Tank Contents Measurements

- There must be a means of measuring the oil volume present in the tank. Therefore, the use of electronic gauges and high level alarms is strongly recommended.

  – The use of an automatic overfill prevention device is also highly recommended.

- Dip sticks should be properly calibrated and only used in the tank for which they are intended.
- Sight gauge tubes should be well supported and fitted with valves, resistant to unauthorised interference and vandalism. These valves should automatically return to the off position when level readings are not being taken.
- Dial gauges should be in a prominent position and regularly checked for their accuracy.

Valves or Cocks

- Must be resistant to unauthorised interference and vandalism, with lockable or removable hand wheels.
- Should be made of steel and located so that any discharge would fall within the bunded area.
- They should be marked to show whether they are open or closed, kept locked when not in use, and fitted with a blanking cap or plug.
- If appropriate, a notice should also be displayed requiring that valves and trigger guns be kept locked when not in use.

Maintenance

Bunds, tanks and pipework should be inspected weekly for signs of damage. Any accumulated rainwater, oil or debris should be removed and any defects to the bund wall or lining should be repaired promptly using the appropriate technique to ensure the bund retains its integrity. Damage to the tank or pipework should be dealt with immediately.

Preventing Pollution

In the short term you may feel that paying for facilities such as good bunding and storage is costly. However, it is the responsibility of all individuals and companies to ensure that their activities do not harm the environment. Following our guidelines may cost more than taking short-cuts, however it is certainly cheaper than the fines and liabilities associated with pollution. New regulations regarding oil storage will be released shortly which may specify minimum standards for oil storage installations.

Please contact our **Customer Helpline**, or the Scottish Environment Protection Agency via the web on www.sepa.org.uk for additional information and advice.

Alternative formats of this leaflet can be made available free of charge. Textphone users please call **0845 603 8855**. For information on Braille, large print, audio tapes and a variety of languages, please call **0845 606 8855**

Please quote this reference code when contacting us SWTEAGS

Please call our **Emergency Helpline** on **0845 600 8855** **immediately** to report an emergency relating to water supply, drainage, or the risk of pollution.

Further Information

If you require any more information please contact us:

By phone on our **Customer Helpline 0845 601 8855**

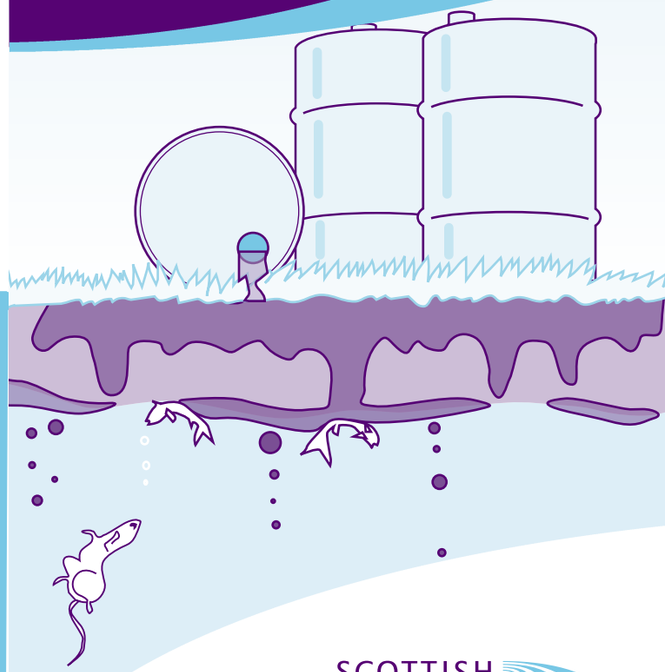
on the web at **www.scottishwater.co.uk**

or in writing at **Scottish Water**
PO Box 8855
Edinburgh
EH10 6YQ

SCOTTISH WATER

clean environment

everything you need to know
about above ground oil storage



SCOTTISH WATER

Pollution from oil storage

Oil pollution can damage property, pollute rivers and soil, and kill wildlife. Most pollution incidents happen because of ignorance, accidents, or vandalism. No company should risk being caught out, because pollution costs and fines still apply, regardless of what causes pollution. It is the responsibility of a company to minimise pollution risks from their operations and storage. This leaflet explains how to do this and what is needed to comply with the legislation.

General Points

All tanks, pipework, gauges and structures should be constructed to recognised engineering standards and in accordance with the appropriate British, European or OFTEC Standards. All installations should comply with the British Standard Code of Practice or other statutory requirements. All tank contents should be clearly marked on the tank.

The Storage Tank

- Storage tanks should be type tested to a recognised standard and produced under a quality assurance system complying with ISO 9001 or 9002, or other recognised standard.
- Should be located where it can be inspected externally for corrosion or leaks.
- Must have sound foundations to prevent settlement.
- Should be adequately protected against corrosion, and marked with the product type and tank capacity. Water from within the tank should be drawn off regularly and steel valves used to prevent frost damage.
- Every part of the tank must be within the bund, including all valves, filters, filling point, taps and the vent pipe.
- Oil-absorbent materials should be stored nearby for use on leaks or in emergencies.

The Bund

- Should consist of a base and surrounding walls which must be constructed or lined with a material impermeable to the oil stored.
- Pipework should not pass through the bund. However, if this is unavoidable, the material used for sealing around the pipe must be resistant to attack by the oil stored.
- Must be able to contain 110 percent of the volume of the storage tank. Hydraulically inter-linked tanks should be regarded as a single tank. Where two or more tanks are installed within the same bund, 110% of the largest tank, or 25% of the total capacity of all tanks, must be used to calculate bund capacity.
- There must **not** be any outlet directly connecting the bund to a drain, sewer or watercourse, or discharging it into a yard or the ground.

  – If rainwater accumulates in the bund, it can be removed by baling, or by a manually operated pump. Alternatively, you can fit specialist equipment designed to extract water from bunds, without taking any oil residues, and which gives an alarm when additional action is needed.

  – This water may be contaminated and must be disposed of with care. It must never be discharged to a drain as this may cause river pollution. Please call our **Customer Helpline** on **0845 601 8855** to seek permission for discharging it to a foul sewer via an oil separator. Alternatively you could use an authorised waste contractor. Please see the yellow pages for a company based near you.

The Pipework

- Pipework should **not** be underground, as this hinders speedy detection of leaks and can lead to serious ground and water pollution.

  – Protect all pipes against corrosion and also insulate them well to guard against frost.

  – Shield all pipes from potential knocks and damage from vehicles or similar machinery.
- Where a pipeline has to be laid underground it should be placed in a protective sleeve or duct with open grating covers for inspection purposes.

  – Underground pipework must also be protected from the risk of damage from excess surface loading.
- Separate fill pipes should be provided for each tank (unless tanks are interconnected by a balance pipe of greater flow capacity than the fill pipe).
- Fill pipes should be clearly marked with the product type and a tank number if more than one tank is involved.
- Fill pipes should be located within the confines of the bund and fitted with a suitable lockable fill cap with chain.
- Vent pipes should be positioned so they can be seen easily and directed so that any discharge from them (e.g. in the event of the tank being overfilled) is directed into the bund.
- Remote fill points are not recommended, but where these are unavoidable, the surface drainage from such areas should pass through a suitably sized oil interceptor.
- Pump sets sited outside the bund should be fitted with a non-return/check valve installed in the feed line. In some cases a bunded area for the pump set and associated pipework may be required.