# Storage Tank General Information

Fixed oil storage tanks between 90 and 2500 litres and the fuel feed system connecting them to a combustion appliance should be strong enough to resist physical damage and corrosion so that the risk of oil spillage is minimised. Tanks should be *constructed* in accordance with:

a. a. the recommendations of BS 799: Part 5: 1987, for a steel tank; or

b. the recommendations of OFTEC Technical Standard OFS T200, for a steel tank, with or without integral bunding; or

c. the recommendations of OFTEC Technical Standard OFS T100, for a polyethylene tank with or without integral bunding; or

d. a European harmonised product standard and assessed by a *notified body*.

# **Types of Tank**

Large tanks are classed as tanks of more than 2500 litres, and their associated pipework must be installed in accordance with the requirements of Regulation 6 of The Water Environment (Oil Storage)(Scotland) Regulations 2006. Oil storage containers up to 2500 litres serving domestic buildings will be deemed to be authorised if they comply with the building regulations.

**Small tanks** are classed as tanks with a capacity of more than 90 litres but not more than 2500 litres and the fuel feed system connecting them to a combustion appliance should be installed in accordance with the recommendations of BS 5410: Part 1: 1997.

**Underground tanks** Reference should be made to the Scottish Executive Code of Practice, Underground Storage Tanks for Liquid Hydrocarbons (2003/27). This CoP provide guidance on underground and partially buried oil storage tanks. The CoP is currently being updated to be consistent with The Water Environment (Controlled Activities) (Scotland) Regulations 2005 and will be issued by SEPA. SEPA also provide guidance in PPG 27, (Installation, Decommissioning and Removal of Underground Storage Tanks). Care should be taken to prevent leakage from pipework. Pipework should be run so as to provide the most direct route possible from the tank to the burner. Joints should be kept to a minimum and the use of plastic coated malleable copper pipe is recommended. Pipework should be installed in accordance with the recommendations in BS 5410: Parts 1: 1997 and Part 2: 1978 and OFTEC Technical Book 3.

# Separation Distances

Oil storage tanks should be located at least 760mm from the boundary and at least 1.8m from any building unless a non-combustible, fire-resisting barrier is provided which extends at least 300mm higher and 300mm beyond either end of the tank.

The fuel feed system from an storage tank to a combustion appliance is also a potential hazard in the event of fire. The fire valve on the fuel feed, should be fitted in accordance with Clause 8.3 of BS 5410: Part 1: 1997 and OFTEC Technical Information Sheet TI/138.

Oil pipelines located inside a *building* should be run in copper or steel pipe. The recommendations of Clause 8.2 of BS 5410: Part 1: 1997 should be followed.

Fire can also spread to an oil storage tank along the ground. Provision should therefore be made to prevent the tank becoming overgrown such as a solid, *non-combustible* base in full contact with the ground. A base of concrete at least 100 mm thick or of paving slabs at least 42 mm thick that extends at least 300 mm beyond all sides of the tank would be appropriate. However, where the tank is within 1 m of the *boundary* and not more than 300 mm from a barrier or a wall of *non-combustible construction* type 7, short duration (see table to section 2: Fire, annex 2.B.1), the base need only extend as far as the barrier or wall.

## Indoor Oil Storage Tanks

Where a storage tank is located inside a *building*, additional safety provisions should be made including the following:

a. the place where the tank is installed should be treated as a place of special fire risk; and

b. the space should be ventilated to the external air; and

c. the space should have an outward opening door that can be easily opened without a key from the side approached by people making their escape; and

d. there should be sufficient space for access to the tank and its mountings and fittings; and e. a catchpit as described in standard 3.24.

Guidance on protection from spillage is provided to standard 3.24. Further guidance may be obtained from OFTEC Technical Information Sheet TI/127: Garage installations.

### Containment

If there is a risk that oil spillage could run-off into a watercourse, open drain or loose fitting manhole cover, the oil storage tank should be provided with a catchpit or be integrally bunded.

# Oil Boilers General Information

When fitting or replacing an oil boiler, it should be kept in mind that an oil boiler should have minimum appliance of SEDBUK 86% i.e. condensing boiler and that the heating system should be inspected and commissioned in accordance with manufacturers' instructions to ensure optimum energy efficiency.

# **Oil Fired Appliance Flues**



The outlet from the flue of the oil-fired appliance should be located externally at a safe distance from any opening, obstruction or combustible materials as follows:

- (a) directly below or horizontally placed from an opening, airbrick or opening window, etc 600mm;
- (b) positioned from an internal or external corner 300mm;
- (c) above a vertical structure not more than 750mm from the side of the flue terminal (i.e. roof pitch or dormer) 600mm;
- (d) below a projection that is plastic or has a combustible finish - 600mm (or 75mm if a heat shield at least 750mm wide is provided.

It should also be kept in mind that any element of a building capable of projecting into or opening onto a circulation route or any place to which people have access can be a hazard and should be positioned, secured or guarded so that it does not present a risk to building users. So a if a boiler flue impinges on a circulation space/access route, provision to prevent collision with the projection must be provided. Please note that this leaflet is merely intended to provide supplementary guidance. Should you have any doubts about whether any work requires a building warrant or whether it complies with current regulations then please consult the Building Standards Service at the number shown below.

Information current at time of printing: 31/01/2011.



#### Comhairle nan Eilean Siar

Development Department Sandwick Road Stornoway Isle of Lewis HSI 2BW

Stornoway Phone: 01851 70822692

Balivanich Phone: 01870 604990

Web: www.cne-siar.gov.uk



Building Standards

# Oil Storage Tanks & Oil Fired Appliances



The purpose of this leaflet is to provide additional guidance on whether or not you require a Building Warrant for the siting of an oil storage tank

Should you need further assistance then please do not hesitate to contact one of our Building Standards officers.

# Comhairle nan Eilean Siar

Stornoway Phone: 01851 822692

Balivanich Phone: 01870 604990

Web: www.cne-siar.gov.uk