

FARMING & WATER SCOTLAND



Storage of Oil

All oil, regardless of the amount, must be stored in a suitable container that is strong enough and of suitable capacity to hold the oil without leaking or bursting. The tank and its components should be positioned to avoid damage, so far as is reasonably practicable.

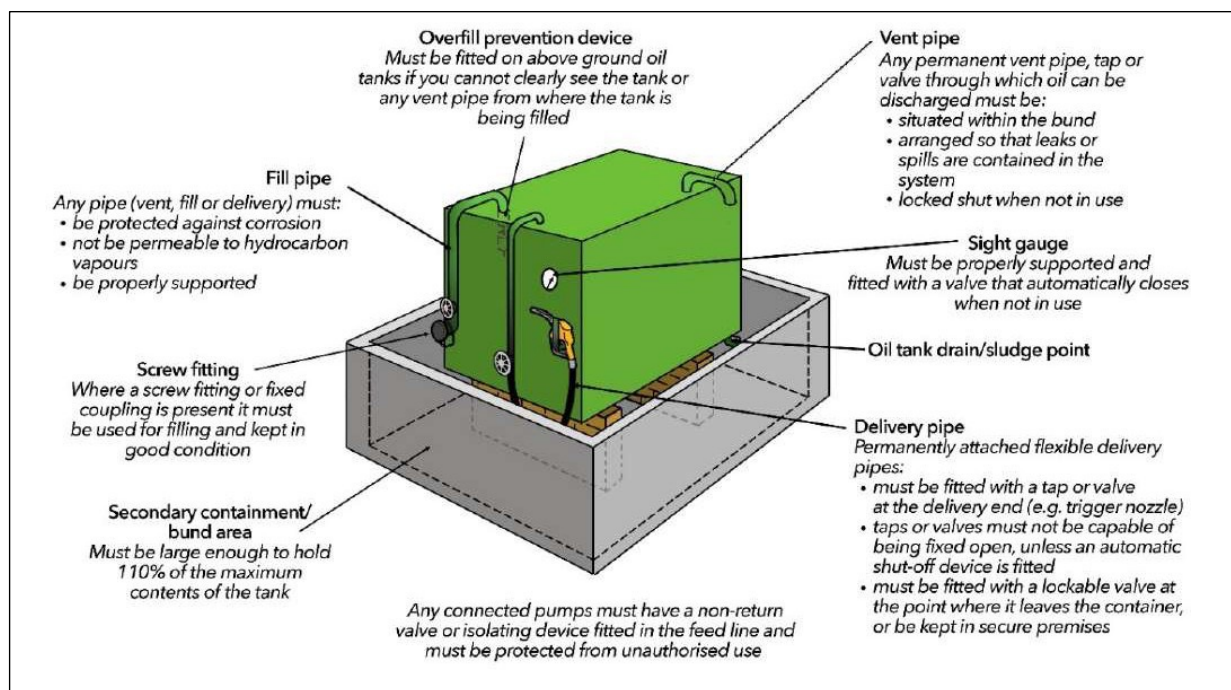


Figure 6.1. Oil storage requirements.

Where the tank/container has a storage capacity of 200 litres or more it must be within a secondary containment system (bund or drip tray) that will catch any oil leaking from the container or its ancillary pipe work and equipment.

Fuel Stations

Fuel stations are typically supplied as all-in-one systems that include an integrally banded plastic or steel tank, with all valves and pipework contained within the integrated bund. These units are specially designed to capture any fuel that is spilt as you refuel vehicles or equipment, protect against theft and allow measurement of any fuel dispensed, meeting many of the requirements listed below for fixed storage tanks.

Secondary Containment Systems/Bunds

NOTE: Secondary containment is not required for tanks, with a capacity of 2500 litres or less, that are used solely for domestic heating or cooking – See Installing new or altering existing domestic oil storage tanks below for associated requirements.

The bund base and walls **must**:

- be impermeable to water and oil and checked regularly for leaks
- not include any valve, pipe or opening, that could be used to drain the system.

Table 6.1. Bund capacity.

Storage details	Required bund capacity
One tank (fixed tanks, mobile bowser, IBC etc.)	Containment must be large enough to hold at least 110 % of the maximum contents of the tank.
More than one tank	Containment must be large enough to hold at least 110 % of the largest tank, or, 25 % of the total storage capacity of all tanks, whichever is greater.
Drum storage	Containment must be large enough to hold at least 25 % of the total capacity of the drum(s).

Emptying the Bund

Any water removed from the bund, contaminated by oil, must be disposed of as special waste, using an appropriately licensed waste contractor.

Fixed Tank Requirements

Fixed tanks include gravity fed tanks which are typically single/double skinned, steel/plastic tanks, with little or no internal bunding. You **must** ensure the requirements for 'Secondary containment' and 'fixed tanks' detailed below are met.

All valves, filters, sight gauges, vent pipes, delivery pipes and other ancillary equipment must be kept within the bund when not in use.

Delivery Pipes

Where oil from the tank is delivered through a flexible pipe, which is permanently attached to the tank or delivery pump:

- The pipe **must** be fitted with a tap or valve (e.g. trigger nozzle) at the delivery end which closes automatically when not in use.
- The tap or valve **must not** be capable of being fixed in the open position unless the pipe is fitted with an automatic shut off device.
- The pipe **must** –
 - have a lockable valve where it leaves the container, which is locked shut when not in use; or
 - be situated in secure premises that prevents unauthorised access.
- When not in use the pipe **must** be kept within the bund or positioned over an area which drains to a suitable oil interceptor unless the pipe is enclosed in a secure cabinet (equipped with a drip tray) which is locked shut.

Sight Gauges

Any sight gauge **must** be properly supported and fitted with a valve, which closes automatically when not in use.

Piping

Any fill pipes, draw off pipes or overflow pipes **must:**

- Be protected against corrosion.
- Not be permeable to hydrocarbon vapours.
- Be properly supported.

Permanent Vent, Pipe or Tap

Any permanent vent pipe, tap or valve through, which oil can be discharged from the tank to the open **must** be:

- Situated within the bund.
- Arranged so that any oil discharged from the tank other than to its intended destination is contained within the system.
- In the case of a tap or valve, fitted with a lock and locked shut when not in use.

Screw Fitting or Other Fixed Coupling

Where a screw fitting or other fixed coupling is fitted, it must be maintained in good condition and used whenever the tank is being filled.

Overfill Protection Device

Above ground tanks **must** be fitted with an automatic overfill protection device (which may include an alarm sounding device) if you cannot clearly see the tank or any vent pipe from where the tank is filled.

Pumps

Any pump **must** be:

- Fitted with a non-return valve or an isolating device in its feed line.
- Protected from unauthorised use.

Underground Fixed Storage Tanks Additional Requirements

Any fill pipe, draw off pipe or overflow pipe **must**:

- Have accessible mechanical joints, if present.
- Have adequate facilities for detecting leaks.
 - if a leak detection device is fitted it **must** be maintained and tested, at least every 5 years, to ensure that it works properly.
 - if a leak detection device is not fitted, it **must** be tested for leaks before its first use, with further testing at least every 5 years for pipes with mechanical joints, or every 10 years for pipes without mechanical joints.

Mobile Bowsers

Any tap or valve permanently fixed to the bowser through which oil can be discharged to the open **must** be locked shut when not in use.

Where oil is delivered through a flexible pipe which is permanently attached to the mobile bowser you **must** ensure:

- The pipe is fitted with a manually operated pump or a valve at the delivery end, which automatically closes when not in use.
- The pump or valve is locked shut when not in use.
- The pipe is fitted with a lockable valve at the end where it leaves the container and is locked shut when not in use.

Any sight gauge **must be** secured to the mobile bowser and is fitted with a valve or tap, which is locked when not in use.

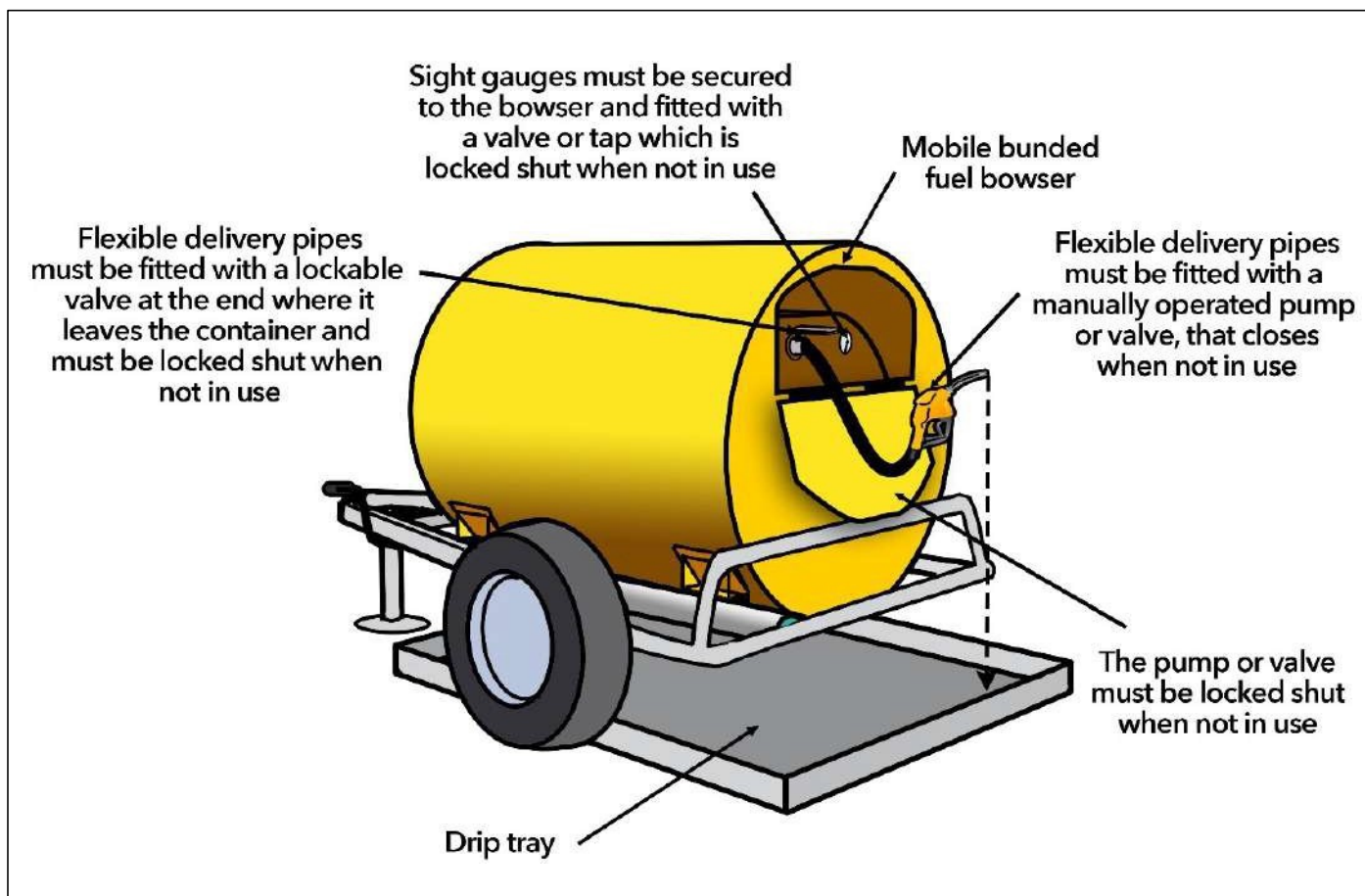


Figure 6.2. Mobile bunded fuel bowser with drip tray.

Definitions:

Oil – Includes petrol, diesel, central-heating oil, mineral and synthetic oils, vegetable and plant oils, heavy oils such as liquid bitumen, oil-based solvents such as kerosene, and waste oil.

Tanks – Include fixed tanks (e.g. gravity fed tanks and fuel stations), mobile bowzers and tanks feeding fixed commercial appliances (e.g. grain dryers.).