

Oil Tank Inspection and Condition

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If the condition of your Oil tank has been marked as a Bad, Poor or Unknown or if it has not been inspected, it may be due to one or more of the following reasons:

Where possible or practicable as part of an appliance "Service" we will check the condition of the Oil tank and dip the oil for the presence of water; but in order to check the condition of an Oil tank we must be able to see it. According to BS5410-part 1:2019, No surface of the Oil tank should be closer than 300mm from a building, wall or other structure to allow for correct inspection. Additional distances may be required if specified by the manufacturer, or if maintenance is required (presumably for painting of steel tanks), and any combustible material or any screening or foliage that does not form part of a boundary should be kept at least 600mm from the tank; any foliage that forms part of a boundary must be kept at least 760mm from the tank to allow for inspection as well as keeping fire separation distances compliant for Domestic Installations and 2000mm away in the case of Non-Domestic Installations (for tanks 3500L or less). **Underground Tanks cannot be inspected, and owners are advised to get a specialist contractor to verify the integrity of the tank on an annual basis.** Integrally banded tanks cannot be fully checked either, as only the outer skin of the bund and a part of the top of the inner tank can be seen. The area around an Oil Storage Tank should not be used for storage. **Plastic Oil Tanks are said to have a working life of 20 years.**

Steel Oil tanks: If there are signs of leakage, rusting or blistered paint: Water can form behind the blisters in paint and start to rust the tank which will eventually cause a leak. Light surface rusting can be removed, the area treated with a corrosion inhibitor and the tank repainted. Heavy areas of rusting should not have any attempt made to repair it; the tank should be replaced.

If the base of the tank is not adequately supported: Areas of the base of the tank can start to sag which could lead to bottom plate failure and could result in a catastrophic failure of the tank which could then lead to a major leak and severe Environmental Pollution. Oil tanks in this condition should be replaced. Steel tanks should be installed with at least 150mm air circulation gap below and adequate space around the tank for maintenance and painting etc.

Single skin Plastic Oil tanks: There can be several issues with plastic tanks: There have been instances of "bulging", distortion, stress cracks appearing on seams or even on other surfaces of the tank which can then lead to failure. If the base of the tank is not adequately supported: **unsupported areas of the tank can sag and start to fold around the supports. Tanks in this condition or that have evidence of stress cracks, bulging, distortion or leakage are at risk of catastrophic failure which could then lead to a major leak and severe Environmental Pollution. Oil tanks in this condition should be replaced immediately.** In some cases, the tank can be seen to have discoloured or have a white chalk like colour (which is not always evident when the tank is wet). This can be due to degradation of the tank and its early replacement should be considered. Tanks should be inspected regularly in case bulging, distortion or stress cracks appear. Stress cracks can appear when the tank has been filled or in the weeks afterwards, but then seemingly disappear when fuel levels become lower again. Occasionally due to increased expansion during the warmer months, stress cracks could appear at any time.

Integrally banded tanks: As integrally banded oil tanks cannot be seen as they are encased within the bund, the condition of the actual storage tank cannot be checked. Only the outer skin (the bund will be visible). Providing the bund appears to be in good condition with no splits or holes, we can only assume the inner tank is intact. If there is any visible damage to the bund itself, the oil tank should be replaced, or specialist advice should be sought; as in the event of a leak the bund may not contain the spillage.

Underground Oil Tanks: As underground Oil tanks cannot be visually inspected there is no easy way to determine their condition. Due to this fact Oil Companies owned by DCC in Ireland branded as Certas Energy in the UK are refusing to deliver fuel to underground tanks unless the customer can supply them with paperwork to prove their integrity and correct installation. **BS5410 part 1 2019 states that You are advised that you should have the integrity of the tank and its associated pipework verified at least every year by a specialist contractor.**

All tanks: If the access lid, filling/vent point or any seals on the top of the tank are in poor condition or missing, problems can occur such as water ingress into the tank, or in some cases oil spillage when the tank is being filled. If water enters the oil tank it can form sludge and bacteria which may degrade the quality of the fuel. If water levels are high enough they may enter the fuel supply line causing damage to components, if this water freezes then the fuel supply could be cut off as the pipe or tank outlet may become blocked. If water enters the Integral bund it could freeze in the winter and lead to additional stress on the tank which may lead to tank failure; if there is sufficient water within the integral bund there is always the chance that the inner tank could float in this water when fuel levels are low which could cause damage to oil supply connections or damage the integrity of the tank or the bund. In these cases, remedial work will be required to fix any problems.

We also recommend regular checking of your Oil tank regardless of its type and more frequently during warmer weather and in the weeks following fuel deliveries.

As stress cracks can appear in plastic tanks when the tank has been filled, but then seemingly disappear when fuel levels become low again due to expansion and contraction of the plastic, it means it is virtually impossible to ensure a tank is in good condition. An excerpt from Building Regulations Approved Document J states **"A visual tank inspection is not a guarantee of longevity; only a view of the condition of the tank at the date and time of inspection"**. Therefore, it is crucial that you make regular checks of your Oil storage facility.

It is the owner/householders responsibility to ensure their system is compliant and safe.