

Appendix A - FM17081 – Specification of requirement - Provision and installation of bunded fuel tanks for Medical Research Council (MRC) Gambia

1. **Aims** –MRC Gambia received funding to replace its ageing underground diesel and petrol tanks in three stations, i.e. Fajara, Keneba and Basse.

Fajara: Fajara is where the head office of MRC Gambia is located and is 15 km away from the Airport. All the major hotels and business are also located in this town. MRC will provide airport pickup and drop-off free of charge for the tank installers. The supplier can choose to be accommodated in MRC free of charge or, alternatively, book into a major hotel at their own cost.

Keneba: Keneba is located about 150 km from Fajara and is in a remote place. MRC will provide transport and accommodation for the installers free of charge.

Basse: Basse town is located about 390km from Fajara. Again MRC will provide transport and accommodation free of charge.

Bidders must hold the necessary accreditation ISO 28300:2008 or equivalent

Delivery Arrangements:

All deliveries should be made to Fajara and MRC will transport the other tanks to Basse and Keneba.

Please see the delivery arrangements the winning bidder must comply with contained within the document entitled Appendix B FM17081 Freight Forwarding Requirements.

2. **Objectives** – With the available funding, MRC wants to replace these underground tanks with modern environmentally friendly bunded fuel tanks before December 2017.
3. **Background to the Requirement** – MRC Gambia relies on thermo electricity because of unreliable, poor and ageing national grid. There are also frequent fuel shortages that occasionally cause disruption in our operations. It is against this background that the unit wants to increase its current fuel storage capacity that will cushion it against these disruptions. The Unit current fuel storage consists of both locally facilitated steel tanks and underground fuel tanks with ageing electric fuel dispensers.
4. **Scope** – The scope involves Fabricating of tanks, shipping, installation, commissioning and training of staff on the tank operation and maintenance. Each Tank should be fitted with two high capacity fuel dispensers and a Spare Dispenser, 4 Stroke Diesel Generator fuel pumps, and hand fuel pumps. The supplier is also required to supply a standalone fuel management system capable of linking multiple sites
5. **Requirement** –
 - a) One Rectangular, fully enclosed, dual compartment bunded fuel tank with 50,000Litres capacity compartment for storing Diesel and 15,000 litres capacity compartment for storing Petrol to be installed in Fajara with Three Fuel dispensers complete with a standalone fuel management system
 - b) One Rectangular, fully enclosed, three compartment bunded fuel tank with 60,000Litres capacity compartment for storing diesel, to be connected to the generator

directly via a meter, 30,000 Litres capacity compartment for storing Diesel and 15,000 litres capacity compartment for storing Petrol to be installed in Basse with Three Fuel dispensers complete with a standalone fuel management system

- c) One Rectangular, fully enclosed, three compartment bunded fuel tank 60,000Litres capacity compartment for storing diesel, to be connected to the generator directly via a meter, 30,000 Litres capacity compartment for storing Diesel and 15,000 litres capacity compartment for storing Petrol to be installed in Keneba with Three Fuel dispensers complete with a standalone fuel management system

- d) Three 4 Stroke Diesel Generator fuel pumps to be installed at each of the three sites (Basse, Fajara and Keneba) to act as redundant in case of power outage

- e) The Supplier must provide on the spot training to two MRC staff in Gambia regarding the maintenance and operation of the system upon completion of the installation.

Tank Specifications

The Tank should be manufactured to the highest Standards. The construction should be of the highest grade mild steel, equivalent to BSEN/10025 1994 5275 Grade 43A fully bunded. The inner tank should provide fuel storage whilst the outer tank forms a water tight totally enclosed bund with a capacity of 110% of the inner tank contents.

Tank Accessories

- All tanks should be fitted with a plastic dipsticks
- Tank Lid Breather
- The lid of tank should be a plastic vent cap to allow breathing of the bund area
- Tank Breather/Vent
- Permanent ladder and platform for easy access
- Pressure/Vacuum Vent in compartment containment
- Interstitial space integrity management system utilising dipstick
- Pump Bay Housing
- Breather Vents etc. supplied with dust filter fitting
- Tank Gauging should be fitted
- Security Doors and locks
- Forklift Pockets - Ensuring easy and stable manoeuvrability.

Pump Specifications

The Dispensers should be a stand-alone system connected to a fuel management system able to operate 24 hours unattended.

Fuel Management System Specification

The system should be able to communicate fuel usage information from multiple sites back to one central point. It should only allow allocated fuellers to access and dispense fuel and collects all fuelling transactions from multiple sites, storing data electronically and transferring it to the central system

The fuel system should be able to capture the following information

- Date
- Time
- Product
- Quantity (L)
- Vehicle ID
- Driver ID
- Mileage
- Previous fuelling Mileage
- Station
- Fuel Consumption

Other Pump Specifications

1. Robust, stainless steel construction
2. Accurate to at least +/- 0.25%
3. Pumping Unit: Belt Driven pump with air separation
4. Motor: 240v Single Phase rated at 10 amps.
5. Meter: 4 Piston Displacement Meter – Forecourt Accuracy
6. Cabinet: Stainless Steel with lockable front door.
7. Display: Electronic LCD Graphics Display with Backlight.
8. Shows up to 9,999.9 litres
9. Period Totaliser: Electronic totalizers and electromechanical totalizer for every dispensing nozzle and should shows up to 9,999,999 Litres.
10. Lifetime Totaliser: Electronic totalizers and should show up to 9,999,999 Litres.
11. Pump Speed: 150 Litres per Minute.
12. Standard Equipment: Auto – Cut off Nozzle & 4 metre Steel Braided Hose
13. Pulsed Output: For connection to a Fuel Management system
14. Hose type and Length: retraction system with long active nozzle radius (8m)
15. Temperature volume correction to volume at 15°C
16. 12 months warranty
17. Should be supplied with Hand fuel pumps to operate in case the main fails

Other specification of the FMS

- Providing alerts and warning on stock movements
- Reporting/alerting deliveries into bulk tanks
- Alerting alarm states – bund alarm – overfill alarm – water detection etc.
- Running Reports
- Stock Control
- Site stock reports
- Low Stock/Re-order Alarms
- Driver reports

- Data export to other software packages
- Accepts offsite-fuelling data from all major card companies.

6. Timetable

Delivery to Fajara	1 st November 2017
Installation	15 th to 30 th November 2017
Commissioning and Training	1 st December to 4 th December 2017