PART C3: SERVICE INFORMATION

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CONTRACT SCOPE DOCUMENT

FOR TANK REPAIRS AT THE GERMISTON DIESEL STORAGE AND DISPENSING DEPOT

VOLUME 1

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1. INTRODUCTION

Germiston depot is located at the Ekurhuleni Local Municipality, Gauteng.

Site infrastructure and operations are summarised as follows:

Main Site Activity: Locomotive movement facility
Main Infrastructure:
• Decanting Area
• Spill Containment Area
• Tankage
• Tank Bund
• Locomotive Refuelling Area
• Fuel Pump House
• Drainage System
• Separators
• Workshop
• Offices

Tankage: Two 498m³ above ground (A/G) vertical bulk diesel storage tanks within a bund area. The tenderer is invited to tender for the refurbishing, painting, testing, commissioning and handover in complete working order ready for immediate use a diesel fuelling facility at Germiston depot.

The tenderer shall be responsible for all aspects of the refurbishment and shall follow the best-accepted engineering practice in order to provide the Client with a storage tank that is in accordance with the requirements and specifications detailed in various parts and sections of this document, and to be erected whilst complying with the local authority's requirements and the following minimum standards:

- API 653 Tank Inspection, Repair, Alteration and Reconstruction.
- API Standard 650, Welded Tanks for Oil Storage.
- SANS 10089-1 - Storage and distribution of Petroleum products in above ground

bulk installations.
- SANS 10131 - Above-ground storage tanks for petroleum products.
- API Std 1104-197: Welding of pipelines and related Facilities.
- Quality Data pack: Quality control plan - welding procedure, welder certificates, material certificates, NDT results etc.

TANK 1 INFORMATION:

- Tank diameter: 7.61m
- Height: 9.74m
- Tank capacity: 498m³
- Product: Diesel

BACKGROUND

In line with the API 653, the diesel tank is taken out of operation every five years for a comprehensive inspection and necessary repairs. This scheduled maintenance ensures the continued integrity and safety of the tank, preventing potential operational disruptions and environmental hazards. The inspection process includes a detailed assessment of the tank's shell condition, nozzles, manhole, and other appurtenances. These evaluations are crucial in identifying any defects or areas of concern that may compromise the tank's structural integrity or functionality.

The tank in question is a vertical above-ground storage unit. Given its above-ground installation, the tank is exposed to various environmental factors that may contribute to wear and tear over time. Based on the findings from the inspection report, targeted repairs will be undertaken to address the identified issues.

2. PROPOSED SCOPE OF WORK

The objective of this project is to refurbish the tank in accordance with the recommendations provided by the inspection, ensuring compliance with the relevant industry standards. The scope of work to be undertaken under this contract includes the coordination, refurbishment, testing, commissioning, and handing over upon the completion of all tasks.

2.1. TANK FOUNDATION

2.1.1. Install a new coat of asphalt or bitumen mixture between the foundation ring and the bottom plates.
2.1.2. Install water proofing membrane around entire circumference of tank.
2.1.3. Install two grounding lugs as per API 650, section 5.8.11.3.
2.1.4. Remove the existing two tank bottoms and install a new bottom plate as per API 650.

2.2. TANK ROOF

2.2.1. Close the tell-tale holes on the nozzle reinforcement plates by weld deposition.
2.2.2. Prepare and wire brush and paint tank roof nozzles using primer and silver metal paint (apply 2 coats).
2.2.3. Supply and install a vent coupled with a dip hatch complete with a cap. Equip the vent with a screen mesh that complies with API 650. See figure 4 for reference.

2.2. TANK SHELL

2.2.1. Sandblast the entire external tank shell.
2.2.2. Prepare and wire brush corroded area on tank shell.
2.2.3. Apply primer where there is bare steel and apply two coats of silver metal paint on the entire tank.
2.2.4. Install a tank data name plate that complies with API 650 and API 653. See figure 1 for reference.
2.2.5. Provide tank labelling that will include tank capacity and inspection dates. See figure 2 for reference.
2.2.6. Provide labelling for inlet, outlet, and drain.
2.2.7. Coat internal first shell course with epoxy.
2.2.8. Install a davit arm on the tank manway.

2.3. TANK APPURTENANCES

2.3.1. Install symbolic safety signs that comply to national standards (SANS 1186-1). See figure 3 as reference.
2.3.2. Remove plug in the tell-tale hole of the tank shell manhole reinforcing plates.
2.3.3. Replace the 2-inch drain valve with a new 2-inch drain valve, together with the associated bolts, nuts, washers (M16) and gaskets (spiral wound) that complies with API 653. The newly installed drain valve must have a lockable mechanism.
2.3.4. Replace both manhole's (top and bottom) graphite gasket with new ones together with the associated bolts, nuts, and washers (M20).
2.3.5. Replace the inlet and outlet 4-inch ball valves with new ones together with the associated bolts, nuts, washers (M16) and gaskets (spiral wound). The new valves must have removable handles and be lockable.
2.3.6. Decommission and uninstall the varec gauge system.

2.3.7. Install welded thermal relief system with isolation valves around tank inlet and outlet valves. Supply, calibrate and Install a TRV set at 350 KPa, refer to figure 4 for the installation.

2.4. HANDRAILS, PLATFORMS AND ACCESS STAIRWAY

2.4.1. Increase the height of the roof rail guard to be 1.07m in total.

2.4.2. Prepare and wire brush corroded areas on the spiral staircase. Apply primer or similar where there is bare steel and apply two coats of silver metal paint or similar.

2.5. GENERAL

2.5.1. Calibrate tank and provide calibration chart.

2.5.2. Conduct Positive Material Identification (PMI) test before welding to determine material of construction.

2.5.3. Appoint Approved Inspection Authority (AIA) inspector to inspect all welds and provide report.

2.5.4. Perform Non-Destructive Testing new welds and provide results prior commissioning of the line. Issue the report/certificates for the new welds.

2.5.5. Paint all piping according to the Transnet paint spec.

2.5.6. Conduct hydrostatic test prior to commissioning.

2.5.7. Commission the system and hand over the production.

2.6. TECHNICAL REQUIREMENTS

2.6.1. Provide a valid gas tester calibration certificate.

2.6.2. Provide welders qualifications.

2.6.3. Provide NDT qualifications.

2.6.4. Quality data must be submitted to the Project Manager, signed by the relevant parties including AIA pack prior commencement of the work with all the necessary required information i.e. Welding procedure, welder's qualifications etc.

2.6.7. All painting works shall be done according to Transnet's paint specification.

2.6.8. Personnel involved in the repair work shall be vetted and shall meet requirements set out in the API 653 latest edition.

2.6.9. All Non-Destructive Testing (NDT) done during the repair/ alteration/ modification work shall meet the requirements outlined in API 650 section 8 and API 653.

API STANDARD 650

ANNEX		YEAR COMPLETED	
EDITION		ADDENDUM NO.	
NOMINAL DIAMETER		NOMINAL HEIGHT	
MAXIMUM CAPACITY		DESIGN LIQUID LEVEL	
DESIGN SPECIFIC GRAVITY		DESIGN METAL TEMP.	
DESIGN PRESSURE		MAXIMUM DESIGN TEMP.	
MANUFACTURER'S SERIAL NO.		STRESS RELIEF	
INT. PRESS. COMB. FACTOR		PURCHASER'S TANK NO.	
EXT. PRESS. COMB. FACTOR			
FABRICATED BY			
ERECTED BY			

SHELL COURSE	MATERIAL

Figure 1: API 650 name plate template



Figure 2: Tank labelling reference

DIESEL



Figure 3: Safety signs



Figure 4: Vent with dip hatch

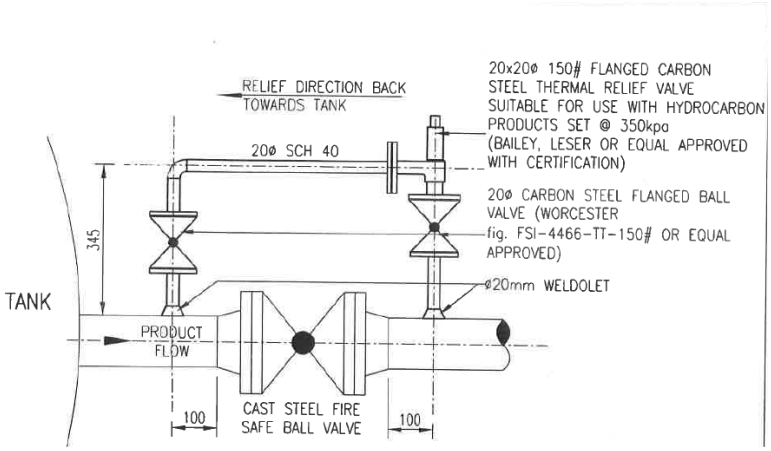


Figure 5: Thermal relief system

2.4. Drawings

Drawing number	Revision	Title
	0	Not Applicable

2.5. Specification

Title	Date or revision	Tick if publicly available
API 653 Tank Inspection, Repair, Alteration and Reconstruction.		
SANS 10089-1: Storage & Distribution of Petroleum Products in above ground bulk storage tanks. **SANS 10131: Above-ground storage tanks for petroleum products.**		

2.6. Constraints on how the *Contractor* Provides the Works

- Program of works
- Method statement
- API 653 accredited inspector certificate
- National diploma in Mechanical Engineering or higher
- Valid ASME 9 certificate (SAIW accredited)
- Project management

2.7. Requirements for the programme

- The programme is required for this works, in a form of MS Project
- Work streams progress needs to be shown
- Programme to be updated daily and submitted to Project Manager
- Provide the project manager with as built drawings for all the work streams covered by the project.

2.8. Services and other things provided by the *Employer*

Item	Date by which it will be provided

Water, Ablution facilities	On award

3. Procurement

3.1 Code of Conduct

Transnet aims to achieve the best value for money when buying or selling goods and obtaining services. This however must be done in an open and fair manner that supports and drives a competitive economy. Underpinning our process are several acts and policies that any supplier dealing with Transnet must understand and support. These are:

- The Transnet Detailed Procurement Procedure (DPP);
- Section 217 of the Constitution - the five pillars of Public PSCM (Procurement and Supply Chain Management): fair, equitable, transparent, competitive and cost effective;
- The Public Finance Management Act (PFMA);
- The Broad Based Black Economic Empowerment Act (BBBEE); and
- The Anti Corruption Act.

This code of conduct has been included in this contract to formally apprise Transnet Suppliers of Transnet's expectations regarding behaviour and conduct of it's Suppliers.

Prohibition of Bribes, Kickbacks, Unlawful Payments, and Other Corrupt Practices
Transnet is in the process of transforming itself into a self-sustaining State Owned Enterprise, actively competing in the logistics industry. Our aim is to become a world class, profitable, logistics organisation. As such, our transformation is focused on adopting a performance culture and to adopt behaviours that will enable this transformation.

1 *Transnet will not participate in corrupt practices and therefore expects its suppliers to act in a similar manner.*
- Transnet and its employees will follow the laws of this country and keep accurate business records that reflect actual transactions with and payments to our suppliers.
- Employees must not accept or request money or anything of value, directly or indirectly, to:
  - Illegally influence their judgement or conduct or to ensure the desired outcome of a sourcing activity;
  - Win or retain business or to influence any act or decision of any decision stakeholders involved in sourcing decisions; or
  - Gain an improper advantage.
- There may be times when a supplier is confronted with fraudulent or corrupt behaviour of Transnet employees. We expect our Suppliers to use our "Tip-offs Anonymous" Hot line to report these acts. (0800 003 056).

2. *Transnet is firmly committed to the ideas of free and competitive enterprise.*
- Suppliers are expected to comply with all applicable laws and regulations regarding fair competition and antitrust.
- Transnet does not engage with non-value adding agents or representatives solely for the purpose of increasing BBBEE spend (fronting)

3. Transnet's relationship with suppliers requires us to clearly define requirements, exchange information and share mutual benefits.

- Generally, Suppliers have their own business standards and regulations. Although Transnet cannot control the actions of our suppliers, we will not tolerate any illegal activities. These include, but are not limited to:
  - Misrepresentation of their product (origin of manufacture, specifications, intellectual property rights, etc);
  - Collusion;
  - Failure to disclose accurate information required during the sourcing activity (ownership, financial situation, BBBEE status, etc.);
  - Corrupt activities listed above; and
  - Harassment, intimidation or other aggressive actions towards Transnet employees.
- Suppliers must be evaluated and approved before any materials, components, products or services are purchased from them. Rigorous due diligence is conducted and the supplier is expected to participate in an honest and straight forward manner.
- Suppliers must record and report facts accurately, honestly and objectively. Financial records must be accurate in all material respects.

Conflicts of Interest

1. A conflict of interest arises when personal interests or activities influence (or appear to influence) the ability to act in the best interests of Transnet.

- Doing business with family members
- Having a financial interest in another company in our industry

3.1.2 The *Contractor's* Invoices

1. When the *Project Manager* certifies payment following an assessment date, the *Contractor* complies with the *Employer's* procedure for invoice submission.
2. The invoice must correspond to the *Project Manager's* assessment of the amount due to the *Contractor* as stated in the payment certificate.
3. The invoice states the following:
   - Invoice addressed to Transnet Limited;
   - Transnet Limited's VAT No: 4720103177;
   - Invoice number;
   - The *Contractor's* VAT Number; and
   - The Contract number
4. The invoice contains the supporting detail
5. The invoice is presented either by post or by hand delivery.
6. Invoices submitted by post are addressed to:

   Transnet Freight Rail (RNC)
   Cnr Jet Park & North Reef Rds,
   Elandsfontein
   1406
   For the attention of the Project Manager
7. Invoices submitted by hand are presented to:

Transnet Rail Infrastructure Manager [1](RNC)
Cnr Jet Park & North Reef Rds,
Elandsfontein
1406
For the attention of the Project Manager

8. The invoice is presented as an original.

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