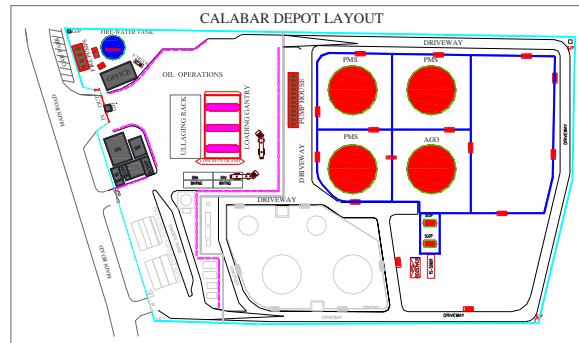


WABECO Petroleum Limited

CALABAR DEPOT, Calabar. Key features

Depot Layout

The depot has been laid out in full compliance with international codes (NFPA, good practice) for minimum safety distances between facilities and fixtures at an oil storage depot.



Google Image



Products stored

Premium Motor Spirit (PMS)
Automotive Gas Oil (AGO)
Dual Purpose Kerosene (DPK)

Storage

There are **4 nos Cone Roof, Steel Vertical Storage Tanks (VSTs)** designed to API 650, **each of Diameter 25m, Height 17.5m and Nominal Volume 8.6 ML,**.

In addition to the normal tank-body fittings and fixtures, the VSTs are equipped with the following:

- Automatic gauging using radar type level transmitters, and inventory system
- Product high-level and low-level indicators and alarms
- Water drenching system for tank cooling
- Foam deployment system for fire fighting
- Cathodic protection to combat corrosion

Depot Piping

The depot piping consists of various Sizes of Schedule 40 MS pipelines. Above-ground pipelines are externally painted and buried pipelines are externally wrapped. The pipeworks for Dual Purpose Kerosene (DPK) are internally lined for possible Aviation Turbine Kerosene (ATK) service.

Cargoline

The depot is fed by a number of pig-able **1,800m, Diameter 10” pipelines** laid from the ECOMARINE portion of the NPA Jetty, Calabar to the depot. The pipelines are all protected against corrosion by wrapping or painting, as appropriate and cathodic protection.

Product Loading

The depot has one loading gantry of **3 islands/6 loading bays** for the top-loading of products into Bulk Road Vehicles (BRVs). Product metering is by pre-set automatic metering equipment which is linked to the depot automation system. The loading bays are segregated by product.

Product Pumps

There are 7 product pumps which are driven by flame/explosion proof electric motors:-

- **6 nos of 140 m³/hr –h71mp** pumps for BRV loading
- **1 no of 450 m³/hr –h77mp** pump for back-loading product to vessels at the jetty

BRV or Road Tanker Loading Rate

The depot can load up to **114 BRVs** or Road Tankers in an **8-hour working day**.

Health, Safety and Environment

- ✚ The depot is equipped with the following safety features:
- ✚ **Electronic flame detector cells** installed at calculated points for fire detection. The activation of any of the cells would initiate the following actions:
 - ✚ Set off the audible alarm system
 - ✚ Close all emergency product supply valves
 - ✚ Shut down all product pumps
 - ✚ Start fire-water diesel-driven pumps
 - ✚ Open the valves on the fire system in the appropriate areas

- **Fire-water hydrant system pressurized by 3 nos 611m³/hr @ head 61.2m diesel-driven Main -Fire Pumps** which are connected in parallel. And an **12 m³/hr @ head 61.2m Jockey Pump** to continuously pressurize the hydrant lines.
- Foam generation and deployment system
- **Fire Water Tank(VST)** designed to API650 for fire-fighting of nominal capacity **1.72ML** for fire-fighting, foam generation and cooling
- Industrial potable water Bore Hole of capacity **10m³/hr** as main source of water.
- Water drenching for cooling VSTs
- Portable/mobile Fire Extinguishers
- Range Rover **Fire Tender/Truck**
- **Main Grounding Network** to protect personnel from injury and equipment from damage
- **Active Lightning Protection** for entire depot. The system and all static electricity protection are bonded to the main grounding network.
- **Main reinforced concrete Bund Wall** at the tankfarm to hold 110% of total spillage from the largest product VST
- **Slop Tankage** made up of **2 nos. steel Horizontal Tanks each of 61m³** nominal capacity
- Oily-water Interceptor (OWS) for the control of all effluent from the depot to the municipal drainage/ocean.
- Lighting System designed to meet the minimum illumination levels and maximum uniformity ratios.
- Appropriate Signage to guide and direct depot operations.

Electric Power Supply

- Public Mains Power supply via **11/0.415 kV Transformer**
- Main Standby Generator of **500kVA**
- Emergency Standby Generator 1 of **380kVA**
- Emergency Standby Generator 2 of **135kVA**