



Domestic Oil Tank Installation Guidance

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Domestic Oil Tank Installation Guidance

Purpose of Guidance

This guidance covers:

- the general requirements for the installation of an oil tank for the storage of fuel oil, which:
 - has a fuel oil storage capacity of no more than 3,500 litres,
 - is made of plastic, fibreglass, steel or stainless steel, and
 - serves one dwelling for a single household
- any associated equipment;
- suggestions of reasonable measures to help you comply with the general requirements;
- best practice recommendations to further reduce the risk of water pollution from your oil tank;
- a glossary of terms; and
- other useful sources of information.

Following this guidance will help you comply with the requirements of The Environmental Pollution (Water Pollution) Ordinance, 2022. The intention of this guidance is to supplement the Ordinance; the definitions provided in the 'Glossary of Terms' section, the reasonable measures identified to help you comply with the general requirements, as well as the best practice recommendations are provided to help you look after your oil storage tank safely and to minimise the risk of causing water pollution. The general requirements detailed in Schedule 2 of the Ordinance and in each section of this guidance are mandatory, whereas the best practice recommendations within this guidance are discretionary. This guidance does not supersede the Ordinance.

Failure to comply with the general requirements may result in the occurrence of, or risk of, water pollution and is an offence under The Environmental Pollution (Water Pollution) Ordinance, 2022. The full version of the legislation is available on the Guernsey Legal Resources [website](#). Please note that there may be other regulatory requirements in place via other agencies which you are required to comply with that are not covered in this guidance.

The Environmental Pollution (Water Pollution) Ordinance, 2022 comes into effect as of 28th November 2022. The general requirements (Schedule 2) of the Ordinance come into effect

as of 28th May 2023; this is a transitional period where people can consider the requirements and make alterations, as may be necessary, to comply.

Reasonable measures to prevent water pollution occurring

Should a water pollution event occur, it is it is best practise to evidence that all reasonable measures have been taken to mitigate water pollution occurring from their oil tank and associated equipment. Below are examples of such reasonable measures which should be carried out to discover whether or not any water resources (such as a spring, ditch, douit, pond, wetland, well or borehole) exist in proximity to the location of the oil tank and associated equipment.

- Contact the Office of Environmental Health and Pollution Regulation and Guernsey Water for information, such as indications of streams, douits, ditches, ponds, wetlands and private drinking water supplies.
- Consult any available maps to identify possible locations of water resources.
- Engage with your neighbours to understand where drinking water supplies not connected to the mains exist in proximity to your land, or where other water resources may exist in their land.

Please refer to the specific oil tank types, associated equipment or related activities in this guidance for examples of reasonable measures relevant to each. For regarding defences to offences under the Ordinance, please refer to Part VI of the Ordinance.

It is recommended that all guidance in this document, including best practice recommendations, are followed or tailored to be more appropriately applied to meet the characteristics of your oil tank installation.

Advice on anything not covered by this guidance

For advice or information regarding anything outside the scope of this guidance (such as oil tanks that serve multiple dwellings, are made from other material types, have a capacity of more than 3,500 litres, or planning and building control requirements), please contact the States of Guernsey Development and Planning Authority (Planning and Building Control).

General requirements for the installation of a domestic oil tank

The below is in relation to Schedule 2 of The Environmental Pollution (Water Pollution) Ordinance, 2022, which specifies the requirements for each activity likely to cause a threat of water pollution. This information is coloured orange for ease of identification within this guidance. Additionally, information is provided which will help you understand why the general requirements are in place and how to comply with them. This information is in black. Please note that the examples provided are not definitive but are given to help you comply with the general requirements. Further mitigating measures to help you prevent a risk of water pollution occurring are covered in the Best Practice Recommendations section below.

It is noted that some of the guidance is technical and efforts have been made to put descriptions and explanations where possible. Please refer to the Glossary of Terms section for details regarding definitions. Where there is any doubt or confusion, it is recommended that you contact the Office of Environmental Health and Pollution Regulation or your oil provider or a plumber, who should be able to advise accordingly.

If your tank has been regularly filled and / or serviced over the last few years then this should provide an indication that no obvious faults have been identified - local oil companies have been proactively identifying these issues while filling or working on domestic tanks.

If you are unsure which type of oil tank you have, or what associated equipment is installed with your oil tank, you can check with your oil provider who should be able to confirm.

Tank with a top outlet

Where a tank with a top outlet (i.e. oil is used via a pipe at the top of the tank) is installed or replaced, the following requirements apply:

- the tank must be installed so that it has a secondary containment (generally a double-lined/walled tank or bund) of not less than 110% of the capacity of the tank; and
- the tank must have an isolation valve and anti-siphon device fitted inside the secondary containment.

These requirements will help prevent an occurrence of water pollution should the top outlet fail and cause oil to spill or leak from the tank - the spilled oil would be captured via the secondary containment system and access to that containment can be cut-off to prevent the spilled oil from entering the surrounding environment.

Tank with a bottom outlet and/or which is single skinned

Where a tank with a bottom outlet (i.e. where oil is used via a pipe at the bottom of the tank) and/or which is single skinned (i.e. there is only one layer to the tank) is installed or replaced, the tank must be located over a catchpit.

A catchpit is an example of a secondary containment system. This requirement ensures that any oil that leaks or spills from the tank is captured and contained before it can enter the surrounding environment and cause water pollution. The catchpit must contain 110% the capacity of the tank and must not be breached in any manner. The catchpit internal walls must be impervious.

Tank made from plastic or fibreglass

If the tank is made from plastic or fibreglass then it must not be fully or partly buried in the ground.

Tanks made from this material that are buried in the ground have a higher risk of causing water pollution, as the tank is in direct contact with the surrounding environment. Any issues with the structural integrity of a tank made from plastic or fibreglass are typically visible on the outside of the tank; however if the tank is buried this makes checking the external condition of the tank much more difficult.

Open-bunded / single skin tank

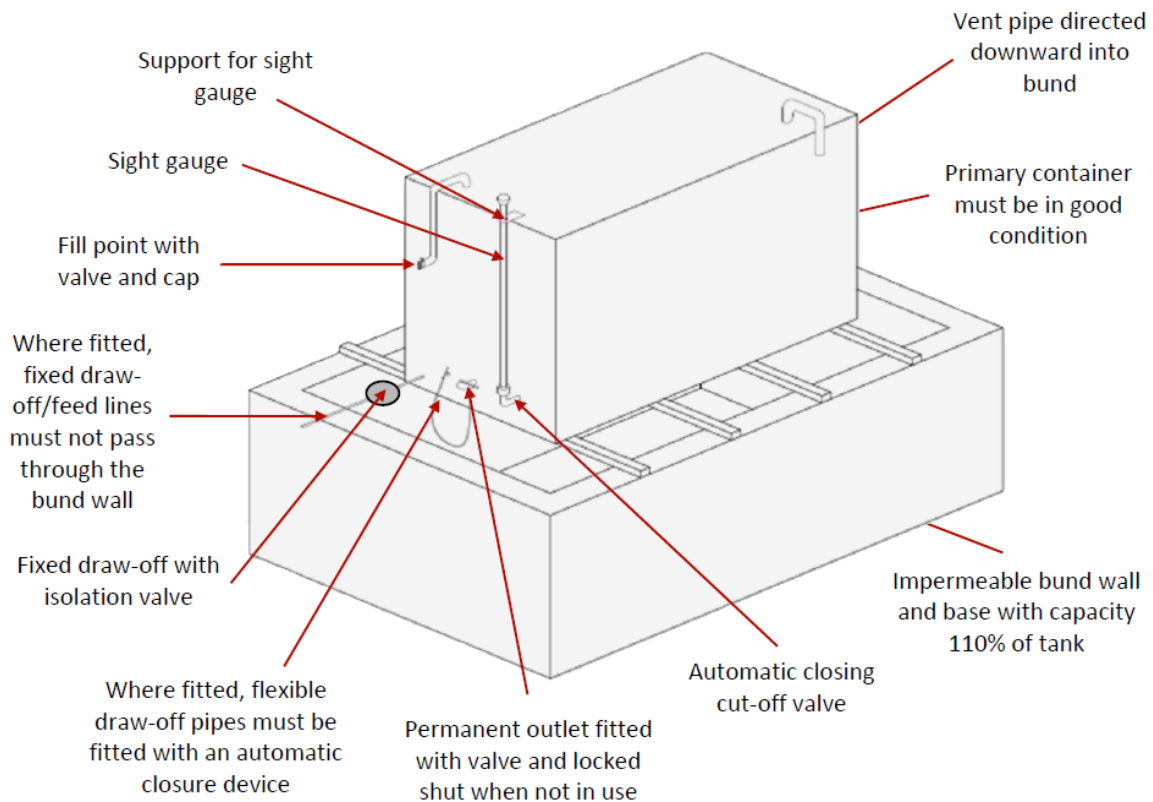
Where an open-bunded tank is installed or replaced, the following requirements apply:

- a vent pipe must be fitted which is directed downwards into the bund;
- any fixed draw-off line or feed line must not pass through the wall of the bund;
- any flexible draw-off pipe must be fitted with an automatic closure device;
- a permanent outlet must be fitted with an isolation valve, and the valve must be shut when not in use; and
- an automatic closing cut-off valve must be fitted on the sight gauge.

These requirements help ensure that the structure of the open-bunded tank is such that lines do not compromise the structure of the tank and the ability of the secondary containment system to contain any spilled oil. They also ensure that should any pipes or outlets fail, the use of the line can either be cut-off or the resulting spilled oil can be prevented from entering the surrounding environment.

Figure 1 below provides an example of an open-bunded tank and associated equipment.

Figure 1



Totally enclosed bunded tank

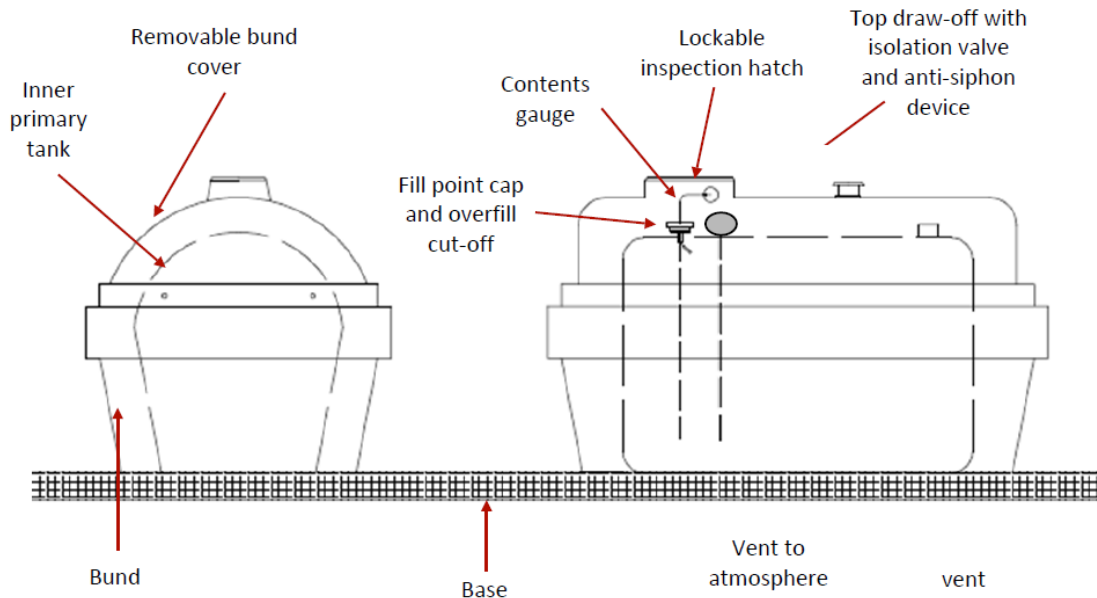
Where a totally enclosed bunded tank is installed or replaced, the following requirements apply:

- there must be a fill point cap and an overfill cut-off;
- there must be a top draw-off with an isolation valve and an anti-siphon device;
- the tank must be vented to the outside air.

These requirements help prevent overfilling of the tank, but should overfilling occur the surplus oil can be drawn off and isolated. They also ensure that should any pipes or outlets fail, the use of the line or pipe can be cut-off and prevent any further oil from escaping the tank and entering the surrounding environment.

Figure 2 below provides an example of an enclosed bunded tank and associated equipment.

Figure 2



Catchpits

Where a tank with a bottom outlet (i.e. where oil is used via a pipe at the bottom of the tank) and/or which is single skinned (i.e. there is only one layer to the tank) is installed or replaced, the tank must be installed that that it is located over a catchpit.

Where a tank is installed over a catchpit, the following requirements apply:

- it must have sufficient support to ensure that the loading on the base of the tank is equally distributed;
- it must have sufficient reinforcement to ensure that weight of the tank at full capacity is supported;
- the catchpit must be watertight;
- the joint work between any block work and the base of the catchpit must be visible above ground level;
- any block work must be rendered inside and out; and
- there must not be any damp course.

To check that the loading on the base of the tank is equally distributed, you could check that the tank does not lean when full. Routine examination of the tank and its associated equipment could include checking that the supports or other reinforcements show no signs of buckling or bending.

A watertight catchpit is one that does not allow water to drip, seep or otherwise penetrate through. Examples of material that could be used to build your catchpit include concrete, brick or stone slabs that are not compromised by any opening, holes, gaps cracks etc.

Damp course is a type of moisture control applied to prevent the transference of moisture from entering inside spaces. The catchpit itself should be made from material that prevents water from getting in or out of it – adding damp course to achieve this is not an acceptable means of ensuring the catchpit is watertight as it is typically not full containing and is likely to be damaged or degraded when in contact with oil.

Fibreglass catchpit

Where the catchpit is made of fibreglass, the catchpit must be located on a concrete pad which is at least 100mm thick, or on paving slabs which are at least 40mm thick.

This is to ensure that the catchpit is suitably constructed with material that does not allow liquid to run, drip, seep or otherwise penetrate through. Oil components can absorb into fibreglass which over time can compromise the structural integrity of the tank. It is therefore essential to have a secondary containment system in place to prevent oil from escaping into the surrounding environment should the structure of the fibreglass tank fail.

Catchpit below a single skinned tank

Where a catchpit is installed below a single skinned tank (i.e. there is only one layer to the tank), it must have a capacity of 110% of the capacity of the tank.

This is to ensure that any oil that leaks or spills from the tank is contained and prevented from entering the surrounding environment, especially when the tank is full.

Oil feed lines

Oil feed lines running from the oil tank to a boiler must be installed in such a way that prevents water pollution.

You should routinely check your tank oil feed lines for any signs of damage, wear, corrosion etc. Such signs may indicate there is an issue with the line and should be repaired as soon as reasonably possible.

Remote offset fill pipelines

Where remote offset fill pipelines are installed with the tank, the following requirements apply:

- the remote offset fill pipelines must be fitted with an isolating valve, a non-return valve at the fill point and a screw cap;
- the remote offset fill pipelines must be pressure-tested to 1 Bar and left to stand for 15 minutes before first use; and
- where remote offset fill pipelines are installed above ground, they must be
 - resistant to corrosion; and

- made of a material that is considered safe for use of delivery of fuel oils having regard to industry good practice from time to time.

A remote offset fill pipeline is a fill pipeline accessed remotely from the oil tank where it is not possible for the oil company delivery driver to be in close proximity to the tank, or the tank is in excess of the normal delivery hose length.

These requirements help ensure that should any lines fail, the use of the line can be cut-off to prevent any further oil from escaping the tank or lines and entering the surrounding environment.

Pressure testing the remote offset fill pipelines ensures that they have been installed and are functioning correctly, to reduce the risk of oil escaping during routine use.

Best Practice Recommendations

Avoid locating your tank in high risk areas

It is recommended that you do not site your oil tank in locations that increase the impact and/or likelihood of water pollution. These include:

- within 10 meters of any spring that provides water for human consumption;
- within 10 meters of any well or borehole that is not capped in such a way as to prevent the ingress of water;
- within 10 meters of the sea;
- within 10 meters of a douit, stream, ditch or pond, as measured from the top of the bank, or of any wetland;
- locations where spilt oil could enter open drains, loose fitting manhole covers or soak into the ground where it could pollute groundwater;
- locations where spilt oil could run over hard ground to enter a douit, stream, ditch, pond or wetland or soak into the ground where it could pollute groundwater;
- locations where tank vent pipe outlets can't be seen from the filling point;
- above roof level, as spilt oil can run down guttering which may be connected to surface water systems; or
- in any areas at risk from flooding.

To find out whether there are any water resources (such as a spring, ditch, douit, pond, wetland, well or borehole), open drains or areas at risk from flooding in proximity to the location of your oil tank and associated equipment, you should:

- contact the Office of Environmental Health and Pollution Regulation and Guernsey Water for information, such as indications of streams, douits, ditches, ponds, wetlands and private drinking water supplies.
- consult any available maps to identify possible locations of water resources.
- engage with your neighbours to understand where drinking water supplies not connected to the mains exist in proximity to your land, or where other water resources may exist in their land.

Secondary containment

Secondary containment means a drip tray, an area surrounded by a bund or catchpit or any other system for preventing fuel oil, which has escaped from an oil storage tank, from escaping further from the place where it is stored.

It is recommended that all oil tanks have secondary containment, even if it's not required by legislation. All reasonable steps should be taken to minimise the risk of damage to the secondary containment system by impact or collision.

Nothing should be stored within the secondary containment as this will reduce the volume available in the event of an oil spill.

Filling your tank

It is recommended that the fill point for your tank is within the secondary containment system. Where the fill point is outside of the secondary containment, it is recommended that a drip tray is used to catch any oil spilled during deliveries.

It is recommended that any fill point drip tray:

- is clean and empty before each use;
- has sufficient capacity to hold all oil that may be spilled during the oil delivery process;
- can be moved without risk of any oil captured being spilled;
- is checked after each delivery and safely emptied if necessary before being stored.

Overfill prevention

An overfill prevention device is a piece of equipment that is fitted to your oil tank that prevents the tank from being overfilled during delivery of oil. Mechanical devices can be fitted which automatically close when opening the valve, stopping any further oil from being delivered into the tank. Electronic devices are also available. Alternatively, a float can be installed within the tank which rises with the oil level and indicates when the tank is full.

It is recommended that an overfill prevention device is used to prevent spills during the oil delivery and filling process.

If your tank does not have an overfill prevention device fitted, you should check that your oil provider uses their own device during delivery, such as an electronic device which uses a probe attached to an electronic unit and which switches off the fuel delivery pump when the probe makes contact with oil in the tank. If you are unsure whether your oil tank has an overfill prevention device fitted, you can check with your oil provider who should be able to advise.

Dealing with oil spills

Your oil provider will have measures in place to ensure containment should a spill occur during the delivery process. In the event of a spill you should ensure that your oil provider is notified and that all reasonable steps are taken to contain the oil as far as practical.

Contact the Office of Environmental Health and Pollution Regulation in the event of a significant oil spill from your tank. During business hours, please contact the Office of Environmental Health and Pollution Regulation, States of Guernsey on 01481 221161.

If a significant water pollution event occurs/ is identified out of hours, please notify the Princess Elizabeth Hospital switchboard on 01481 220000.

Looking after your tank

The tank manufacturer can advise what regular maintenance your tank needs. It is recommended that you routinely check all accessible parts of your tank, secondary containment system and associated equipment for damage or leaks, and any damage or leaks identified are repaired as soon as possible.

Record keeping

It is recommended that you maintain a record of works relating to your tank, such as inspections and repairs, who conducted them and when. If these are carried out by your oil provider or a plumber, a receipt of their inspection and any related paperwork should suffice.

Glossary of Terms

Anti-siphon device: means a device used to prevent the oil siphoning effect.

Automatic closing cut-off valve: means a valve used for shutting off the flow of oil from a tank and which closes automatically.

Bund: means a containment around an area where hazardous liquids are handled or stored, which contains liquid in the event of a leak. A bund is an example of a secondary containment system.

Catchpit: means a chamber located underneath an oil tank which is designed to collect silt, debris and liquids before it enters any drainage system to contain polluting substances and help prevent the threat of water pollution.

Draw-off pipe: is defined in The Environmental Pollution (Water Pollution) Ordinance 2022 as a pipe used to withdraw oil from a tank.

Fuel oil: is defined in The Environmental Pollution (Water Pollution) Ordinance 2022 as including liquefied petroleum gas and kerosene.

Isolation valve: means a valve in a fluid handling system that prevents the flow of fluid to other areas in the system.

Non-return valve: means a valve that prevents backflow of fluid in a line by only allowing flow in one direction.

Oil: is defined in The Environmental Pollution (Water Pollution) Ordinance 2022 as any kind of liquid oil including fuel oil, waste oil, biofuel mixtures, vegetable oil, plant oil, lubricant oil and hydraulic oil.

Pollution: is defined in The Environmental Pollution (Guernsey) Law, 2004 as the presence in the environment, whether permanently or temporarily, of any pollutant; and a “pollutant” is any substance or energy capable of causing –

- (a) harm to the health or well-being of man, including damage to or deleterious interference with man’s senses;
- (b) harm to the health of other living organisms supported by the environment; or
- (c) other interference with the ecological systems of which man or other living organisms form part.

Remote offset fill pipeline: means a fill pipeline accessed remotely from the oil tank where it is not possible for the oil company delivery driver to be in close proximity to the tank or the tank is in excess of the normal delivery hose length.

Sea: is defined in The Environmental Pollution (Guernsey) Law, 2004 as any area submerged at mean high water springs and also includes, so far as the tide flows at mean high water springs, an estuary or arm of the sea and the waters of any channel, creek, bay or river.

Secondary containment: is defined in The Environmental Pollution (Water Pollution) Ordinance 2022 as a drip tray, an area surrounded by a bund or catchpit or any other system for preventing fuel oil, which has escaped from an oil storage tank, from escaping further from the place where it is stored.

Single skinned: single skinned tanks are tanks that are made from one layer of material (steel or plastic).

Vent pipe: is defined in The Environmental Pollution (Water Pollution) Ordinance 2022 as a pipe open to the atmosphere which exposes the tank to atmospheric pressure.

Water pollution: is defined in The Environmental Pollution (Water Pollution) Ordinance 2022 as the introduction into Guernsey's water resources of any pollutant.

Other Useful Information

Links to relevant legislation

The following legislation is available on the Guernsey Legal Resources [website](#):

- The Environmental Pollution (Guernsey) Law , 2004
- The Environmental Pollution (Water Pollution) Ordinance, 2022
- The Environmental Pollution (Prescribed Operations) (Exemptions) Regulations, 2019
- The Environmental Pollution (Prescribed Operations) (Fees) Regulations, 2019

[Guernsey Technical Standard, Heat producing appliances and fuel storage systems](#)

Manufacturing and quality standards

British Standard (BS) EN ISO 9001.

Oil Firing Technical Association (OFTEC)

Contact details regarding the installation of oil tanks larger than 3,500 litres

Land Planning and Building Control, Environment Department, States of Guernsey tel: 01481 221161.

<https://www.gov.gg/buildingcontrol>

Contact details in the case of a water pollution event

During business hours, please contact the Office of Environmental Health and Pollution Regulation, States of Guernsey on 01481 221161.

If a significant water pollution event occurs/ is identified out of hours, please notify the Princess Elizabeth Hospital switchboard on 01481 220000.

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