







# **Guidance for Pollution Prevention**

Above ground oil storage tanks: GPP 2

Version 1.2 June 2021

This guidance has been produced by Natural Resources Wales (NRW), the Northern Ireland Environment Agency (NIEA), the Scottish Environment Protection Agency (SEPA) and the Oil Care Campaign. For Northern Ireland, Scotland and Wales, this document provides guidance on environmental legislation. These guidelines are not endorsed by the Environment Agency as regulatory guidance in England.

For guidance on environmental regulations in England go to www.gov.uk. To find the relevant regulations visit www.legislation.gov.uk.

Guidance for Pollution Prevention (GPP) documents are based on relevant legislation and reflect current good practice. Following this guidance will help you manage the environmental responsibilities to prevent pollution and comply with the law.

If you cause pollution or allow it to occur, you will be committing a criminal offence. Following these guidelines will help you reduce the likelihood of a pollution incident. If one does occur contact the environmental regulator immediately on the relevant incident hotline number: In Northern Ireland and Scotland call **0800 80 70 60**, in Wales call **0300 065 3000**.

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# **Acknowledgements:**

We would like to thank the following organisations for their valued assistance in producing these guidelines.

The Energy Institute: <a href="https://www.energyinst.org/home">https://www.energyinst.org/home</a>

The Oil Care Campaign: <a href="http://oilcare.org.uk/">http://oilcare.org.uk/</a>

# **Section 1: Introduction**

# 1.1 Who is this guidance for?

This Guidance for Pollution Prevention is written for anyone who:

- intends to install or replace above ground oil storage tanks
- has existing oil storage tanks on their site to help look after their oil safely.

Following these notes will help look after your above ground oil storage tanks safely and to minimise the risk of causing pollution.

Different regulations apply in Northern Ireland, Scotland, Wales and England. This guidance describes what the regulations do and don't cover in each country.

#### 1.2 Legal requirements

Formal approval may be required when carrying out certain works or activities. It can take up to four months to process an application for formal approval, it is therefore important you contact the environmental regulator early on in the project.

There are laws that protect land, water, air, wildlife and people from pollution. If you cause pollution you will be committing an offence. Penalties include fines, imprisonment, Fixed Penalty Notices, stopwork notices or equivalent, and having to pay clean-up costs, along with damage to your reputation.

The Legal requirements are different throughout the United Kingdom (UK) (England, Northern Ireland, Scotland and Wales). If you are located in **Scotland** or **Northern Ireland**, you can find information on your legal environmental obligations by visiting the NetRegs website. In **Wales** guidance on regulations can be found on the Natural Resources Wales (NRW) website (see **Further information**).

#### 1.3 Pollution Prevention

It is important to understand how activities could affect the environment and cause pollution. Think about what pollution linkages there are (see Figure 1.).



Figure 1: Example of a pollution linkage using the source > pathway > receptor model.

NOTE: Groundwater is both a pathway and a receptor.

The site and activities will only cause a risk to the environment or people if you have all three parts of the pollutant linkage present i.e. a source, a pathway and a receptor. You should put in place measures to prevent or minimise or mitigate the effects of any risks and thereby break the pollutant linkages between these three. By doing this, you can identify how to prevent or reduce

the likelihood of pollution and reduce the impact of any risks that may occur. It is important that you fully understand the local drainage network as pollution is often caused by mistaking a surface water drain for a foul/combined sewer. Contact your local water company for advice on this.

If you cause pollution you will be responsible for the clean-up cost. This can be expensive and time consuming particularly if groundwater has become contaminated. There may be additional costs associated with recovering the cost for the environmental regulator's response (in line with the Polluter Pays Principle), you may receive fines through the criminal courts or civil claims and you may experience a reputational cost i.e. loss of future work.

Following this Guidance for Pollution Prevention will help you reduce the likelihood of an incident. However, if one does occur contact the environmental regulator immediately on the relevant Incident Hotline number. A rapid response to incidents will help to minimise the environmental impact and could reduce the overall costs.

For more information refer to Section 16.

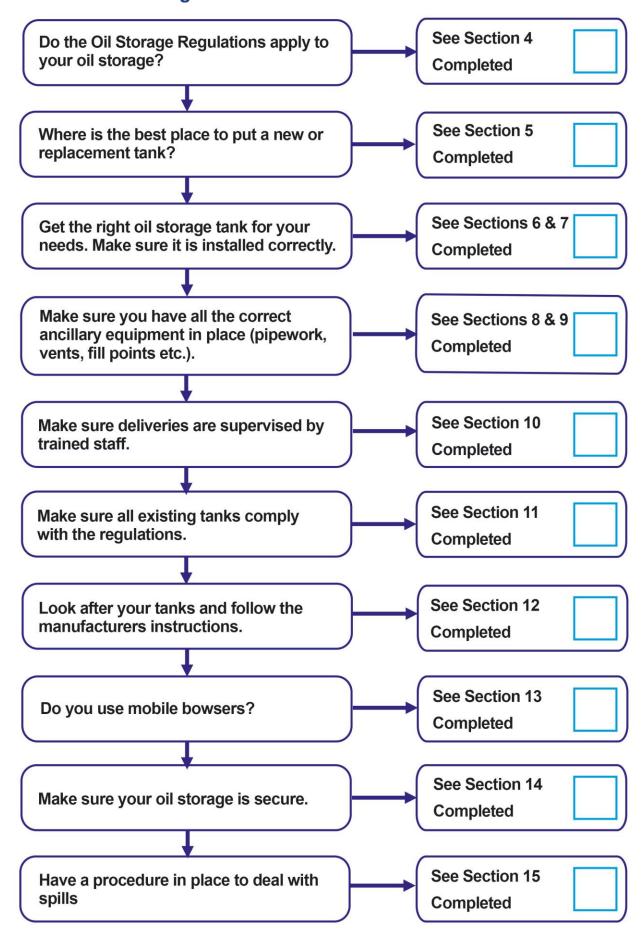
# **Section 2: Get Insurance**

Oil is among the most common pollutants in the UK. Cleaning up oil spills can be difficult and expensive. Dealing with a spill will cause you and maybe your neighbours a great deal of inconvenience. Make sure you have adequate insurance cover which does not just cover the cost of replacing the lost oil, and if needed your oil storage tank. Your policy should include:

- environmental clean-up for accidental oil loss, or deliberate oil loss through vandalism
- a high enough liability limit to cover you if neighbouring land, premises and/or boreholes are affected
- the costs of cleaning up oil on your own property.

You should be aware that your insurer may not settle a claim if the oil tank and associated pipework which leaked did not comply with the applicable oil storage regulations.

Section 3: Oil storage checklist



# Section 4: The regulations and what they apply to

Across the UK, if you pollute the water environment it is very likely you are committing an offence. Throughout this guidance, we've highlighted text indicating areas that must be complied with under the regulations that deal with oil storage in Northern Ireland, Scotland, Wales and England. Where the regulations differ we've included information about the regulations for each country. Where the term 'must' is used, this refers to your legal requirement under these Regulations where they apply.

# 4.1 Oil Storage Regulations

#### Northern Ireland

### The Control of Pollution (Oil Storage) Regulations (Northern Ireland) 2010

In Northern Ireland, 'oil' means any kind of oil and includes petrol, diesel, waste, vegetable and plant oils; but doesn't include uncut bitumen. The regulations apply to all premises that are not wholly or primarily a private dwelling, that is industrial, commercial, institutional and public body sites storing oil in containers over 200 litres, including drums and IBCs, and to domestic premises storing heating oil in a tank with a capacity of 3500 litres or more.

The regulations apply to:

- Above ground oil storage in containers over 200 litres.
- Private domestic oil tanks over 3,500 litres.
- Waste oil storage.
- Oil stored in buildings see Section 7.

The regulations don't apply to:

- Oil stored on farms for agricultural use, where the Silage, Slurry and Agricultural Fuel
   Oil (SSAFO) Regulations apply see References 6 and 8.
- Oil stored on premises regulated under the Control of Major Accident Hazards Regulations (Northern Ireland) 2015 where the container is 2500 tonnes or more.
- Oil stored wholly underground.

#### Scotland

#### The Water Environment (Miscellaneous) (Scotland) Regulations 2017

In Scotland, the regulations apply to any kind of oil including petrol, diesel, mineral oil, heating oil, lubricating oil, agricultural fuel oil, waste oil and vegetable and plant oils. They don't include uncut bitumen. They apply to the storage of any volume of oil, except private dwellings storing oil in a container with a capacity of 2,500 litres of oil or less.

The regulations apply to:

- All above ground oil storage (except domestic oil tanks of 2500 litres or less).
- Portable containers of less than 200 litres\*
- Waste oil storage see GPP8, Reference 8
- Oil stored on farms see Reference 6
- Oil stored in buildings see Section 7.
- Oil distribution depots for onward distribution to other places.

\* Portable containers with a storage capacity under 200 litres don't have to comply with the more prescriptive requirements of the Oil Storage Regulations (OSR) Scotland, such as secondary containment, which apply to the remainder of the list above. They must however be strong enough not to leak in ordinary use.

The regulations don't apply to:

- Oil stored in accordance with Pollution Prevention and Control (PPC) Part A permits.
- Oil stored wholly underground, unless it's in a building.
- Oil stored in vehicles.

#### Wales

# The Control of Pollution (Oil Storage) (Wales) Regulations 2016

In Wales, oils covered by these regulations include: petrol, diesel, vegetable, synthetic, waste and mineral oils. They do not apply to uncut bitumen. They apply to most industrial, commercial, institutional, agricultural and domestic sites storing oil in containers over 200 litres.

The regulations apply to:

- Above ground oil storage in containers over 200 litres
- Waste Oil Storage see GPP8, Reference 7
- Oil Stored in buildings- see Section 7.

The regulations don't apply to:

- Oil stored wholly underground, unless it's in a building
- Premises used for refining oil
- Premises used for the onward distribution of oil to other places
- Oil stored at domestic properties in containers in place before 15 March 2016
- Oil stored in accordance with the conditions of an environmental permit

# **England**

### The Control of Pollution (Oil Storage) (England) Regulations 2001

In England, oils covered by the regulations include: petrol, diesel, vegetable, synthetic and mineral oils. They apply to most industrial, commercial, and institutional sites storing oil in containers over 200 litres.

Refer to guidance for 'Oil storage regulations for business' on GOV.UK for more information.

The regulations apply to:

 Above ground oil storage in containers over 200 litres unless the exemptions below apply.

The regulations don't apply to:

- Waste mineral oil storage, refer to guidance on www.gov.uk
- Oil stored on farms for agricultural heat and power, Where the Silage, Slurry and Agricultural

Fuel Oil (SSAFO) Regulations apply. Refer to 'Agricultural fuel oil' guidance on www.gov.uk

- Oil stored at a premises that is wholly or mainly used as a domestic dwelling where the tank capacity is 3500 litres or less.
- Oil stored in buildings, follow good practice recommendations.
- Oil stored wholly underground.
- Oil stored at premises used for refining oil.
- Oil stored at premises used for the onward distribution of oil to other places.

The following sections (4.2 to 9) cover in some detail legal requirements and good practice for the storage of oil. Appendix A contains a checklist to help you decide whether improvements are needed to your oil storage system to comply with the OSR.

# **4.2 Building Regulations**

Oil tanks connected to fixed combustion appliances, like central heating boilers and cookers, need to comply with the building regulations that apply in Northern Ireland, Scotland, Wales or England (Reference 9). These regulations include requirements for both environmental protection and fire safety. If you're having a new or replacement oil tank fitted or having your tank altered, you should check with your local authority (usually your local council) to see how these Regulations apply to your oil storage tank. Alternatively, you can have the tank installed by a registered competent person, as they will ensure that any changes meet building regulations and can self-certify the installation or changes. If you don't use a competent person you must pay for a building regulations certificate from your local council.

Even if your oil tank isn't covered by any of the Regulations above, following these guidelines is good practice and will minimise the risk of your oil causing pollution. In some sensitive locations, for example close to a watercourse, we may ask for more stringent environment protection measures than are described here. You can find further information about high-risk locations below.

# Section 5: Deciding where to put your tank

You should think about environmental, fire protection, access, maintenance and security requirements before deciding where to put a new or replacement oil storage tank.

# 5.1 Avoid environmental high-risk locations

We recommend that you don't store oil in high-risk locations; these include:

- within 50 metres of a spring, well or borehole
- within 10 metres of a watercourse
- places where spilt oil could enter open drains, loose fitting manhole covers or soak into the ground where it could pollute groundwater
- places where a spill could run over hard ground to enter a watercourse or soak into the ground where it could pollute groundwater
- places where tank vent pipe outlets can't be seen from the filling point
- above roof level, as spilt oil can run unseen into guttering connected to surface water systems
- Source Protection Zones (SPZs) where groundwater is particularly vulnerable.

Oil spilt in these locations could pollute surface waters and groundwater. If these locations are unavoidable, then check with us before you arrange the installation of a new tank, as we may require additional environmental protection, e.g. overfill prevention device or oil separator on the surface water drainage system.

We recommend at all sites that you have secondary containment for your oil storage tanks wherever you put them, even if it's not required by Oil Storage Regulations (OSR), SSAFO Regulations or Building Regulations, (see **Section 6.3**).

You should, or if OSR applies must, ensure that steps are taken, to minimise the risk of damage to the secondary containment system by impact or collision.

You should consider access for maintenance and deliveries to the tank (filling). Check with your local oil delivery company before making the final decision on where to place a tank. They need to consider pollution prevention and staff health and safety aspects of filling your tank. This includes where they can safely park the oil tanker, where the delivery pipes will run and access to the tank. They will also be able to give advice relating to height of the fill point above ground and delivery pipe size.

### 5.2 Avoid storing oil in areas at risk from flooding

Oil containers and tanks may float in a flood, causing pipelines to break and oil to be spilled. If there's no alternative, consider raising tanks above predicted flood water levels, as long as this doesn't compromise the tank integrity, safe delivery and handling of your oil. You could also secure your tank so it can't lift as water rises around it. Contact a registered competent person, (see **Section 18**) for advice on securing your tank. Contact us to check if your tank is in an area at risk from flooding. The NIEA, SEPA, Natural Resources Wales and the Environment Agency all have flood maps on their websites, which provide details of flood risk areas.

# Section 6: Types of oil storage

Before choosing a new or replacement tank, you should check the following:

- if there are any legal requirements you must comply with; such as the need for secondary containment (see Sections 6.3 and 6.3)
- that it meets minimum manufacturing standards (see Section 6.1)
- the type of tank is suited to your requirements.

#### Also consider the:

- type of oil to be stored (see Section 4)
- safe installation and routine maintenance (see Section 7)
- location of the tank and impact protection (see Section 5)
- intended use
- safe filling and dispensing (see Section 10 and 9.3)
- prevention of leaks from flexible delivery hoses. (see Section 9.4).

If you're replacing a tank you'll also have to consider how to safely empty, remove and dispose of your old one. A specialist contractor would be able to carry out this work according to the relevant standards. See the information in **Section 12** of this guidance – "What you should do with your old tank."

#### **6.1 Manufacturing and Quality Standards**

There are recognised British Standard and trade association tank standards for different types of tank. Your tank manufacturer, supplier or installer should advise you on the minimum design and manufacturing standards under the appropriate accredited quality assurance scheme. It should comply with BS EN ISO 9001 (Reference 10). Plastic and steel tanks and tank systems manufactured to the Oil Firing Technical Association Ltd (OFTEC) Standards, OFS T100 and OFS T200 respectively meet these requirements.

Please note that compliance with standards for construction and manufacture doesn't guarantee compliance with OSR. Other aspects such as secondary containment, pipework, location and deliveries, also affect OSR compliance.

Choose a tank that complies with OFTEC standards and:

- is expected to last at least 20 years, with proper maintenance (see Section 12), before it needs to be replaced
- is made of a material that is suitable for the type of oil you will store (check with supplier)
- is of sufficient strength and structural integrity to ensure that it won't burst or leak in ordinary use
- has a way of preventing drain down by gravity e.g. top off-take and / or isolating check valves.

Check the recommended maintenance needed for your tank with the manufacturer.

### 6.2 Types of oil storage tank

There is a range of oil storage tanks available. Above ground oil tanks are usually made from steel or polyethylene (plastic). They can be single skinned, double skinned or have a built-in bund (integrally bunded) as a complete containment system.

**Single skinned tanks** are tanks made from one layer of steel or plastic. Single skinned tanks and their ancillary pipework must be put into a secondary containment system, often referred to as a bund. For tanks in open bunds, we recommend there is a minimum distance of 750 mm between the tank and the bund wall and 600 mm between the tank and the base to allow access for external inspection and maintenance. We recommend that the bund walls are high enough to prevent the "jetting" of oil from a small tank puncture hole reaching outside the bund and causing pollution.

**Double skinned tanks** have two layers of steel or plastic with a very small space between them; any ancillary equipment is positioned outside the second skin. The space between the two layers is not enough to contain 110% of the oil your tank can hold. Double skinned tanks, along with ancillary pipework and valves, must be put into a constructed secondary containment system, or they will not be compliant with the OSR.

**Integrally bunded tanks** have a primary container manufactured with integral secondary containment (see **Section 6.3** and Figure 3) that can hold a minimum of 110% of the design volume of oil from the primary inner tank. Ancillary equipment will also be positioned within the secondary containment.

It is important that you know what sort of tank you have and how to use it. See 'Get to know your tank' from the oil care campaign (Reference 13).

Figure 2. Shows a diagrammatic example of an integrally bunded steel oil tank.

Figure 3. Shows a diagrammatic example of an integrally bunded plastic oil tank.

These tanks are manufactured off site and installed onto a suitably constructed base. The diagrams show fixed draw-off pipes, and on Figure 3, an overfill prevention device and oil monitoring between the tank and secondary containment.

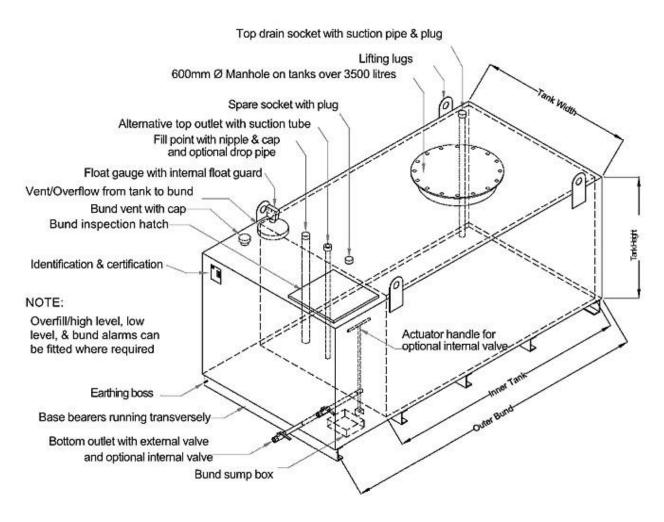


Figure 2. Integrally bunded steel tank (Image courtesy of James Blake and Co (Engineers) LTD).

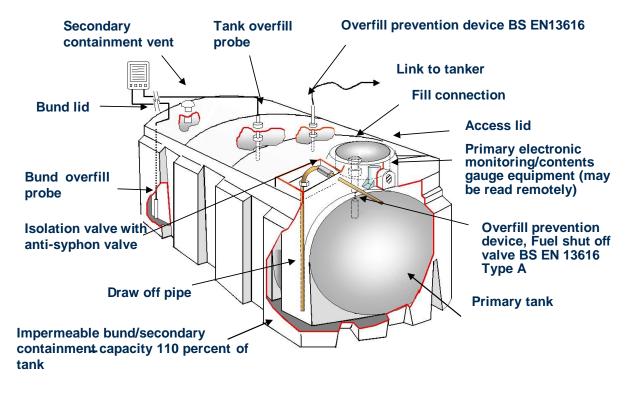


Figure 3. Example of integrally bunded tank (could be constructed of metal or polyethylene and may not be this shape and design (Image courtesy of OFTEC)

Figures 2 and 3 are for illustration only. Different configurations exist depending on the manufacturer, type of tank and installation. We normally recommend top tank outlets, as manual valves on bottom tank outlets must have someone in attendance.

You can get an Oil Care tank sticker for your storage tank from the Oil Care Campaign (Reference 13).

### 6.3 Secondary Containment (also known as bunds)

Secondary containment is an area around a tank and its ancillary equipment designed to contain any loss of oil and to prevent it from escaping to the environment. It can be manufactured as part of an integrally bunded tank system or built on site ready for the tank to be put into it. Your tank may need to have secondary containment by law, depending on where it is and what it's used for. We recommend all oil tanks should have secondary containment as it is good environmental practice.

Secondary containment must hold at least 110% of the volume of oil the tank is designed to contain.

The extra 10% margin is intended to take into account a range of factors, including:

- loss of the total tank contents, for example due to vandalism or an accident
- sudden tank failure or leaks
- overfilling
- containment of fire-fighting agents
- dynamic factors such as overtopping caused by surge and wave action following tank failure
- an allowance for rainfall during an oil spill incident, although it is advisable to roof over secondary containment areas.

If you have more than one oil storage tank in the system, the secondary containment must be capable of storing 110% of the biggest tank's capacity or 25% of the total capacity, whichever is the greater.

Secondary containment must be impermeable to oil and water with no direct outlet such as a pipe, valve or other opening to drain the system, and which could:

- connect it to any drain, sewer or watercourse
- discharge oil onto a yard or unmade ground.

Ideally, any pipework to fill or empty your tank shouldn't pass through the secondary containment floor or walls (the bund). If this is unavoidable, **the joint between pipe and bund should be sealed**; we recommend using a material that is resistant to attack by the oil stored, **so that the containment remains leak-proof**.

Don't store anything in the secondary containment, as this will reduce the volume available in the event of a spill and can cause a fire risk if it becomes saturated in oil.

For agricultural oil storage in Northern Ireland, Scotland and England, it is a legal requirement that bunds are expected to remain impermeable, with proper maintenance, for at least 20 years and have no gaps, holes or drainage outlets. (see References 6 and 8). In Scotland and Northern Ireland and Wales, this is a requirement of the OSR. In England,

it is a requirement of the SSAFO regulations. Agricultural oil storage is covered by the 2016 OSR in Wales.

If you're considering an integrally bunded tank system, check with the manufacturer to make sure that it's designed to provide at least 110% secondary containment capacity. Some tank systems may not provide enough capacity if your tank is overfilled. Be aware that it isn't easy to see into the secondary containment section of an integrally bunded tank. We recommend your tank is fitted with an overfill prevention device and secondary containment sensors that detect if oil has collected in the bund from an incorrect delivery, overfilling or an inner tank problem and to warn you if additional maintenance is needed.

# 6.4 Secondary containment capacity

Make sure your secondary containment has the capacity to take at least 110% of the volume your oil tank can hold.

For integrally bunded tanks, you can contact the tank manufacturer with the model of your tank; this information should be on your tank somewhere. They should be able to confirm the secondary containment capacity. You should be aware that with integrally bunded tanks the capacity of the secondary containment will often take into account the volume of the primary containment tank. This is because in the event of a leak, the oil will find its level in both the primary and secondary containment.

If the capacity of the secondary containment is 110% of the capacity of the primary container, the actual difference in capacity may only be 10%. Overfill prevention devices are particularly important in these circumstances to prevent overfilling resulting in an oil spill.

For single or double skinned tanks within a constructed secondary containment system, you can calculate the bund volume yourself. You can take account of any volume taken up by tank supports within the bund and consider the volume taken up by any of pipework or pumps. The capacity of the part of the primary container that sits below the level of the bund can be included in the total capacity of the bund. You can find advice on calculating bund capacity in **Appendix B.** 

# Section 7: Installing tanks

You should have your tank installed by a competent person who's registered with a professional scheme for the type of tank you're having installed. They will make sure that tanks are installed according to the relevant standards and good practice. Professional schemes are run by a number of organisations (see **Section 18** for more details).

Tanks should be sited on an appropriately designed and constructed base or support, with sufficient room around it to protect the tank from fire in the surrounding area, see BS 5410 (Reference 12). Check what you need for your tank with the tank manufacturer or qualified tank installer.

To prevent pollution, the delivery and dispensing area around your tank should have an impermeable surface and be isolated from surface water drainage systems. For domestic oil tanks there may not be an impermeable surface available.

Make sure you keep the manufacturers and installers information for your tank. Leave all the markings and stickers on your tank when it's installed. These include tank manufacturer, make, model and capacity markings. Many oil tanks come supplied with an Oil Care Campaign tank sticker that gives information about what to do if you have an oil spill. It may be a legal requirement for your tank to have a sticker describing emergency actions if you have a spill. If your tank doesn't have a tank sticker, you can get one from The Oil Care Campaign (Reference 13). If you have more than one tank, label all your tanks and their fill points clearly, with the type of product stored and tank capacity.

You should protect your oil storage tank from the risk of fire. Building Regulations (Reference 9) allow for fire protection by using approved distance between the tank and surrounding structures or by a physical fire protection barrier. Don't store any materials close to your tank or in the secondary containment.

**Tanks within buildings** – in **Northern Ireland**, **Wales** and **Scotland** these must comply with the OSRNI, OSR Wales or OSR Scotland. In **England** follow good practice guidance to reduce your pollution risk. Building Regulations are also likely to apply.

#### For tanks in constructed secondary containment

If your tank is being installed in a constructed bund, the bund should be built using reinforced materials, with no damp-proof course and lined to ensure it is impermeable to oil.

Your bund should be designed to reduce the risk of oil spraying beyond the containment area if your tank developed a hole (known as jetting).

To reduce the chance of this happening you should:

- keep the tank as low as possible within the bund
- increase the height of the bund walls
- leave space between the tank and bund walls
- don't put one tank above another.

A bund that is open to the elements should also have a sump formed in the base so you can remove rainwater for safe and legal disposal.

The Construction Industry Research and Information Association (CIRIA) suggests in locations with high rainfall an open bund with 110% capacity may not be enough to provide protection from loss (Reference 11). They give an alternative method to calculate the size of secondary containment needed for tanks in open bunds in locations with high rainfall. The method for calculating bund capacity depends on the risk of polluting water. If you're in any doubt about the sensitivity of a site, consult us. A roof over the oil storage area will help prevent the need for additional capacity in the bund, but you should consider aspects of health and safety for delivery and maintenance as well as fire safety, depending on the type of oil being stored.

# **Section 8: Ancillary equipment**

These are the fittings and pipework that all tanks will have, e.g. a vent pipe, but others may be needed according to the tank type, location or use.

#### For example:

- a heating oil tank may have a fixed draw off pipe
- a tank used for refuelling may have a pump and flexible hose to deliver oil
- a tank with a remote fill point or in a sensitive location may have an overfill prevention device.

Valves, filters, sight gauges, vent pipes, or other tank ancillary equipment, not including the fill pipe, draw-of pipe or pumps for oil with a flashpoint less that 32°C, must be within the secondary containment system, so any discharges of oil are retained.

Many of these fittings are shown in Figures 2 and 3 above and are discussed below.

The Oil Care Campaign produce an oil tank user guide 'Get to know your oil tank', which should be a useful resource. Reference 13.

# 8.1 Measuring tank contents

You need to be able to measure how much oil is left in your tank so you can order the right amount when your tank needs refilling and to monitor how fast you use your oil. There are many products available to measure tank contents including electronic, float and hydrostatic gauges, sight or visual gauges and dip sticks. Some are read at the tank, others remotely. Ask the tank manufacturer or a qualified tank installer for advice on a suitable system for your tank.

If you store flammable liquids (as classed by Health and Safety Executive), your gauge must be safe for use with the product you store.

# Sight gauges

- must be located in the secondary containment
- must be properly supported so it can't come loose
- must be fitted with a valve that closes automatically when the gauge isn't in use
- valves should never be kept open
- valves should only be opened when taking contents' readings.

Delivery drivers should close sight gauge valves at the end of their delivery. After your tank has been filled, check that the sight gauge is shut and isn't leaking. Sight gauge tubes aren't suitable for use with integrally bunded oil tanks.

Dipstick - only use it in the specific tank type for which it was designed, to ensure the reading is accurate.

# **Section 9: Pipework**

# **Underground pipework**

Underground pipes should be avoided where possible as they can't easily be checked for damage or leaks and have a greater risk of causing pollution. You should only use underground pipe work where you can't fit pipes above ground. See section 9f. OSR Wales has specific requirements regarding how underground pipework is installed and, where pipe joints have to be used, how they can be inspected.

# All above ground pipework must be:

- positioned or protected to minimise the chances of damage by impact or collision
- protected against corrosion
- supported so it's secure and can't come loose (a legal requirement in England & Wales; good practice elsewhere).

All above ground pipework should also be:

- made of a material suitable for use with the oil you're storing. It is important that the type of oil doesn't degrade or weaken the material used in construction. Your supplier will be able to advise.
- where appropriate, insulated to prevent freezing up and frost damage.

### 9.1 Vent pipe

This allows oil vapour and air to escape from the tank when it is being filled or when these gases expand with heat on hot days, it also allows air in when fuel is being drawn off.

We recommend that tanks (including those in buildings) are installed so that vent pipes can be easily seen during deliveries; and that the vent pipes are within and discharge into the secondary containment system.

# Legal requirements:

#### In Northern Ireland:

- Vent pipes must be within the secondary containment system and must be arranged so any oil discharged is contained within the system.
- The tank must be fitted with an automatic overfill protection device (which may include an alarm sounding device) if the filling operation is controlled from a place where it is not reasonably practical to observe the tank or any vent pipe.

# In Scotland:

- Vent pipes (including those on tanks within buildings) must be within the secondary containment system.
- The tank must be fitted with an automatic overfill protection device (which may include an alarm sounding device) if the filling operation is controlled from a place where it is not reasonably practical to observe the tank or any vent pipe.

#### In Wales:

- Vent pipes must be within the secondary containment system and must be arranged so that any discharge is directed vertically downwards into the system.
- The tank must be fitted with an automatic overfill protection device, if the filling operation is controlled from a place where it is not reasonably practicable to see the tank and any vent pipe.

### In England:

- Vent pipes must be within the secondary containment system and must be arranged so that any discharge is directed vertically downwards into the system.
- The tank must be fitted with an automatic overfill protection device, if the filling operation is controlled from a place where it is not reasonably practicable to see the tank and any vent pipe.

#### 9.2 Fill point

The fill point is where the tanker delivery hose connects to fill the tank. There are different arrangements depending on tank type, size and location.

Coupling - If your tank fill point has a screw fitting, or other fixed coupling that is in good condition, it must be used when filling the tank. The fill point should have a lockable fill cap with a chain and be marked clearly with the product type, tank capacity and, where appropriate, tank number. The cap should be replaced on to the fill point after each delivery to protect it from damage and unauthorised use.

Position – we recommend your fill point should be at the tank and within the secondary containment system or, **if outside the secondary containment, must have a drip tray to catch any oil spilled during deliveries.** Where your fill point is outside the secondary containment system, this could be positioned in a suitable cabinet with a drip tray designed to catch any oil spilled during deliveries.

Fill point drip trays should be:

- clean, free from water and other debris before each use
- able to be moved without risk of spilling the oil we recommend your drip tray holds at least 3 litres, it may need to be larger
- checked after each delivery and, if necessary, safely emptied before being put away;
   we recommend you ask your oil delivery company to do this for you
- kept somewhere safe where they can't collect rainwater when not in use.

**Remote fill** - if there's no alternative and you have to have a fill point which isn't near the tank (or it isn't practical to see the tank and vent pipe), a remote fill point will be needed. Your registered competent person (see **Section 18**) can advise you about standards required for remote fill points.

In Northern Ireland, Scotland and Wales, if you have a remote filling point and the vent pipe can't be seen during delivery you must have an overfill prevention device. This should conform to the OFTEC standard OFS E105.

In England, if your tank and vent pipe can't be seen from where a delivery is controlled, even if the fill point is not remote, the tank must have an overfill prevention device. This should conform to the OFTEC standard OFS E105.

Shut-off valves should be fitted to remote fill pipes because they can retain oil after the delivery.

**If you have more than one tank** - provide separate fill pipes for each tank, unless they're connected by a balance pipe with a greater flow capacity than the fill pipe. Each fill pipe should have its own fill point shut off valve and be marked with its corresponding tank/compartment number, volume and type of oil.

When a tank is removed or decommissioned, make sure you remove the remote fill point as well to prevent fuel being discharged into redundant pipes.

# 9.3 Pipework to take oil from your tank (draw-off or supply pipe)

Whenever possible, position supply pipework above ground to make it easier to inspect and repair. We recommend using tanks that have top outlet off take pipes; and that feed lines should have anti-siphon (a requirement in Wales) and isolating valves to prevent the tank contents draining down because of leaks, damage, theft or vandalism.

Oil spills and leaks are most common on the pipework leading from an oil storage tank.
Oil tanks in good condition rarely leak, however pipework is more vulnerable to damage and can leak from poorly made joints.

Use pumped dispensing from oil storage tanks for refuelling to reduce the chance of oil spills. If you can't avoid gravity dispensing, then tanks should be properly supported and installed. Suitable secondary containment for the tank and its ancillary equipment should be designed to reduce the chance of oil 'jetting' from the high tank in the event of an overfill or damage.

Consider the risk to the user from working at height (to fill, inspect, maintain and draw-off), suitable ladders, railings and other health and safety equipment may be necessary.

**Filters or isolating valves** used to protect the draw-off pipe or downstream equipment in a gravity-feed system aren't considered ancillary to the container. Where practicable, locate this equipment within the secondary containment system. We recommend that valves should be lockable or have removable hand wheels.

#### 9.4 Flexible delivery pipes

These should only be used where you need to move the end delivery point, for example when fuelling vehicles. Fit the pipe with a tap or valve at the delivery end, which closes automatically when not in use; we recommend you use a trigger nozzle designed to dispense oil. Where the pipe isn't fitted with an automatic shut-off device, it mustn't be possible to fix the tap or valve in the open position.

# The pipe must either:

- have a lockable valve where it leaves the tank which is locked shut when not in use and be kept in the secondary containment, or
- must be in an enclosed secure cabinet which is locked shut when not in use and has a drip tray.

Dispensing pumps should be installed with all the following:

- positioned to minimise the risk of damage by collision or protected from collision
- fitted with a valve in its feed line that prevents the tank contents emptying if there's damage to the pump or feed line
- protected from unauthorised use, for example with a remote electrical switch or locked when not in use.

Pumps **are not** ancillary to the oil tank. You should ensure any oil that could leak from a pump is contained either by a bund or drip tray. Pumps for oil with a flash point below 55°C should never be within the secondary containment system because of the risk of explosion. You should assess the risk for all stored oil, and if appropriate use a pump that is intrinsically safe and certified to ATEX (EC Directive 2014/34/EU - *Atmospheres Explosives*). If your pump is within the secondary containment, check its positioned above the 110% containment level so it can't become submerged.

### 9.5 Taps and valves

Taps and valves that are permanently attached to a tank and can discharge oil must:

- be fitted with a lock
- be locked shut when not in use
- In England, must be within the secondary containment system.

# 9.6 Underground pipework

These should be avoided where possible as they can't easily be checked for damage or leaks and have a greater risk of causing pollution.

If you do have them we recommend they should:

- be double skinned (pipe in pipe)
- be within concrete ducting
- have as few joints as possible
- be marked clearly on-site plans and when possible on the ground.

Underground pipework must be protected against corrosion and from physical damage like that caused by excessive surface loading, ground movement or ground disturbance. If mechanical joints have to be used, they must be readily accessible for inspection under a hatch or cover.

You must have adequate facilities for detecting leaks from underground pipework. If you use a continuous leak detection device, it should be maintained and tested regularly (in Scotland at least every 5 years). Keep a record of the test results and any maintenance work completed.

If you don't have a continuous leak detection system you must test:

- pipework before use
- pipework with mechanical joints every five years
- all other pipe work at least every ten years.

These are minimum requirements, and it is good practice to do this more frequently.

# 9.7 Overfill prevention devices

We recommend your tank system includes an overfill prevention devices to safeguard against spills. These can be electronic or mechanical which sound an alarm and/or give a visual warning or automatically stop the oil delivery into the tank. They may be a legal requirement depending on tank location, fill point and vent pipe arrangements.

Overfill prevention devices should comply with the Oil Firing Technical Association Ltd (OFTEC) standard OFS E105.

# Section 10: Safe deliveries to your tank

All your tanks should be labelled with the capacity and type of oil they contain and if you have more than one tank should be individually numbered to help identify them. If you have more than one tank, then remote fill pipes should be labelled to identify the tank it fills.

Before you order an oil delivery:

- check how much oil is in the tank
- work out the spare capacity
- decide how much oil you need but make sure you don't over order.

Supervise all deliveries. Ensure that whoever is supervising the delivery knows about the tank, its equipment, how the overfill prevention system works and what to do if there's a spill. If you have more than one tank, make sure the correct tank is being filled. The Federation of Petroleum Suppliers (FPS) produces information on safe deliveries. For additional information, see **Section 18**.

If your tank is filled from a place where it is not practicable to see the tank and any vent pipe, it may need to have a remote fill point fitted.

In Northern Ireland, Scotland and Wales, where a tank has a remote filling point and the vent pipe can't be seen during the filling operation, you must have an automatic overfill prevention device fitted to your tank.

In England; if your tank and vent pipe can't be seen from where a delivery is controlled, even if the fill point is not remote, the tank must have an overfill prevention device.

We recommend you avoid remote filling points where possible. Your registered, qualified tank installer, (see **Section 18**) can advise you about standards required for remote fill points.

If your tank has a screw fitting or other fixed coupling that's in good condition, it must be used when filling the tank. Your fill point should have a lockable fill cap with a chain and be marked clearly with the product type, tank capacity and, where appropriate, tank number. Make sure the cap is replaced on to the pipe after each delivery to protect it from damage and unauthorised use, (see Section 7.2 for more information on fill points).

#### Protect soil and water

The area around your tank where deliveries are made and, if applicable, oil is dispensed should have an impermeable surface and be isolated from surface water drainage systems. This will help stop oil and/or contaminated water getting into the soil and groundwater. If any oil is spilt during an oil delivery, you should make sure that it can't run into a surface water drainage system.

You should consider if you need a suitably sized oil separator to direct oily liquid away from surface waters and prevent oil escaping from your site. This will reduce the risk of any spilt oil causing pollution if there's a spill. You can check with your environmental regulator to see if environmental sensitivities in your local area mean drainage from your oil tank area should pass through an oil separator of an approved design (see GPP 3: Reference 14).

# Section 11: Check the legal compliance for your existing tanks

There may be legal requirements that your existing tank (including home heating tanks) need to comply with for the OSR Wales, OSR Scotland, OSR Northern Ireland, OSR England or Building Regulations. The checklist in **Appendix A** will help you check your tank for most requirements of the OSR Northern Ireland, OSR Scotland and the OSR Wales. In England, check on the GOV.UK website.

# Section 12: Looking after your tank

The oil tank user guide 'Get to know your oil tank', Reference 13, contains simple guidance on looking after your tank. Make sure you have a copy, as it includes space for you to record essential information about your tank, including when its last annual check was.

You should inspect all accessible parts of your tank, secondary containment, ancillary equipment and pipework regularly, for signs of damage or leaks, if you're unsure what to look for see the Oil Care website. As a minimum you should inspect your tank before an oil delivery and if you are aware that the oil level in the tank is decreasing faster than expected. If you're unsure how frequently you should do this, contact your environmental regulator for advice. If you notice any damage, you should have it repaired or replaced immediately by a registered competent person.

#### 12.1 Maintenance

Your tank manufacturer will be able to tell you what regular maintenance your tank needs. Use a registered competent person to check your tanks, secondary containment and pipework every year and remove any condensation water that has accumulated within the tank. You should receive a written report on the state of your tank after the inspection is completed. Any repairs or alterations detailed in the report should be done by a registered competent person straightaway.

To make sure a constructed bund retains its integrity, use a reputable company to repair any defects in the bund wall or lining promptly.

**Keep a log** of the inspections, any repair work on your tanks and who's done it.

**Record oil usage**. Regularly make a note of how much oil is in your tank and compare this to your previous usage. Contact a registered competent person if you need advice about methods of monitoring your oil use and how often. If you're suddenly using more oil and you can't explain why, this could indicate a problem with your tank or pipework. Ask a registered competent person to check your tank and pipework for faults and make any repairs immediately.

Removing rainwater. If you have a tank in an open bund, check the bund after heavy rainfall. If there's no rainwater in the bund, it might not be sealed properly and you should have it inspected and repaired. If rainwater has collected in your bund, it will reduce the amount of oil it can contain. If it's necessary to remove accumulated rainwater, we recommend you do this with a manually operated pump or by bailing from the sump. In remote locations, you could use automatic systems that can distinguish between the oil and water in the bund. If you install one of these systems, you need to contact us for advice on where you can dispose of the discharge and if you need a permit or authorisation.

In the long term, it may be more cost-effective to construct a roof over the tank and secondary containment. Consider fire risk and health and safety for maintenance and the delivery driver before fitting a roof.

Any water removed from the bund contaminated with oil must be disposed of as hazardous /special waste, using an appropriately licenced waste contractor.

**Dispose of sump water safely and legally.** Water taken out of the bund might be contaminated. Any accumulated water, oil or debris should be removed and disposed of in line with waste management legislation. In all cases where wastes are removed, as the waste

producer you are obliged under the Duty of Care (see Reference 15) to describe the waste accurately and dispose of it properly.

**In Northern Ireland, Wales and England**, waste contaminated with oil is classed as hazardous waste unless you can show there is under 0.1% oil. For guidance on waste classification you should refer to the WM3 Technical Guidance document. (See Reference 19).

**In Scotland**, waste contaminated with oil is classed as special waste, unless you can show there is under 0.1% oil. To establish if enough oil is present to make a waste special, a generic threshold of 0.1% may be used; however, if the result is below this, there may still be other hazards that make the waste special, such as flammability or toxicity, or the presence of other contaminants.

A consignment note system applies for disposal of these hazardous or special wastes. For more details about waste oils in **Northern Ireland**, **Scotland** and **Wales**, see either GPP8 (Reference 7) or your regulators' websites.

### 12.2 What you should do with your old tank

You should have your tank removed by a competent person who's registered with a professional scheme for the type of tank you're having removed. They will make sure that tanks are removed according to the relevant standards following good practice and waste management legislation. Professional schemes are run by a number of organisations (see **Section 18** for more details)

We don't recommend your tank is disconnected and left on site. If the structure of the tank deteriorates any oily residue in the tank could leak and cause pollution. If your tank has a remote fill point care should be taken when removing it and its pipework, as it can contain fuel from the original tank. This can cause pollution if it is not drained and removed.

It's important that remote fill pipes are removed or made permanently unusable if the tank they connected to is removed. Spills caused by oil delivery companies pumping oil through a remote fill pipe that no longer has a tank attached to the other end are surprisingly common.

Make sure that a tank is fully drained, degassed and certified when it's taken out of use and before it's removed. Only suitably qualified and competent technicians should do this work. Never carry out work that heats the tank until after it has been degassed and the appropriate certificate issued (see Reference 16). Under waste management legislation, decommissioned tanks taken off site must be removed by a licensed waste carrier and must be accompanied by a waste transfer note. If residues are present, then you might need to use a consignment note for hazardous/special waste. An assessment would be needed to determine if the waste was hazardous/special and the controls needed. For this assessment refer to WM3 (Reference 19).

Tanks can only be disposed of at an appropriately licensed facility. In **Scotland** and **Northern Ireland**, you can find lists of licensed waste sites on the NetRegs website. In **England** and **Wales**, contact the Environment Agency or Natural Resources Wales to find your nearest site. In **Wales** this would be on the public register of licenced sites which can be found on the NRW website.

After your tank has been decommissioned or removed, check that the surrounding soil or groundwater hasn't been contaminated. This can include testing surface and subsurface soil and groundwater samples for products relating to what you were storing. If contamination is found, take action as soon as possible to remove the pollution. Make sure you repeat the

testing after the work has been done to ensure all the contamination has been removed. For more information see Reference 1 or contact your environmental regulator. Contact details for NIEA, SEPA and NRW are at the end of the document.

### Section 13: Mobile bowsers

Mobile bowsers are oil storage containers that can dispense oil and are designed to be moved, either being towed or lifted onto another vehicle, but which can't move under their own power. As well as the requirements for the storage container (see **Section 6**) and secondary containment (see **Section 6.3**) above, the following apply to mobile bowsers:

- Any flexible pipe, tap or valve must be fitted with a lock where it leaves the container and be locked shut when not in use
- Flexible delivery pipes must be fitted with manually operated pumps or a valve at the delivery end that closes automatically when not in use. We recommend you use a nozzle designed to dispense oil
- The pump or valve must have a lock and be locked shut when not in use.

More detailed information is also available in References 6 and 8.

# **Section 14: Security**

Your oil storage areas should be secured to prevent theft and vandalism. Permanent taps or valves through which oil can be discharged to open areas should be locked when not in use. Display a notice telling users to keep valves, nozzles and trigger guns locked when they're not in use. Pumps should also be protected from unauthorised use.

Valve taps or levers should be corrosion resistant, strong enough to be tamperproof when locked and marked to show whether they are open or closed. **When not in use, they should be locked shut.** If the tank is being decommissioned, then any valve taps or levers should be fitted with a blanking cap or plug.

Try to position oil containers or stores where there is minimal chance of collision or impact, for example from moving vehicles. If the Oil Storage Regulations apply, you must ensure you protect the containers and the secondary containment system.

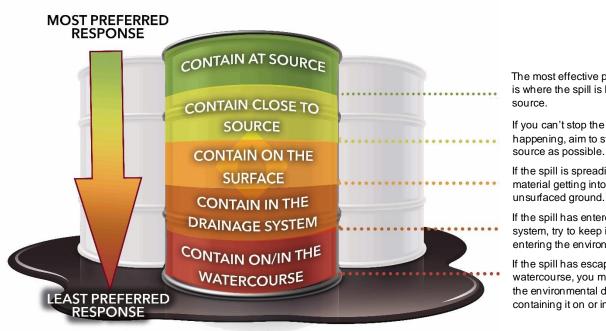
Protect your oil storage containers from the risk of theft or vandalism; site them where they can be seen and inside a locked compound if possible. Sites away from perimeter fences are often safer. If a pollution incident is caused on your site by vandalism, you will still be held responsible for any clean-up costs.

# **Section 15: Oil spills**

An oil spill from your tank is likely to cause pollution; this will damage the environment, your reputation and the environmental regulator may prosecute you. Keep a spill kit with commercial sorbent products, sand or earth close to your oil storage to deal with spills. Make sure you or your staff know how to use it safely.

In Northern Ireland, Scotland and Wales 'Pollution incident response planning': GPP21, Reference 17, tells you how to draw up a plan to protect your site, and 'Dealing with spills': GPP 22, Reference 18, will help you decide what action you may be able to take if you do have a spill.

If you have a spill, take immediate action to stop the oil getting into any drains or watercourses or soaking into the ground, see Figure 4. Oil that soaks into the ground is often the most expensive to clean up. If you can, soak up the spilt oil with the contents of your spill kit, without putting yourself in danger. Don't hose the spill down or use any detergents to try to get rid of it; you could make the pollution worse.



The most effective place to stop a spill is where the spill is happening, at the

If you can't stop the spill where it's happening, aim to stop it as close to the source as possible.

If the spill is spreading, aim to stop the material getting into drains or onto any

If the spill has entered the drainage system, try to keep it there and stop it entering the environment.

If the spill has escaped into a watercourse, you may be able to limit the environmental damage by containing it on or in the watercourse.

Figure 4. Pollution control hierarchy, courtesy NetRegs 2017.

Notify us by calling the Incident/Pollution Hotline on 0800 80 70 60 (Northern Ireland, Scotland and England) or the Emergency hotline in Wales on 0300 065 3000, (press 1 - 24hour service)

If oil soaks into the ground, a professional company should remove the soil soaked in oil, so it doesn't cause long term pollution. Store any materials that are soaked in oil in containers that won't let the oil run away until it can be correctly and legally disposed of. Surface and subsurface soil and groundwater samples may need to be taken and tested for products relating to the incident. For details on how to legally dispose of materials soaked in oil, which may be classed as hazardous or special waste, see Reference 7 GPP 8: Safe storage and disposal of used oil.

# **Section 16: Incident response**

#### **Incident Hotline Numbers:**

In Scotland, Northern Ireland and England call:

In Wales call:

0800 80 70 60 0300 065 3000

(24 hour service)

(24 hour service; Press 1 for Welsh, 2 for English)

You should immediately report any environmental incidents by calling the Incident Hotline for your country.

Incidents can include spillages (e.g. from oils and chemicals), contaminated surface water runoff, flooding, riverbed disturbance, damage to underground services, damage to habitats and poor waste disposal and storage. If in doubt, report it.

You should produce an Incident Response Plan as part of the environmental impact management of your work. Include the following:

- site risks
- list of key external and internal contacts (include your environmental regulator, Local Authority, Fire Service)
- reporting procedures
- site plan including drainage and location of storage/refuelling areas
- list of stored materials
- details of local environmental sensitivities e.g. abstractors, high amenity areas and fish farms
- location of spill equipment
- procedures for spill containment and remediation

Train your staff and contractors in the use of spill equipment and how to manage and dispose of waste materials legally.

If you are using oils and chemicals in close proximity to the water environment, store a suitable spill kit or absorbent materials nearby. Provide appropriate temporary storage for any oils and chemicals. Contain all spillages using absorbents such as sand, soil or commercially available booms or pads and notify the environmental regulator immediately, using the Incident Hotline numbers above.

# Section 17: References

#### References 1 – 3: Guidance for Pollution Prevention.

All the Guidance on Pollution Prevention notes (GPPs) are available at: <a href="www.netregs.org.uk">www.netregs.org.uk</a> These notes are endorsed by NIEA, SEPA and NRW. In **England** please see GOV.UK.

- 1. Installation, decommissioning and removal of underground storage tanks: GPP 27
- 2. Drums and intermediate bulk containers: GPP 26
- 3. Refuelling facilities: GPP 7

# Reference 4: Secondary and Tertiary Containment of Bulk Hazardous Liquids at COMAH establishments. Health and Safety Executive (HSE)

http://www.hse.gov.uk/comah/guidance/bulk-hazardousliquids.pdf

### Reference 5: Buncefield task group report, HSE

https://www.hse.gov.uk/comah/buncefield/buncefield-10-years-on.pdf

**Reference 6:** For Northern Ireland and Scotland visit <a href="www.netregs.org.uk">www.netregs.org.uk</a> for information on the Oil Storage Regulations

For **Northern Ireland**, Guidance note for the Control of Pollution (oil storage) Regulations (Northern Ireland) 2010, available on the Department of the Environment website <a href="https://www.daerani.gov.uk/publications/control-pollution-oil-storage-regulations">https://www.daerani.gov.uk/publications/control-pollution-oil-storage-regulations</a>

For **Scotland**, Building standards technical handbook 2019 – Fuel Storage <a href="http://www.gov.scot/resource/doc/1057/0029448.pdf">http://www.gov.scot/resource/doc/1057/0029448.pdf</a>

For **Wales**, Guidance note for the Control of Pollution (Oil Storage) (Wales) Regulations 2016, available on the Welsh Government website at <a href="https://gov.wales/sites/default/files/publications/2019-06/oil-storage-regulations.pdf">https://gov.wales/sites/default/files/publications/2019-06/oil-storage-regulations.pdf</a>

For England visit https://www.gov.uk/guidance/storing-oil-at-a-home-or-business

### Reference 7: Safe storage and disposal of used oils: GPP 8

<u>Guidance for Pollution Prevention (GPPs) - Full list | NetRegs | Environmental guidance for your business in Northern Ireland & Scotland</u>

### Reference 8: Agricultural oil

For **Northern Ireland**: Guidance note for the Control of Pollution (Silage, Slurry and Agricultural Fuel Oil) Regulations (Northern Ireland) 2003, available on the Department of the Environment website <a href="https://www.daera-ni.gov.uk/articles/silage-slurry-and-agricultural-fuel-oil-ssafostorage">https://www.daera-ni.gov.uk/articles/silage-slurry-and-agricultural-fuel-oil-ssafostorage</a>

In **Scotland**, Prevention of Environmental Pollution from Agricultural Activity (Code of good practice) (PEPFAA Code), available on the Scottish Government website <a href="http://www.gov.scot/Topics/farmingrural/Agriculture/Environment/PEPFAA/Overview">http://www.gov.scot/Topics/farmingrural/Agriculture/Environment/PEPFAA/Overview</a>

In **Wales**, Code of Good Agricultural Practice, Protecting our Water, Soil and Air available at https://gov.wales/code-good-agricultural-practice

For **England**: Silage, Slurry and Agricultural Fuel Oil on the gov.uk website https://www.gov.uk/guidance/storing-silage-slurry-and-agricultural-fuel-oil

#### Reference 9:

In **Northern Ireland**, The Building (Amendment) Regulations (Northern Ireland) 2006 Technical booklet

https://www.dfpni.gov.uk/articles/building-regulations-technical-booklets

In **Scotland**, Building (Scotland) Act 2003 and applicable regulations under that act; Environment section of the Building Standards Technical Handbooks (Domestic and Non Domestic Handbooks 2015), Scottish Government <a href="http://www.gov.scot/Topics/Built-Environment/Building/Buildingstandards/publications/publech">http://www.gov.scot/Topics/Built-Environment/Building/Buildingstandards/publications/publech</a>

In **Wales**, The Building Regulations 2010, part J (heat producing applicances) https://gov.wales/building-regulations-guidance-part-j-heat-producing-appliances

In **England** refer to <a href="https://www.gov.uk/government/collections/approved-documents">https://www.gov.uk/government/collections/approved-documents</a>

**Reference 10: BS EN ISO 9001.** Quality management systems requirements. British Standards Institution BSI <a href="http://www.bsigroup.com/en-GB/iso-9001-quality-management/">http://www.bsigroup.com/en-GB/iso-9001-quality-management/</a>

Reference 11: Above-ground proprietary prefabricated oil storage tank systems. C535. Construction Industry Research and Information Association (CIRIA), available on the CIRIA website at <a href="http://www.ciria.org/Search?SearchTerms=c535">http://www.ciria.org/Search?SearchTerms=c535</a>

Reference 12: BS 5410 -1:2014 Code of practice for oil firing Installations up to 45 kW output capacity for space heating and hot water supply purposes. BSI shop <a href="http://shop.bsigroup.com/ProductDetail/?pid=000000000030285454">http://shop.bsigroup.com/ProductDetail/?pid=00000000030285454</a>

BS 5410 -2: 2013 Code of practice for oil firing. Installations of 44kW and above output capacity for space heating, hot water and steam supply purposes. BSI shop http://shop.bsigroup.com/ProductDetail/?pid=00000000030170836

BS 5410 -3: Code of practice for oil firing. Installations for furnaces, kilns, ovens and other industrial purposes. BSI shop

http://shop.bsigroup.com/ProductDetail/?pid=000000000000097376

Reference 13: Get to know your oil tank. Available from the Oil Care Campaign website, <a href="http://oilcare.org.uk/">http://oilcare.org.uk/</a>

Reference 14: The use and design of oil separators in surface water drainage systems: GPP 3 <a href="https://www.netregs.org.uk/environmental-topics/guidance-for-pollution-prevention-gpp-documents/guidance-for-pollution-prevention-gpps-full-list/">https://www.netregs.org.uk/environmental-topics/guidance-for-pollution-prevention-gpps-documents/guidance-for-pollution-prevention-gpps-full-list/</a>

Reference 15: Duty of Care, codes of practice:

**Northern Ireland**: <a href="https://www.daera-ni.gov.uk/publications/waste-management-duty-care-codepractice">https://www.daera-ni.gov.uk/publications/waste-management-duty-care-codepractice</a>

Scotland: https://www.gov.scot/publications/duty-care-code-practice/

Wales: https://www.gov.uk/government/publications/waste-duty-of-care-code-of-practice

England: https://www.gov.uk/government/publications/waste-duty-of-care-code-of-practice

Reference 16: Cleaning and gas freeing of tanks containing flammable residues. Guidance note CS15. SBN 9780717613656. Health and Safety Executive (HSE) <a href="http://www.hse.gov.uk/pubns/books/cs15.htm">http://www.hse.gov.uk/pubns/books/cs15.htm</a>

# Reference 17: Incident response planning: GPP 21

https://www.netregs.org.uk/environmental-topics/guidance-for-pollution-prevention-gpp-documents/guidance-for-pollution-prevention-gpps-full-list/

Reference 18: Dealing with spills: GPP 22 <a href="https://www.netregs.org.uk/environmental-topics/guidance-for-pollution-prevention-gpp-documents/guidance-for-pollution-prevention-gpps-full-list/">https://www.netregs.org.uk/environmental-topics/guidance-for-pollution-prevention-gpp-documents/guidance-for-pollution-prevention-gpps-full-list/</a>

**Reference 19: WM3 Technical Guidance document** – Guidance on the classification and assessment of waste

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\_data/file/948735/Waste\_classification\_technical\_guidance\_WM3.pdf

Copies of regulations are available from The Stationery Office, tel 0870 600 5522 or <a href="https://www.tso.co.uk">www.tso.co.uk</a>.

# Section 18: Useful sources of information

**Oil Bank Line** - Contact the Oil Bank Line at <a href="www.oilbankline.org.uk">www.oilbankline.org.uk</a> or on 08708 506 506 for details of your nearest oil recycling bank. Also, check with your Local Authority that the recycling facility is still available.

Energy Institute. Tel: 020 7467 7100 www.energyinst.org.uk/home

Design, Construction, Modification, maintenance and Decommissioning of Filling Stations ISBN 0-85293-419X.

**Federation of Petroleum Suppliers (FPS):** Oilsafe - Home heating oil advice <a href="http://speed.oilsave.org.uk/OilWise">http://speed.oilsave.org.uk/OilWise</a>

The British Standards Institute http://shop.bsigroup.com/

The Construction Industry Research and Information Association (CIRIA) www.ciria.org

### On-line advice and support services:

- For Northern Ireland and Scotland: www.netregs.org.uk
- For Wales: Natural Resources Wales https://naturalresources.wales/splash?orig=/
- or **England**: www.gov.uk

Health and Safety Executive: www.hse.gov.uk

The Oil Care Campaign: <a href="http://oilcare.org.uk/">http://oilcare.org.uk/</a>

- For details of oil recycling facilities across the UK Find your nearest oil bank
- Useful good practice information to help you look after your oil storage
- Stickers and labels for oil storage tanks
- Spill training information
- For details of oil recycling facilities across the UK Find your nearest oil bank

### Oil Storage information:

- For Wales: https://gov.wales/sites/default/files/publications/2019-06/oil-storageregulations.pdf
- For Northern Ireland: https://www.daera-ni.gov.uk/articles/oil-storage
- For Scotland:
   www.sepa.org.uk/water/water\_regulation/regimes/pollution\_control/oil\_storage.aspx

#### Professional schemes for competent persons:

- The Competent Persons Directory <a href="http://www.competentperson.co.uk/">http://www.competentperson.co.uk/</a>
- APHC Association of Plumbing and Heating Contractors Wales.
   www.competentpersonsscheme.co.uk

BESCA - Building Engineering Services Competence Accreditation Limited, England and Wales. <a href="http://www.besca.org.uk/">http://www.besca.org.uk/</a>

NAPIT - National Association for Professional Inspectors and Testers Certification Limited, www.napit.org.uk

NICEIC - National Inspection Council for Electrical Installation Certification, <a href="https://www.niceic.org.uk">www.niceic.org.uk</a>

OFTEC - Oil Firing Technical Association Ltd, www.oftec.org.uk

Scottish and Northern Ireland Plumbing Employers Federation (SNIPEF) www.snipef.org

The Stationery Office: <a href="https://www.tsoshop.co.uk">www.tsoshop.co.uk</a>

# **Further information**

For information about environmental compliance, or to report inconsistencies or inaccuracies in this guidance, visit <a href="https://www.netregs.org.uk">www.netregs.org.uk</a>.

You can view guidance on environmental regulations online at <a href="www.netregs.org.uk">www.netregs.org.uk</a> (for businesses in Scotland and Northern Ireland) and at <a href="http://naturalresources.Wales">http://naturalresources.Wales</a> (for businesses in Wales).

This guidance is issued by the Scottish Environment Protection Agency (SEPA), Northern Ireland Environment Agency (NIEA) and Natural Resources Wales (NRW).

This document is available at <a href="https://www.netregs.org.uk/environmental-topics/pollution-preventionguidelines-ppgs-and-replacement-series/">www.netregs.org.uk/environmental-topics/pollution-preventionguidelines-ppgs-and-replacement-series/</a>.

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# **Useful contacts**

Incident/Pollution hotline: Northern Ireland, Scotland

and England

**Emergency hotline - Wales** 

Floodline \_ Wales, Scotland and England

Flooding incident line - Northern Ireland

0800 80 70 60 (24-hour service)

**0300 065 3000** (24-hour service; press 1 for Welsh, 2 for English)

0845 988 1188

0300 200 0100

Natural Resources Wales	Scottish Environment Protection Agency	Northern Ireland Environment Agency
www.naturalresourcesWales.gov.uk	www.sepa.org.uk	www.daera-ni.gov.uk
Head Office (Ty Cambria) 29 Newport Road Cardiff CF24 0TP	Corporate Office Strathallan House The Castle Business Park Stirling FK9 4TZ	Head Office Klondyke Building Cromac Avenue Gasworks Business Park Malone Lower Belfast BTZ 2JA
Tel: 0300 065 3000 (Mon _ Fri, 9am- 5pm)	Tel: 03000 99 66 99	Tel: 0300 200 7856
enquiries@naturalresourcesWales. gov.uk	www.sepa.org.uk/contact	nieainfo@daera-ni.gov.uk