

**PROVISION OF SERVICING AND MAINTAINCE OF FIRE
PORTABLE PROTECTION STYSTEMS FOR TRANSNET SOC
LTD TRADING AS TRANSNET PORT TERMINAL RICHARDS
BAY (TPT RCB) FOR A PERIOD OF THIRTY-SIX (36) MONTHS**

TPT RICHARDS BAY

TRANSNET PORT TERMINALS: TPT
DESCRIPTION OF THE WORKS: PROVISION OF SERVICING AND MAINTENANCE OF FIRE PORTABLE PROTECTION SYSTEMS
FOR TRANSNET SOC LTD TRADING AS TRANSNET PORT TERMINAL RICHARDS BAY (TPT RCB) FOR A PERIOD OF THREE (3)
YEARS

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2. Executive Overview

Transnet Port Terminals is a division of Transnet SOC Limited whose core business is to provide cargo handling to a wide spectrum of customers, including shipping lines, freight forwarders and cargo owners. Operations are divided into five major business segments, namely containers, bulk, break bulk, automotive and national port authority.

The Richards Bay Terminal is a material handling plant comprising of the Dry Bulk Terminal (DBT) and the Multi-Purpose Terminal (MPT). The two terminals are for importing and exporting different cargoes using mobile fleet, ship loaders, ship unloaders, stackers, stacker reclaimers and a network of conveyors.

The purpose of this scope of work is to acquire provision of servicing and maintenance of fire portable protection systems for a period of thirty-six (36) months in accordance with SANS 0400.

3. Scope of Work

3.1 Main Works Information

The purpose of this scope of work is to acquire provision of servicing and maintenance of fire portable protection systems for a period of thirty-six (36) months in accordance with SANS 0400. Services and maintenance shall be for the following:

- a) fire extinguishers
- b) fire hose reels
- c) fire hydrants

3.2 Service maintenance Requirement

The service provider is required to provide a maintenance team that will be providing maintenance and service of fire portable protection system such as, fire extinguishers, fire hose reels and fire hydrants during normal working hours (07h00 am to 16h00 pm).

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- 3.2.1 The maintenance team should include, one (1) experienced fire portable supervisor, two (2) SAQCC fire portable technicians, and four (4) assistants and should be on site as from **(07h00 am to 16h00 pm)**.
- 3.2.2 A service provider must have SANS 1475 permit from the department of labor approved accreditation bodies, BSI, SABS or SACAS
- 3.2.3 Service provider is required to provide park homes, the office of site Manager/Supervisor, Mess room and ablutions for maintenance team because Transnet will not provide.
- 3.2.4 The service provider is also required to attend call out, break down duties after normal working hours **(16h00 pm to 07h00 am)**, one (1) SAQCC technician and one (1) assistant should be always available to attend breakdown duties after normal hours.
- 3.2.5 Each breakdown occurrence, Root Cause Failure Analysis (RFCA) must be conducted by both parties (TPT representatives and a supplier)
- 3.2.6 Breakdowns due to poor quality of service from the supplier, TPT will not pay for call out cost and supplier should be accountable.
- 3.2.7 The service provider is also required to supply an additional technician(s) or assistant(s) only on request.
- 3.2.8 To conduct inspections, services and repairs on fire extinguishers, fire hose reel, and fire hydrants as required by Transnet Port Terminals.
- 3.2.9 Replace or install new components (spares) for fire portable protection system.
- 3.2.10 Ensure the service labels are glued on all fire extinguishers, fire hose reels and fire hydrants serviced or/ and inspected.
- 3.2.11 Use Transnet's work order management system to inspect, capture and record history of what was done, defective components and recommendation for fire extinguishers, fire hose reels and fire hydrants as when required by Transnet Port Terminals.

4. Areas to Be Serviced

There are numerous installations to address the various areas of the plant in terms of fire protection. These are listed below and detailed further in the scope.

4.1 Bulk Terminal

- 4.1.1 Galleries
- 4.1.2 Sheds
- 4.1.3 Sub stations & Mini substations
- 4.1.4 Warehouses
- 4.1.5 Office buildings
- 4.1.6 Quayside equipment
- 4.1.7 Fire pump stations: DBT MPT & 6 series

4.2 Break Bulk Terminal

- 4.2.1 Sheds
- 4.2.2 Office buildings
- 4.2.3 Workshops
- 4.2.4 Mini sub-stations
- 4.2.5 Key side equipment

5. Maintenance Task and Schedules

5.1 Site control

Site control shall be carried out monthly by the responsible person on all fire hose reels, fire hydrants and extinguishers as per SANS 100105-2

5.2 Equipment services

- I. Inspections should be done monthly, and inspection report recorded,
- II. Minor services must be done annually, and major services for fire extinguishers includes replacing the head, replacing the horn, refiling the dry powder, refiling CO2 gas and paint the extinguishers.
- III. A registered person every five years or when deemed necessary by a registered person should do a major service during an annual minor service.

6. Total number of equipment to be serviced, inspected, and repaired.

Table 1: Equipment Specification

FIRE EQUIPMENT	TOTAL QUANTITY
2kg CO2	25
5kg CO2	215
4.5 kg DCP	6
9 kg DCP FE	977
Fire hose reel	402
Fire Hydrant	162

6.1 Service frequency

Table 2: inspection Schedule

Fire portable equipment	Activity type	Frequency
Fire extinguishers	<ul style="list-style-type: none"> • Inspection • Service 	<ul style="list-style-type: none"> • Weekly/monthly • Annually
fire hose reel	<ul style="list-style-type: none"> • Inspection • Service 	<ul style="list-style-type: none"> • Monthly • Annually
fire hydrant	<ul style="list-style-type: none"> • Inspection • Serviced 	<ul style="list-style-type: none"> • Monthly • Annually

7. Maintenance Activities

7.1 Management monitoring and activities

- 7.1.1 Overseeing of service Technicians, safety equipment and transporting service Technicians to site
- 7.1.2 Checking of daily service equipment e.g. spares and replacements
- 7.1.3 Specifying required spares equipment e.g. hydrant heads, hoses and frame, and spare that are required
- 7.1.4 Reporting of any events that occurred e.g. Alarms, fires, power failures and problems (recorded)

7.3 Fire hose reels and Fire hydrants

- 7.3.1 Check the fire hose reel mounting frame and mounting bolts for corrosion and physical damage.
- 7.3.2 Check whether the frame is mounted securely and whether the reel operates freely.
- 7.3.3 Check the legibility, correctness, and completeness of the markings on the label(s) and, if necessary, replace each label with a new label that gives all the information required by the corresponding standard.
- 7.3.4 With the outlet nozzle closed and the inlet, control valve open, check whether the fire hose is in an acceptable condition and acceptably fitted, and whether it can withstand the pressure in the supply main.
- 7.3.5 Operate the water control fittings (i.e. the inlet control valve and the outlet control nozzle) and check whether they are operative. Pay special attention to the quality of these valves.
- 7.3.6 While the hose is under pressure, check any water seal for leakage.
- 7.3.7 Report a lack of water supply or low water pressure to the responsible person and the local fire department.
- 7.3.8 Any fault observed during inspections carried out, shall be rectified immediately by on-site repair or, if this is not possible, the fire hose reel shall be taken to the workshop for a major service. When the fire hose reel is removed from site, it shall immediately be replaced by another fire hose reel, that is properly installed and in full working condition.

8. Performance Reports

8.1 Weekly reports

A formal report must be forwarded to the Technical manager of fire department, RCB Terminals on a weekly basis. This must detail all faults and other necessary information

8.2 Monthly reports

A formal report must be presented to the engineering Manager of Technical services at the end of every month. This report must detail all faults, all planned work and work carried out in the previous month. This is essential a detailed status report.

9. Site Location

The service Provider must be aware of the following site conditions for their work planning for all applicable conditions.

The groundwater table has been recorded at between 0.8 m and 1.5 m below ground level across the site during winter.

- Altitude – sea level
- Ambient temperature – 5 to 45 °C
- Relative humidity – frequently 100%
- Air Pollution – heavily saline and dust laden; industrial and locomotive fumes; ignitable dusts
- General wind velocities – up to 60km/ h
- Storm wind velocities – up to 180 km /h
- Climate data for Richards Bay based on monthly averages for the 30-year period: 1961-1990 (SAW, 2005) 2

10. Governing Codes, Standards and Specifications

The *Contractor's* works must be in accordance with the requirements of the latest edition of the following specifications and codes:

Table 4: Codes and Standards

Standard No.	Year	Ed.	Standard
SANS 246	2004	1	Code of fire practice for fire protection for electronic equipment installations
SANS 369-1	2004	1	Code of practice for the operation of fire protection measures part 1: Electrical actuation of gaseous total flooding extinguishing systems
SANS 369-2	2004	1	Code of practice for the operation of fire protection measures part 2: Mechanical actuation of gaseous total flooding and local application extinguishers systems
SANS 1709	2008	1	Water spray fixed systems for fire protection
SANS 10400-T	2011	3	The application of the national building regulations part T: Fire protection
SANS 1475	2013	1	Fabricated flanged steel pipework
SANS 1128(1-2)	2010	2	Hose couplings, connectors and branch pipe and nozzle connections
SANS 7240	2008	1	Fire detection and alarm systems
SANS 10287	2000	1	Automatic sprinkler installations for fire-fighting purposes
SANS 50054		1	Fire detection and fire alarm systems

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11. Health and safety requirements

The service provider shall comply with TPT health safety and Environment specification number: operations -SHE contractor Specification SHEQ PRO.021

12. Documentation Control

The service provider will be expected to refer EEAM-016, General Requirements for document control and **EEAM-009 Quality Assurance, Quality Specification** which defines the quality control plan requirements

13. Tools and Machinery

The service provider is to provide all labour, materials, tools, machinery, equipment, appliances, and services necessary to execute the works in the scope. TPT will only pay for the labour and the different services requested. Where required, scaffolding and rigging will be supplied by TPT.

14. Technical evaluation criteria (RETURNABLES)

CRITERIA	DOCUMENTATION REQUIRED	Weight	Returnable documents
Eligibility: SANS 1475 permit, CIDB (code SF) and three (3) SAQCC fire 1475 technicians' certificates	It is required to submit SANS 1475 permit from the Department of Labour approved accreditation bodies, BSI, SABS or SACAS.	N/A	T2.2 - 1
	It is required to submit a CIDB level 3 (code SF) of fire prevention and protection system.		
	It is required to submit three (3) SAQCC fire 1475 technicians' certificate to carry the required works		
1. Experience on a similar projects or work'	It is required to submit testimony letters from previous client; it will serve as proof of experience of a service provider. The testimony letter should state the similar task that was taking place, (it should also state the time and must be in the past 3 years), the contact details, signature and company letterhead of the previous client must appear on the testimony letter. Testimony without contact details, letterhead of the company, signature, not stating the task took place or not stating when the task took place will not be considered during technical evaluation.	40	T2.2 - 2
2. Standard Operating procedure	It is required to submit a comprehensive standard operating procedure of replacing a damaged fire hydrant valve, these following factors be included : - PPE to be worn -Risk assessment -List of spares - Fabrication process and installation plan	30	T2.2 - 3
3. Quality assurance plan	It is required to submit quality assurance plan includes the following factors: - quality control plan - quality control of corrections, and repairs and non-conformance - control of quality records	30	T2.2 - 4
		100	

Technical Threshold = 80%

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APPENDIX: LIST OF FIRE PORTABLE EQUIPMENT TO BE INSPECTED/SERVICED

AREA	FIRE EQUIPMENT	QUANTITY
SUBSTATIONS		
Sub A	5kg C02 FE	8
Sub B	5kg C02 FE	6
Sub C	5kg C02 FE	6
Sub D	5kg C02 FE	8
Sub E	5kg C02 FE	6
Sub F	5kg C02 FE	6
Sub G	5kg C02 FE	6
Sub H	5kg C02 FE	6
Sub I	5kg C02 FE	4
Sub J	5kg C02 FE	5
Sub k	5kg C02 FE	7
Sub L	5kg C02 FE	8
Sub L&F Kiosk	5kg C02 FE	2
Delkor Sub	5kg C02 FE	3
BUILDINGS & WORKSHOP		
Import	2kg C02 FE	2
	5kg C02 FE	26
	9kg DCP FE	30
	Fire hose reel	13
	Fire hydrant	4
CCR	2kg C02 FE	7
	9kg DCP FE	3
	Fire hose reel	4

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	Fire hydrant	1
Export	2kg C02 FE	2
	5kg C02 FE	1
	5kg DCP FE	7
	9kg DCP FE	16
	Fire hose reel	6
	Fire hydrant	4
Umhlathuze	4.5kg DCP FE	5
	5kg C02 FE	3
	9kg DCP FE	23
	Fire hose reel	7
	Fire hydrant	4
Facilities & HT	5kg C02 FE	11
	9kg DCP FE	6
	Fire hose reel	2
	Fire hydrant	1
Shop 5	2kg C02 FE	1
	5kg C02 FE	9
	9kg DCP FE	13
	Fire hose reel	5
	Fire hydrant	1
DBT central store	5kg C02 FE	9
	9kg DCP FE	15
	Fire hose reel	6
	Fire hydrant	1
Old MHA	9kg DCP FE	10

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	Fire hose reel	2
	Fire hydrant	0
Ingwenya offices (6 series)	2kg C02 FE	1
	9kg DCP FE	2
	Fire hose reel	2
MHA	2kg C02 FE	6
	4.5kg DCP FE	1
	5kg C02 FE	6
	9kg DCP FE	19
	Fire hose reel	11
	Fire hydrant	2
Endlovini	2kg C02 FE	3
	5kg C02 FE	5
	9kg DCP FE	11
	Fire hose reel	4
	Fire hydrant	0
CPO 706	5kg C02 FE	2
	Fire hose reel	2
CPO 708	5kg C02 FE	2
	Fire hose reel	2
Umkhombe	2kg C02 FE	3
	5kg C02 FE	3
	9kg DCP FE	3
	Fire hose reel	2
	Fire hydrant	2
Neobulk	5kg C02 FE	1

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	9kg DCP FE	8
	Fire hose reel	1
	Fire hydrant	1
Storage	5kg C02 FE	3
	9kg DCP FE	17
	Fire hose reel	3
	Fire hydrant	0
Rock Shed offices	9kg DCP FE	1
	Fire hose reel	0
	Fire hydrant	0
GALLERIES		
Export (woodchip route)	5kg C02 FE	1
	9kg DCP FE	79
	Fire hose reel	80
	Fire hydrant	23
Export (General Cargo)	5kg C02 FE	4
	9kg DCP FE	56
	Fire hose reel	38
	Fire hydrant	19
Import	5kg C02 FE	0
	9kg DCP FE	103
	Fire hose reel	66
	Fire hydrant	17
Storage	5kg C02 FE	0
	9kg DCP FE	54
	Fire hose reel	42

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	Fire hydrant	22
WEIGHBRIDGE & PARK HOMES		
6 series	5kg C02 FE	0
	9kg DCP FE	1
	Fire hose reel	0
	Fire hydrant	0
702/703	5kg C02 FE	0
	9kg DCP FE	0
	Fire hose reel	0
	Fire hydrant	0
Pig iron/ 706	5kg C02 FE	0
	9kg DCP FE	1
	Fire hose reel	0
	Fire hydrant	0
Neobulk	5kg C02 FE	0
	9kg DCP FE	2
	Fire hose reel	0
	Fire hydrant	0
Security check points	9kg DCP FE	5
	5kg C02	1
SHEDS		
GP01	9kg DCP FE	6
	Fire hose reel	6
GP02	9kg DCP FE	6
	Fire hose reel	6
GP03	9kg DCP FE	24

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	Fire hose reel	8
GP04	9kg DCP FE	4
	Fire hose reel	4
	Fire hydrant	1
Inyathi	9kg DCP FE	16
	Fire hose reel	8
	Fire hydrant	4
Imvubu	9kg DCP FE	14
	Fire hose reel	7
	Fire hydrant	4
Rocksphate	9kg DCP FE	7
	Fire hose reel	2
	Fire hydrant	3
Coaking coal	9kg DCP FE	13
	Fire hose reel	26
	Fire hydrant	26
Paper shed	9kg DCP FE	99
	Fire hose reel	20
	Fire hydrant	7
Canopy	9kg DCP FE	52
	Fire hose reel	15
	Fire hydrant	6
PUMP HOUSES		
DBT pump house	5kg C02	46
	9kg DCP	50
	Fire hose reel	1

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6 series	9kg DCP	2
MPT	9kg DCP	2
Delkor plant	9kg DCP	6
	Fire hose reel	1
Triangle coal stacker	Fire hydrant	11
QUAYSIDE MACHINES		
Alesa	9kg DCP	10
Hopper 01	9kg DCP	03
Hopper 02	9kg DCP	03
Caillard 8	9kg DCP	08
Caillard loader	9kg DCP	06
Leighber MHC 05	9kg DCP	07
Leighber MHC 09	9kg DCP	07
Leighber MHC 08	9kg DCP	06
IMG Man	9kg DCP	04
Sandvick	9kg DCP	08
Elmec Engineering	9kg DCP	09
Man Tarkraf	9kg DCP	06
MOBILE MACHINES		
Terbeg	9kg DCP	69
Forklift	9kg DCP	30
Sweeper	9kg DCP	2
Rich Stacker	9kg DCP	3
Excavator	9kg DCP	11
Bobcat	9kg DCP	6