply chin strap on their hard hats. This is mandatory for employees when loading rail tankers, dipping bulk trucks, storage tanks.
- Wearing of bucket hat, bandanas or beanies underneath the hard hat is forbidden.
- Individuals who use synthetic hair pieces (wigs, extensions, weaves) or have dreadlocks are always required to wear Fire Retardant Hair Cap and a hard hat with a chin strap secured in areas where the wearing of hard hat is required or dictated.
- Sun brim 100% cotton with fabric that meets the requirements of SANS 1387 – 4, Material type D59, and flame retardant can be used with the hard hat for the protection from the sun.
- Flame retardant winter liner can be used with the hard hat for the protection from the cold weather.

6.9.1.1 Supply and Replacement of Hard Hats

- Hard hat has a limited lifespan from the date of issue to employees. Hard hats must be replaced two years after being issued.
- All hard hats shall be marked with date of issue. The date of issue should be marked on an additional sticker on the inside of the hard hat at the back of the shell.
- Any hard hat showing damage (e.g. dents, cracks or holes etc.) or deterioration (e.g. excessive discoloration or brittleness) shall be removed from service immediately and replaced.

6.9.2 Hearing Protection

- Hearing protection must be worn when entering a workplace with a noise level at or above 85 dBA. An area with a noise level at or above 85 dBA noise rating limits will be identified by an ear protection sign.
- Hearing protection must be worn when using noisy equipment with a noise level at or above 85dBA such as compressors, angle grinders, etc. Equipment with a noise level at or above the 85 dBA noise rating limit will be identified by an ear protection sign.
- Hearing protection must be worn where health risk assessment on the site shows that there is a risk of exceeding the acceptable noise exposure levels and must be indicated with an ear protection sign at the applicable areas.

- Hearing protection in the form of SANS approved ear plugs or earmuffs.
- Earmuffs shall be in accordance to SANS 1451-1
- Earplugs shall be in accordance to SANS 1451-2.

6.9.3 Eye Protection

- If an employee is carrying out, assisting with, or working adjacent to any activity where sparks or projectile particles are being generated, where chemical mists or fumes are being generated, where liquids may splash or spray, where harmful electromagnetic radiation (heat or light) is being generated, or where there is a risk of wind-blown particles entering the eyes, then suitable protective eyewear must be worn at all times.
- Eye protection must be worn by employees, contractors and visitors passing through eye hazard areas.
- All eye protection (Prescription or non-prescription) must have side shield or wrap around protection.
- Approved eye protection, including, or in combination with any prescription eyewear meeting requirements of SANS 1644, normal spectacles may be worn provided the lenses have been toughened with safety glass that meets the requirements of SANS 1644.
- Prescription safety glasses should include side – shield that complies with SANS 1644.
- All components of prescription safety glasses that are being used for eye protection must meet the requirements of SANS 1644.
- Employees requiring prescription safety glasses for verified medical reasons will be provided at the cost of TPL.
- Medical eye examination is at employee's own expense.
- All hazard areas where eye protection is required will be posted with appropriate warning signs.
- Face protection and the welders face protection shall comply to SANS 1404

6.9.4 Hand Protection

- Hand protection (gloves) will be worn when there is a potential for injury to the hands from exposure to hazards such as but not limited to those from skin absorption of harmful substances, cuts or lacerations, severe abrasions, punctures, chemical burns, thermal burns and harmful temperature extremes.
- Suitable gloves must be selected based on the task to be performed and the specific hazard against which the employee requires protection such as sharp edges, sharp points and splinters, abrasive surfaces, Hazardous chemical substances (Toxic, corrosive, sensitizing, etc.)
- The gloves shall comply with SANS 416.

6.9.5 Foot Protection

- Safety boots / Shoes must be worn where there is a potential danger of slipping, electrostatic build-up, falling objects and chemical splashes.
- Non – conductive foot protection will be worn where the employee’s feet are exposed to electrical hazards.
- All safety shoes / boots must be SABS approved.
- Safety shoes / boots with steel toe cap, oil and hydrocarbon resistant sole, anti-perforation sole, anti-static, anti-slip sole and breathable leather uppers. Consideration given for standard size and wide size (broad fitting)
- Socks 100% cotton, antistatic used in conjunction with safety boots and / or shoes.
- Boots must be made of leather material
- Safety footwear shall comply with SANS 20345

6.9.6 Skin /Body Protection

- Full body protection must be worn where there is exposure to dermal, chemicals, UV radiation, extreme temperatures, rainy conditions, heat, sparks and flying particles.
- Dromex DW – D59 FA, 100% cotton, flame retardant and Acid resistant SABS approved conti suit with long sleeves. Materials meeting the requirements of SANS 434, antistatic properties EN 1149 with silver reflective strip (50mm in width) on each sleeve around upper arm and leg meeting the requirements for EN471 legs are required for use at Transnet Pipelines.
- Work wear suits shall comply with SANS 434

6.9.6.1 Flame Retardant Rain Suits

- Rain suits must be worn where there is exposure to rain and splashes of petroleum product, liquid chemicals whilst having flame retardant and anti-static properties.
- Two-piece water-resistant rain suit with stow away hood. Reflective: 50 mm silver reflective. Dromex flame retardant rain suit

6.9.6.2 Flame Retardant Thermal Jackets

- Dromex DW D59-SABS Flame retardant acid resistant 100% cotton (inclusive of the lining of the jacket).
- Thermal jacket compliant to SANS 1423 – 1

6.9.6.3 Flame Retardant Reflective Vests / Bibs

- The reflective vests/bibs design shall comply with SANS 50471. Anti-static and flame retardant vest

6.9.7 Respiratory Protection

- Respirators must be worn where there is exposure to air contaminated with harmful dusts, fumes, mists, gases, sprays, or vapours.
- Respiratory protection must be worn where health risk assessment on site shows the risk of exposure to harmful fumes, gases, vapours, etc. and needs to be indicated by a safety sign at the applicable areas.
- Type of respirator to be used may be identified by type of task as risk assessed in the risk assessment and must comply with relevant standard indicated on this SOP.
- A2 Organic vapour cartridge respirators to be used for protection against organic vapours
- Respirators shall comply to SANS 50136

6.9.8 Arc Flash Protection

- Arc flash PPE is a combination of clothing and safety equipment worn for protection from arc flash and shock hazards by a person performing electrical work.
- Underneath arc flash protection, 100% cotton clothing to be worn. Persons wearing bras, such bras shall not have wire support.
- Arc Flash protection shall comply to SANS 724
- Electrical staff performing LV or MV maintenance work at Category 2 pump stations as per table hereunder shall wear arc flash PPE protection for category 2 hazard risk.

PUMP STATIONS MV	PUMP STATIONS LV
Howick (HWR)	Coalbrook (CBK)
Quagga (QGA)	Sasolburg (SBG)
Coalbrook (CBK)	Alrode (ALR)
Island View TM 1 (IVW)	Secunda (SEC)
Twini (TNI)	Island View TM 1 (IVW)
Hilltop (HTP)	Twini (TNI)
Mnambithi (MBT)	Hilltop (HTP)
Jameson Park (JMP)	Mnambithi (MBT)
	Jameson Park (JMP)

Levels of PPE programme recommended for Transnet Pipelines Electrical staff performing LV or MV maintenance work at hazard risk category 2 pump stations i.e., 4 – 8 Cal / Cm² arc rating or arc rating exceeding the hazard levels of category 2 are worn where work is performed for protection from the arc flash (See table hereunder for details)

Hazard Risk Category	Cal/Cm2	Protective Clothing
1	1.2 – 4 Cal / Cm2	Dromex DW – D59 FA, 100% cotton, flame retardant and Acid resistant SABS approved conti suit with long sleeves.
2	4 – 8 Cal / Cm2	Dromex DW – D59 FA, 100% cotton, flame retardant and Acid resistant SABS approved conti suit with long sleeves. Arc Rated Face Shield: Ergoz face shield Arc Rated Balaclava: Nomex Balaclava in oatmeal colour Arc Rated Gloves: 8 cal Nomex Glove in oatmeal colour. Arc Rated Hard Hat: 18 cal silver hard hat

6.9.9 Sun Protection

- All persons exposed to sunlight must use long sleeve conti suit top, long conti suit trouser, or overall, brims to hard hats, UV factored sunscreen
- Sunscreen products, protective creams shall be in accordance with SANS 1557

6.9.10 Fall Protection - PPE

- Full body safety harnesses must be worn by each person for all elevated work (performing operations, maintenance or construction activities), except if such work is being undertaken on a permanent work platform and that the work is confined within the handrails.
- Where safety harness is being used, harness lanyards must be suitably tied on and secured onto an anchor point whilst work is being undertaken.
- Anti – Static Full Body Harness with anti – static, shock – absorbing double lanyards
- Full body harnesses shall comply to SANS 50361

6.9.11 Flotation Devices / Personal Flotation Devices

- Flotation devices / personal flotation devices must be used / worn when working close to the water's edge of bodies of water such as spill dam/basin, separator pit, etc. without handrails or other approved safeguards.
- Life Buoy (Zero/Novamarine/Viking type) flotation devices could be placed around spill basins where there is a potential of falling into the water and drowning.
- Life jackets of 150N single chamber must be used as a minimum when working within a distance of 1 meter of spill basin, separator pit with no fixed safe railing around it or other approved safeguards.

6.10 MEDICAL CONDITIONS

- Where special conditions of a medical nature need to be accommodated, the employee must declare such to their supervisor and the supervisor will escalate to a Health and Safety committee, which will in turn escalate to the PPE Forum. Appropriate investigation of the condition and subsequent issue of PPE will be facilitated by the PPE forum.
- On a rare occasion, an employee may seek approval to not wear the required PPE. This may be due to a medical condition and must be supported by a medical certificate for approval by the PPE Forum.

6.11 CONTROL

- Employees are to sign acceptance of PPE as per **PPE Issue Register, TRN – IMS – TPL – 001.1**. Conditions of issue must be explained to each employee when PPE is issued, and the employee must sign acknowledgement of the said instruction.
- When PPE is issued, instructions of use, care and where required training in use of the equipment must be given to the wearer and such instruction must be recorded and signed by both the receiver and the issuing officer. The wearer must also be given the legal requirements and implications concerning the wearing of PPE.
- The loss or theft of any PPE must be recorded on TOMS and an investigation must be done to establish the root cause of the loss. Should the loss investigation find that the loss was due to the employee's negligence disciplinary action must be taken in consultation with the Employee Relations Manager.
- Up – to – date register must be kept as proof that items of PPE have been issued to individual employees

6.12 MONITORING

- Employees after pre-use inspections for wear and damage will declare in the **TPL signing on/off declaration fit for duty register, TRN – IMS – TPL – REG – 001.2** that:
 - He / she is wearing all personal protective equipment (PPE) as required
 - All personal protective equipment (PPE) worn is neat and in good condition
- The Depot / Workshop / Site Supervisor resident on site will confirm employees' declarations and sign in the TPL signing on/off declaration fit for duty register.
- Depot / Workshop / Site Supervisor who is not resident on site will on weekly basis check employees' personal protective equipment and endorse the employees' declarations by signing TPL signing on/off declaration fit for duty register.
- Carry out monthly inspections using prescribed **Inspection Checklist: Personal Protective Equipment, TRN – IMS – TPL – CL – 001.1** to ensure that PPE is being used correctly is being maintained in a good, serviceable, clean and well maintained and fit for purpose.

6.13 COMPLIANCE MONITORING

- Regular audits must be undertaken by safety, health, environment and quality department to monitor compliance.

6.14 ENFORCEMENT

- Any individual found violating the requirements shall immediately be directed to put on the required PPE or immediately directed to stop performing the task and leave the area.
- Any person who refuses to wear PPE as required must be removed from site.
- Repeat violations by employees may lead to disciplinary action, and for contractors, may lead to loss of access to the depot/site and loss of future contracts.
- People who do not conform to the procedure may be subject to disciplinary action in terms of the applicable Transnet disciplinary processes and procedures.

7. RECORDS

7.1 TRN-IMS-GRP-ATR-008 3 Training Attendance Register

7.2 TRN-IMS-TPL-REG-001.2 TPL Signing on/off Declaration Fit for Duty Register

7.3 TRN-IMS-TPL-CL-001.1 Inspection Checklist: Personal Protective Equipment

7.4 TRN-IMS-TPL-REG-001.1 Personal Protective Equipment Issue Register

7.5 TRN-IMS-TPL-FRM-001.1 PPE Hazard Assessment Form

8. ANNEXURES

8.1 Transnet Pipelines PPE Matrix

8.1 TRN-IMS-TPL-FRM-001.2 PPE Training Certification Form

8.2 TRN-IMS-TPL-GDL-001.1 Task and Area Specific Hazard Assessment