WEST OXFORDSHIRE
DISTRICT COUNCIL

Domestic Heating Oil Storage

Advice and Guidance for Householders on Domestic Oil Spill Prevention and Procedures

INTRODUCTION:

The intention of this document is to provide user-friendly information to householders who rely on heating oil. Although guidance is available from the Environment Agency relating to storage of heating oil, it is largely aimed at commercial premises. While domestic oil storage tanks and associated pipework may seem relatively innocuous, if they are poorly installed, inadequately maintained or faulty they can create a significant pollution incident. Leaked heating oil can be very difficult and extremely expensive to clean up. In more serious incidents, homes have had to be evacuated as oil has soaked into the ground beneath the tank, migrated under the house and produced fumes inside which render residence intolerable. This document is intended to provide advice relating to oil storage tanks and the results of leaks but, more importantly, to give practical advice on how to ensure that leaks do not occur. A little time and money spent on maintenance now could avoid future clean-up costs running to thousands of pounds.

WHAT CAN HAPPEN?

The following are examples of real incidents that illustrate what can happen:-

• The underground oil supply pipe between a tank and the house developed a leak which contaminated the ground beneath a neighbouring house. That house had to be evacuated because of the resultant odour and fumes inside. The ground floor had to be completely removed to clean up the contamination, the overall cost of which was several thousand pounds.

• A tank mounted on concrete block supports corroded and oil soaked into the ground beneath. Water pipes serving two houses ran under the spill area and oil was able to penetrate the plastic pipes and contaminate the water supply. The contaminated soil had to be removed and the water pipes replaced at a cost of several thousand pounds.

• A tank was vandalised, resulting in significant oil spillage. The very costly clean-up operation required a soil treatment operation that lasted several months. Restriction of access to the tank and/or bunding could have avoided the problem.

POTENTIAL HEALTH RISKS:

Heating oil fumes are very strong smelling and can be detected by people at very low concentrations. However, people exposed to the smell can often get used to the smell relatively quickly, so the opinion of someone independent can often be useful in detecting a leak. A leak of heating oil in or near your house can cause the following problems:-

• feeling "drunk" e.g. sleepy, nauseous, fuzzy-headed, slow to react, dizzy, etc;

• headaches, sore throats, etc;

• skin rashes;

• heating oil can penetrate plastic water supply pipes, contaminating the water and giving rise to odours and taints. This can pose a serious risk to health if consumed;

• sub-surface utilities and house footings could also be at risk; and

• heating oil is toxic and harmful to plants and animals.

WON'T MY INSURANCE COVER ME?

Cleaning up oil spills is difficult, time-consuming and expensive and will cause you and any affected neighbours considerable inconvenience. Not all household insurance policies cover this type of incident and so you should ensure that your own policy includes cover for the following:-

• the cost of replacing the lost oil;

• the cost of cleaning up oil on your own property; and

• a high enough liability limit to cover clean-up costs if neighbouring land, properties or waters are affected;

It is against the law to cause pollution and the responsibility for cleaning up lies with the tank owner. You must also be aware that an insurance company may not pay up if a leak has been occurring over an extended time period. This makes it imperative that you maintain and monitor your system on a regular basis in order to be able to present a robust case to your insurance company. A specimen Tank Details Log Sheet is attached as Appendix A to assist in this process.

PREVENTION OF LEAKS AND SPILLS:

The best way to avoid risks to health and the environment as well as property damage, inconvenience and expense is to take effective preventative actions as summarised below:-

• Ensure that tanks are located in a suitable position. They should be located as far away as possible from any ponds, boreholes, springs, streams and drains;

• New or replacement tanks should be installed by OFTEC registered technicians;

• If your tank meets any of the following criteria, it should be bunded:-capacity greater than 2500 litres; sited within 10 metres of a stream, ditch, river, lake, pond or canal; sited where any spillage could run into an open drain or loose-fitting manhole cover; sited within 50 metres of a source of drinking water, e.g. spring, well, borehole; sited where the tank vent pipe outlet cannot be seen from the fill point.

• Even where the tank does not meet the above criteria, it is advisable to provide bunding to all tanks. A bund is an impermeable collection trough which sits underneath the tank and, in the event of a leak, will collect and retain the oil. To this end, the bund should have the capacity to hold at least 10% more than the capacity of the tank itself -the 10% buffer allowing for collection of rainwater over time. Please be aware that some tank designs (usually referred to as "integrally bunded") actually incorporate a bund for secondary containment, rendering a "trough" unnecessary. However, this is not the same as a "double-skinned" or "twin-walled" tank which provides extra protection via a double skin but does not provide for containment of spillages.

• Check the physical condition of your tank and pipework regularly, looking for bulging, damage and interference. Pay particular attention to corners, pipework joints, welds and the points where the tank is supported. Additionally, be on the lookout for staining of tank supports or bases and for oily smells. If it is a metal tank, ensure that it is painted regularly to prevent corrosion.

• Get your tank and pipework (as well as your boiler) serviced at least once per year by an OFTEC registered technician;

• Monitor your usage of oil. If consumption appears to increase, check the system for leaks immediately.

• Make sure your tank is not overfilled – carefully check the level of oil before ordering a delivery and be at home when the tank is filled so that you can stop the delivery if there are any leaks or overflows;

• Keep fill points on the tank clear of obstructions and ensure that they are tamper-proof;

• Ensure that you know where pipes are routed under the ground so that you can prevent damage to them, e.g. digging in garden areas, tent pegs, etc; and • Never leave sight gauge valves open.

WHAT SHOULD I DO IF I FIND A LEAK?

If you discover or suspect a leak it is absolutely vital that you act immediately to minimise its impact. You should:-

• Try and find out where the leak is coming from and stop any further oil leaking as soon as is possible. Contact your fuel supplier to arrange removal of any remaining fuel that would be likely to leak;

• Prevent any spilled oil from entering watercourses or drains using an absorbent material, e.g. sand or purpose-designed spillage absorbents. If you suspect that a watercourse has been, or is likely to be, polluted contact the Environment Agency's 24-hour Pollution Hotline on (0800) 807060;

• Arrange for an engineer or competent person to repair or replace the tank and/or pipework as necessary;

• Contact your insurance company to advise them of the leak and to set in motion a potential claim. The company may appoint a loss adjuster to co-ordinate its response; and;

• Report any taste or smell of oil in your drinking water immediately to your water company. Do not drink any water suspected to be contaminated until it has been tested and cleared. If you have a private water supply, contact West Oxfordshire District Council on (01594) 810000.

• If there is a strong smell of oil in your home, immediately open doors and windows to provide additional ventilation.

• For further advice in all eventualities, contact West Oxfordshire District Council's Environmental Protection team at www.westoxon.gov.uk or on (01993) 861000.

YOU SHOULD NEVER:-

• delay taking the necessary actions;

• use detergents or try to wash the spill away with a hose -these actions will make the situation worse; or

• assume that the problem will go away or solve itself.

FURTHER INFORMATION:

• "Home guide to domestic liquid fuel storage up to 3500 litres" available at;

https://www.oftec.org/consumers/off-gas-grid-guides/home-guide-to-domestic-liquid-fuel-storage-up-to-3500-litres

APPENDIX A

HEATING OIL STORAGE TANK DETAILS

It is recommended that you check your tank and fill in the details below so that they are to hand should you need them.

Manufacturer: _____

Model: _____

Reference/Serial Number: _____

Capacity: _____ **litres**

Construction: **plastic** □
steel □

Spillage Protection: **single skin** □
integral bund □
double skin □
external bund □

Installation Engineer: _____

Contact No: _____

Oil Supply Company: _____

Contact No: _____

Insurance Company: _____

Policy No: _____

Contact No: _____

Annual Tank Checks:

Date of Inspection	Inspection Engineer Signature	Resultant Actions