



Fuels and oils

Fuels and oils can seriously harm the environment and human health if not managed properly.

If a spill occurs and causes or risks causing pollution, the person or business in control of the substances, regardless of ownership, is responsible for containment and clean up. Failure to do so may result in enforcement action.

This guidance note looks at minimising the risks associated with the use of fuels and oils and covers:

- Fuel and oil storage
- Refuelling
- Spill response
- The pollution hierarchy

Fuels and oil storage

In Scotland, fuels and oils must be stored in line with the requirements specified in the water activity General Binding Rules (GBRs) 26, 27 and 28, which specify:

- The container must be strong enough to hold oil without leaking or bursting
- The container must be positioned to avoid damage
- A secondary containment system such as a bund or drip tray must be provided to catch any oil leaking from the container or its ancillary pipe work and equipment
- The secondary containment system must have sufficient capacity to contain at least 110 percent of the maximum contents of the container - if more than one container is stored, the bund should be capable of storing at least 110 percent of the largest tank or 25 percent of the total storage capacity, whichever is the greater (in the case of drums the capability should be at least 25 percent of total storage capacity)
- Mobile bowers or fuel cubes used to store oils or fuels should have an integral bund - if intermediate bulk containers are used, these should be placed on a bunded pallet
- Bund base and walls must be impermeable and checked regularly for leaks
- Any valve, filter, sight gauge, vent pipe or other ancillary equipment must be kept within the bund when not in use
- Above-ground pipe work must be properly supported
- Below-ground pipe work must be protected from physical damage and have adequate leak detection - if mechanical joints have to be used, they should be readily accessible for inspection
- Try not to store oil in a pollution risk area - this includes within 10 metres of a watercourse and 50 metres from a spring well or borehole





Refuelling

Designated refuelling areas

A designated refuelling area must be made available within the site or compound.

When making a refuelling area available on site make sure it is:

- Sited on an impermeable, hard standing surface, where possible, for long term fuel areas - bare ground should be avoided
- Sited in a suitable location away from high risk locations, such as areas that are prone to flooding or close to watercourses - it is best practice to locate refuelling areas at least 10 metres away from drains (foul/combined) and 30 metres from surface water drainage and watercourses
- Secure to prevent vandalism or unauthorised use
 - Bowsers, cubes and containers require to be locked when not in direct use
 - Refuelling areas should be fenced off, with access control to prevent access other than for the person carrying out the refuelling
- Clearly signposted and include relevant labelling of containers
 - This could include signage stating 'Refuelling area' with the spill response procedure displayed
 - Ownership of each bower to be indicated where multiple bowsers are stored together
- Fire protected in line with the requirements of the project/premises
- Ready for any mitigation by having a spill bin with the appropriate contents available

Receiving deliveries

- All fuel, oil and chemical deliveries to be supervised by a responsible person who will be trained to deal with any spillage to prevent a pollution problem occurring
- Drums, cans and intermediate bulk containers shall be placed within a secondary containment/secure storage area immediately on delivery - never leave in unsecure, high-risk locations, such as within 10 metres of drains or watercourses or near heavily trafficked access routes
- New bowzers delivered should be checked in the secondary skin for debris and spilled oil - if present, they should be cleaned out appropriately (for example, with a spill pillow) or the container exchanged
- Storage tank levels are to be checked before delivery to prevent overfilling and to ensure that the product is delivered to the correct tank
- Joints on hoses being used to fill tanks and bowser's should be checked immediately once pumping starts - if a leak is detected stop the fuel transfer immediately





Refuelling plant and site vehicles at the designated refuelling area

Where possible, refuelling and dispensing should only be carried out within the designated area.

Before refuelling takes place consider the following:

- Wherever possible use containers with an integrated refuelling pump and hose, with auto shut-off
- Use fuel dispensing hoses with automatic cut-off trigger nozzles, which can't be left propped open - refuelling should always be supervised and hoses filling plant should never be left unattended
- An absorbent plant mat must be placed under plant or equipment during refuelling - drip trays should be avoided outdoors, unless there is a plan in place to deal with rainwater which will collect within the tray
- The location and condition of spill kit should be confirmed before refuelling to ensure the appropriate spill kit materials are available in the event of a spill
- Fuel cans should be returned to secondary containment or secure storage area immediately after use

Refuelling or changing oil away from the designated area

All efforts should be made to carry out refuelling activities in the designated refuelling area in line with the contents of the following sections. Where this is not viable and refuelling takes place outwith the refuelling area, the following measures require to be complied with:

- Only use containers which are specifically intended for fuel storage and transfer - containers such as water bottles are not acceptable for this use
- Use an absorbent pad or other secondary containment solution under the item being refuelled - never allow fuel or oil to spill directly to ground
- Use funnels, spouts or other appropriate filling equipment
- Ensure that enough operatives are available to safely refuel
- Return all oil containers (including mobile bowsers), funnels, couplings, hoses etc, to the designated storage area after use - small fuel cans which may be used to constantly refill items such as concrete pokers should be placed in a secure location and on an absorbent pad
- Deal with any spilt oil and drips into the secondary containment immediately, using spill kits, and report to the Site Management and the Safety, Health and Environment Team in all instances
- Store waste oil/fuel/chemicals in hazardous waste storage bins/drums, and bag up contaminated absorbents - dispose of containers, absorbents and surplus materials as hazardous/special waste
- Never empty waste oil or oily wastes onto the ground or into drains





Spill response

In the event of a spill, and if safe to do so: **Stop > Contain > Notify > Clean-up**

Stop

- Stop work immediately
- Stop the leak or eliminate the source of the spill
- Eliminate ignition sources and provide natural ventilation

Contain

- Ensure appropriate Personal Protective Equipment (PPE) is available to use where necessary
- Use pollution control equipment (for example, spill kits, drip trays, bunds of earth and sand) to contain the spill
- Cover all drains/manholes to prevent the spill from entering the drainage system

Notify

- If the spill has reached any drains, water courses, or other sensitive areas. If it has call the Pollution Hotline on **0800 80 70 60**
- Once the spill has been contained notify your emergency contact(s)

Clean-up

- Attempt to soak up the spill using absorbent material
- Follow your duty of care for waste when disposing of contaminated materials

Pollution control hierarchy

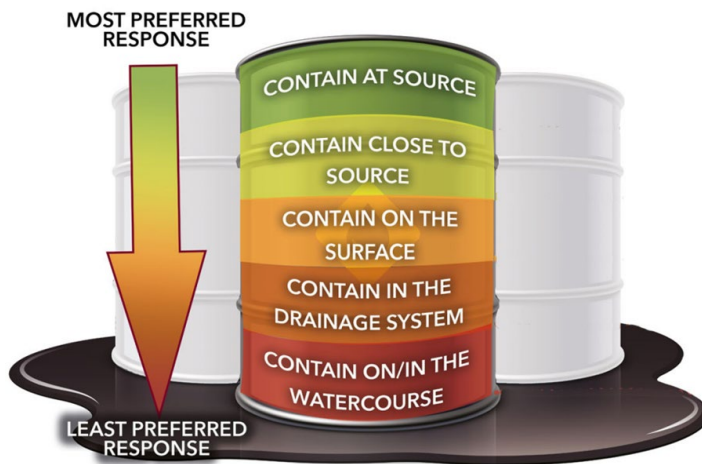
If you have a spill there are options to help you manage it. These are based around the pollution control hierarchy.

Contain at source - The most effective place to stop a spill is where the spill is happening, at the source. If the primary container or secondary containment has been breached or failed for any reason try to contain the spill where it is happening.

Contain close to source - If stopping the spill at its source is not possible, aim to contain it as close to the source as possible. If the spill has escaped from primary or secondary containers, focus on preventing further spread.

Contain on the surface - If the spill is spreading and cannot be contained near the source, prevent it from entering the drainage system or unsurfaced ground, unless the incident response plan allows using the drainage system for containment. Once contained, the spill can be more easily removed or transferred to a suitable temporary container to prevent further contamination.

Containing the spill on the surface before it reaches the drainage system allows for safer transfer to a temporary container.





Pollution control hierarchy (continued)

Contain in the drainage system - If the spill has entered the drainage system, try to keep it there and prevent it from reaching the environment.

Closing and sealing the drainage system may allow it to act as a temporary containment system to hold the pollutant until it can be properly managed.

Contain on or in the watercourse - If the spill has escaped into a watercourse or surface water, limit environmental damage by containing it on or in the water before it spreads.

For materials that float, such as oil, you may be able to use a river boom across the water to contain the spill.

For materials that mix with water, block the flow of the watercourse with a dam. This is suitable only for small watercourses.

A boom can also be placed across the site's outfall.

If a spill reaches a watercourse or surface water call the Pollution Hotline on **0800 80 70 60**.

Guidance for Pollution Prevention (GPP) 22 - Dealing with spills

Scan or click on the QR code to view the GPP 22 - Dealing with spills for more information on the pollution control hierarchy.



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Other guidance notes within this series:

- Silt management
- Surface water management
- Cement, concrete and grout
- Waste duty of care
- Ecology and biodiversity
- Air quality and nuisance
- Decarbonisation on site
- Materials sourcing and management

Scan the QR code to view the guidance notes and associated animations on the NetRegs website



Further information

Fuels and oils guidance on NetRegs



Scan (or click) the QR code to view the fuels and oil storage guidance on the NetRegs website.

These guidance notes have been developed by NetRegs in partnership with:

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