

# Oil storage and spillages



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Oil can reach the natural environment through spillages, failure of containment or a deliberate act. If this happens, the oil can cause severe and long term damage. Major incidents can arise due to a variety of scenarios, such as accidents during the handling of industrial bulk containers (IBCs), or from the lack of routine inspection and maintenance of a fixed storage tank or its secondary containment.

A small quantity of oil can affect a large area - it takes just 5 litres to cover a stretch of water the size of two football pitches - and the 'polluter pays' principle for environmental damage means that an organisation or individual held responsible can find themselves liable for the vast costs associated with remedying such situations.

Oil that gets into soil can spread, causing gradual contamination of large areas and any groundwater and other water courses that it reaches. Once it's in water, oil will form a surface film that reduces the level of oxygen in the water, destroying habitats and presenting a serious threat to aquatic life; it also has the potential to reach public water supplies and sewerage treatment works.

Anyone who has control of oil storage facilities, including tanks, drums, IBCs and mobile bowsers, need to comply with the relevant regulations for their region of the UK. There is a range of different regulations applicable to the use and control of oil and which vary between England, Scotland, Wales and Northern Ireland, but they all place duties on those responsible for industrial, commercial, agricultural and institutional premises to prevent pollutants from escaping into a watercourse.

### **Accident vs. deliberate act**

It should be noted that, whether or not the regulations apply, it is an offence to cause pollution either deliberately or accidentally.

## Key actions to store oil safely and handle spillages

- Undertake and record a risk assessment of:
  - the delivery, storage, use and disposal of oil;
  - the premises and location including an up-to-date plan of the drainage systems;
  - control measures including emergency planning and spillage procedures including those from run-off water from firefighting if appropriate;
  - provision of appropriate equipment and materials to deal with spillages; and
  - emergency procedures and the appointment of trained spillage response teams.
- Review the risk assessment and make revisions in response to change and at suitable intervals to ensure that the arrangements remain valid.
- Develop a written policy setting out the organisation's commitment to environmental management and how it will be put into practice. See our guidance on environmental management for more information.
- Make sure that tanks, drums and other containers are strong enough to hold oil without leaking or bursting.
  - They should be manufactured under an accredited quality assurance scheme, complying with BS EN ISO 9001. Plastic and steel tanks and tank systems manufactured to OFTEC Standards OFS T100 and OFS T200 respectively will meet these requirements.
- Position oil containers away from any vehicle traffic to avoid damage from collision. If this isn't possible, install physical protection, such as metal barriers.
- Install secondary containment (bunding) for fixed tanks, drums, IBCs and other containers, including mobile bowzers.
- Provide secondary containment in the form of bunds or drip trays to catch any oil leaks or overspill from containers and ancillary pipework and equipment.
  - The bund must be able to contain 110% of the maximum contents of the oil container; Where more than one container is stored, the bund should be capable of storing 110% of the largest tank or 25% of the total storage capacity, whichever is the greater.
  - The bund base and walls must be impermeable to water and oil and checked regularly for leaks.
- Keep any valve, filter, sight gauge, vent pipe or other ancillary equipment within the bund when it's not in use.
- Don't fit drainage valves for the purpose of draining out rainwater to the bund.
- Check that above-ground pipework is properly supported and that underground pipework is protected from physical damage and has adequate leakage detection.