



# Kwa-Zulu Natal

## Fire Protection Association



### **INTEGRATED FIRE MANAGEMENT**

#### GUIDELINE FOR FIRE EQUIPMENT STANDARDIZATION

#### LOW PRESSURE BAKKIE SAKKIE UNIT

#### Tank:

- The approximate tank volume will be 400-700lt.
- The tank to be manufactured from UV stabilised LMDPE with a nominal wall thickness of approximately 10mm.
- The tank design shall ensure a low centre of gravity.
- The colour should be yellow or red, but not essential.
- A filler/vent to be provided on the centre line.

#### Pumps:

- One Davey twin stage standard impeller pump, close coupled to a Honda GX160 air cooled, rope start petrol engine.

#### Reels:

- 1 x Heavy duty spoke type with, manual rewind live hose reel with removable crank handle.
- The live reel to be mounted by means of heavy duty bearings and seals/bushes.
- The hose reel fitted with 30-60m (20mm) good quality mining rubber hose, terminating in an adjustable 20mm brass nozzle.
- Hose reel designed in such a way as to prevent kinking of the hose - forestry side on / veld facing back.
- 20mm Geka couplings to be used on hoses

#### Plumbing:

- The pump unit to be mounted on the base plate by means of mounting rubbers.
- The plumbing to allow for suction from tank, suction from open source, tank refill as well as fire fighting.
- All pipe fittings to be brass, alloy or galvanised fittings.
- 1 x 40mm x 5m suction hose with 1 x 3mm heavy duty strainer, and non-return valve supplied for tank refill from open source. To be supplied with Camlock couplings.
- All ball valves should be either Netco or Bossini and a small hole should be drilled on the right hand side to drain water from the ball valves to prevent damage due to freezing.
- Red PVC covers to be provided for the pump and hose reel. Pump to be mounted in such a way that the exhaust gasses do not blow onto anything that could be damaged by the hot gasses.

- All ball valves should be mounted in such a way that it is ergonomically friendly and will prevent someone from injuring his hand.

- The pump to be mounted in such a way that it is possible to replace the starter rope without moving the pump or any other component, except for the starter cover. Easy access required! It should also ensure easy and ergonomically friendly starting.

#### **Unit Design:**

- The unit (pump and reel) to be mounted in such a way that it maximizes the driver's view through the rear window.
- The unit to be designed in such a way that it can easily be loaded manually.

#### **Colour Coding:**

- **Red:** All valves on the delivery side used for fire fighting, the hose reels, as well as the 38mm outlets.
- **Green:** All valves on the suction side as well as the valves required for refilling the tank and the foot valve on the suction hose.

#### **Additional Equipment:**

The following additional equipment should be available:

- 1 x 25mm brass nozzle to be used with rubber hoses (with extension piece and ball valve – minimum distance between ball valve and nozzle section 150mm).
- 2 x 20mm Gecke couplers, hose clamps and o-rings - spares