| Document Title: |
| --- |
| **SCOPE OF WORK** |

| Project Title: |
| --- |
| **SCOPE OF WORKS FOR THE RE-FILLING AND SERVICE MAINTENANCE OF THE STORED FOAM FIRE SUPPRESSION SYSTEM FOR TM1** |

**REVISION: FOR APPROVAL**

## 1. INTRODUCTION

Transnet Pipelines (TPL), a division of Transnet SOC Ltd, provides strategic pipeline infrastructure, with associated world class pipeline logistics, for the petroleum and gas industries of South Africa. This is done in partnership with our customers and stakeholders thereby assuring the African sustainable development imperative. Established in 1965, TPL owns, maintains, and operates a network of 3 114 km of high-pressure petroleum and gas pipelines. The pipeline transverses five different provinces (Kwa-Zulu Natal, Gauteng, Northwest, Free States and Mpumalanga) ensuring security of supply of petroleum products into the inland market.

## 2. PROJECT OBJECTIVE

This document outlines the scope of work for the re-filling and service maintenance of the stored foam fire suppression system installed in Transnet Pipelines (TPL) containerized Gensets for back-up power driven by the diesel engine. The fire suppression system is an automatic fire suppression system that uses an expellant gas cartridge of Nitrogen at 122.5 Bar and AFFF Ansulite 6% wet chemical agent for class B fires, refer to Figures 1A, 1B & 1C below. The maintenance service shall conform to NFPA Standard 11: Wet chemical extinguishing system and NFPA 16.

Wet-Chemical Agent

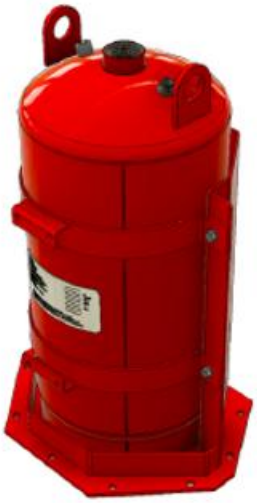

**Figure 1A**

Expellant Gas Cartridge

**Figure 1B**

AFFF Ansulite 6%

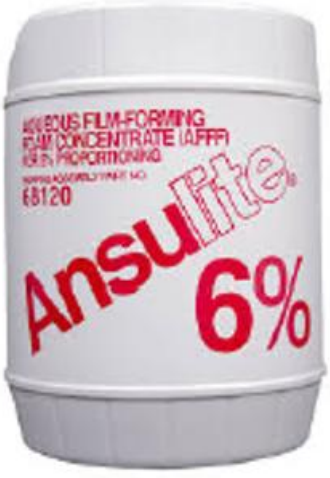


**Figure 1C**

## 3. SCOPE REQUIREMENTS:

### 3.1 Compulsory Tender Briefing

Tenderers are required to attend compulsory tender briefing at the address mentioned below in Table 1.

**Table 1: Physical Address for the site**

| ISLAND VIEW (TM1) |
|---|
| Transnet Pipelines Terminal 1<br><br>105 Taiwan Road<br><br>Island View Cutler<br><br>Durban |

### 3.2 Scope of work

- The successful bidder is required to re-fill and recharge the system, replace any defective items, and ensure that the system is 100% operational when done.
- When re-filling the tank(s), the service provider must be certain to use the correct measurements for the AFFF to water ratio, please refer to Table 2 below.
- Service provider to provide a service report upon completion and provide TPL with itemised spare list for the system.

**Table 2: AFFF to Water Ratio**

| Model | AFFF | Water |
|---|---|---|
| 25Lt | 2lt AFFF | 23lt water |
| 35Lt | 2lt AFFF | 33lt water |
| 45Lt | 3lt AFFF | 42lt water |
| 65 Lt | 4lt AFFF | 61lt water |

- Please refer to Figure 2 below for more specifications for all 25lt, 35lt, 45lt, & 65lt models.

| MODEL | Part Number | Capacity | Shipping Weight | Dimesions | Actuation | Cartridges |
|---|---|---|---|---|---|---|
| F-25 - 25Lt Advanced AFFF system | ADV-004 | 23Lt 6% AFFF Wet Chemical Agent | 42.8Kg With Bracket | 520mm x 500mm x 307mm | Electric Detection With Pneumatic Actuation. Manual or remote actuators | Propellant N2 Remote Actuators N2 1800PSI(122 .5Bar) |
| F-35 - 35Lt Advanced AFFF System | ADV-001 | 33Lt 6% AFFF Wet Chemical Agent | 47.6Kg With Bracket | 695mm x 500mm x 307mm | Electric Detection With Pneumatic Actuation. Manual or remote actuators | Propellant N2 Remote Actuators N2 1800PSI(122 .5Bar) |
| F-45 -45Lt Advanced AFFF System | ADV-003 | 42Lt 6% AFFF Wet Chemical Agent | 49.5Kg With Bracket | 791mm x 500mm x 307mm | Electric Detection With Pneumatic Actuation. Manual or remote actuators | Propellant N2 Remote Actuators N2 1800PSI(122 .5Bar) |
| F-65 - 65Lt Advanced AFFF System | ADV-044 | 63Lt 6% AFFF Wet Chemical Agent | 62.3Kg With Bracket | 1000mm x 500mm x 307mm | Electric Detection With Pneumatic Actuation. Manual or remote actuators | Propellant N2 Remote Actuators N2 1800PSI(122 .5Bar) |

**Figure 2: All size Models Specification Chart**

### 3.3 Equipment Materials and Consumables

- The service provider shall provide all necessary equipment and PPE for the execution of the work. As the minimum requirement, the service provider shall ensure its employees are equipped with the following:
    - ✓ Steel cap boots,
    - ✓ Full length overall, either 1 piece or 2 pieces that are flame retardant,
    - ✓ Hard hat,
    - ✓ Safety glasses and ear protection,

# 4. HEALTH, SAFETY, AND ENVIRONMENTAL MANAGEMENT

### 4.1 Health and Safety Standard

4.1.1 The awarded Service Provider shall comply with the requirements of the Occupational Health and Safety Act 85 of 1993 and its promulgated Regulations, Requirements for Safe Entry and the following Transnet procedures: Transnet Contractor Management Procedure (TIMS-GRP-PROC-014) and Transnet Contractor Health and Safety Specification Guideline (TRN-IMS-GRP-GDL-014.3), as applicable to the scope of services. and any laws applicable in terms of Health and Safety.

### 4.2 Contractor's General Requirements for Health and Safety

4.2.1 The Service Provider is solely responsible for carrying out the work under the Contract having the highest regard for the health and safety of its employees, Transnet's employees, and persons at or in the vicinity of the Site, the Works, temporary work, materials, the property of third parties and any purpose relating to the Principal Contractor carrying out its obligations under this Contract. Adequate provisions must be made available for health and safety.

4.2.2 The Service Provider is required to develop and implement a Health and Safety Plan in accordance with the Contractor Health and Safety Specification Guideline (TRN-IMS-GRP-GDL-014.3). This plan must encompass all the sites where work will be conducted. The contractor is to ensure that their Health & Safety Management plan, as well as their Baseline Risk Assessment, includes the management of communicable diseases.

4.2.3 The Service Provider shall ensure that all incidents are reported to the relevant Transnet Pipelines Depot Manager and investigated by the principal contractor in conjunction with the client's safety representative. Occurrences shall be reported immediately or before the end of the shift, followed by a written report within 24 hours.

### 4.3 Contractor Compliance File Requirements (Minimum requirements)

4.3.1 The Contractor will provide Transnet Pipelines with the required Health and Safety documentation before work on site begins. Once the Contractor's Health & Safety file is approved, the awarded contractor will be permitted to commence work.

4.3.2 The file must include but not limited to the following documents:

- A valid Letter of Good Standing with the Workman's compensation.
- Proof of relevant insurances to carry out work.
- Contractor Health & Safety Plan correlating with Transnet Contractor Management Procedure (TRN-IMS-GRP-PROC-014) submitted and approved.

- Copies of TPL & Contractor's health, Safety & Environmental Policies
- Mandatory agreement as per section 37.2 of the OSHACT. Act 85 of 1993 and CR 5.1(K)
- Risk Assessments, Method statements and Safe Working Procedures
- Employee scope of work.
- Proof of site-specific induction (Contractor).
- Copy of ID Document.
- Legal Letter of Appointment.
- Abbreviated CV for the management and Legal appointees.
- Proof of competence.
- Valid entry medical certificate of fitness done by an Occupational Health Practitioner.
- Project Specific Risk Assessment indicating the full scope of work and risk profile.
- Organogram of reporting structure including contact details.
- Copy of nominated responsible person to conduct inspections and proof of their competency.
- The contractor to ensure that their Health & Safety Management plan as well as their Baseline Risk Assessment includes the management of communicable diseases.

## 5. SECURITY VETTING

- The Contractor will be expected to go through security vetting before being given access to Transnet Pipelines premises.

- The following documents are needed from the bidder:
  - Company registration number.
  - CIPC registration.
  - Company TAX clearance TCS Pin.
  - Copies of ID of directors.
  - Fingerprints of directors (Use SAP 91) to be found at local SAPS. Original fingerprints must be submitted.
  - Copies of ID of employees who will be working on site.
  - Fingerprint of employees who will be working on site (Use SAP 91) to be found at local SAPS. Original fingerprints must be submitted.

- The contractor must make a copy of the extra Departmental documents and take it to SAPS, which prevents them from paying.