



Review of England & Wales Approved Document J 2002

Submission paper: OFTEC ADJ02 – J6 Domestic Risk Assessment

Requirement J6 and Approved Document Guidance relating to Oil Storage tanks.

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Introduction

This paper has been compiled to inform and advise CLG with specific regard to their review and proposed revision of the 2002 Approved Document J specifically with regard to Requirement J6 and the guidance contained within the approved document specifically relating to oil storage tanks. The proposals at the end of this paper are based upon OFTEC's direct experiences over the last seven years (04/2002 – 07/2009).

Review:

ADJ 2002 - Protection against pollution J6.

Oil storage tanks and the pipes connecting them to combustion appliances shall-

- (a) be so constructed and protected as to reduce to a reasonable level the risk of the oil escaping and causing pollution; and
- (b) have affixed in a prominent position a durable notice containing information on how to respond to an oil escape so as to reduce to a reasonable level the risk of pollution.

Requirement J6 applies only to fixed oil storage tanks with capacities of 3500 litres or less, and connecting pipes, which are –

- (a) located outside the building; and
- (b) serve fixed combustion appliances (including incinerators) in a building used wholly or mainly as a private dwelling, but does not apply to buried systems.

Provisions where there is a risk of oil pollution

5.7 The Control of Pollution (Oil Storage) (England) Regulations 2001 (SI 2001/2954) come into force on 1 March 2002. They apply to a wide range of oil storage installations in England, but they do not apply to the storage of oil on any premises used wholly or mainly as one or more private dwellings, if the capacity of the tank is 3500 litres or less.

5.8 Requirement J6 applies to oil storage tanks of 3500 litres or less serving combustion appliances in buildings used wholly or mainly as private dwellings. In such cases, secondary containment should be provided where there is a significant risk of oil pollution. For the purposes of requirement J6, there is a significant risk of pollution if the oil storage installation:

- a) has a total capacity of more than 2500 litres; or

- 5. is located within 10m of inland freshwaters or coastal waters; or
- 5. is located where spillage could run into an open drain or to a loose fitting manhole cover; or
 - d) is located within 50m of sources of potable water, such as a wells, bore-holes or springs; or
 - e) is located where oil spilled from the installation could reach the waters listed above by running across hard ground; or
 - f) is located where tank vent pipe outlets cannot be seen from the intended filling point.

5.9 Inland freshwaters include streams, rivers reservoirs and lakes, as well as ditches and ground drainage (including perforated drainage pipes) that feed into them.

5.10 When secondary containment is considered necessary, a way of meeting the requirement would be to:

- 5. provide an integrally banded prefabricated tank; or
- 5. construct a bund from masonry or concrete in accordance with the general guidance in *Above Ground Oil Storage Tanks: PPG2* and the specific advice in *Masonry Bunds for Oil Storage Tanks* or *Concrete Bunds for Oil Storage Tanks*, as appropriate (see Page 68). However: systems or constructed on site, should have a capacity of at least 110% of the largest tank they contain.

5.12 An oil storage installation should carry a label in a prominent position giving advice on what to do if an oil spill occurs and the telephone number of the Environment Agency's Emergency Hotline (see Page 66).

OFTEC Comments:

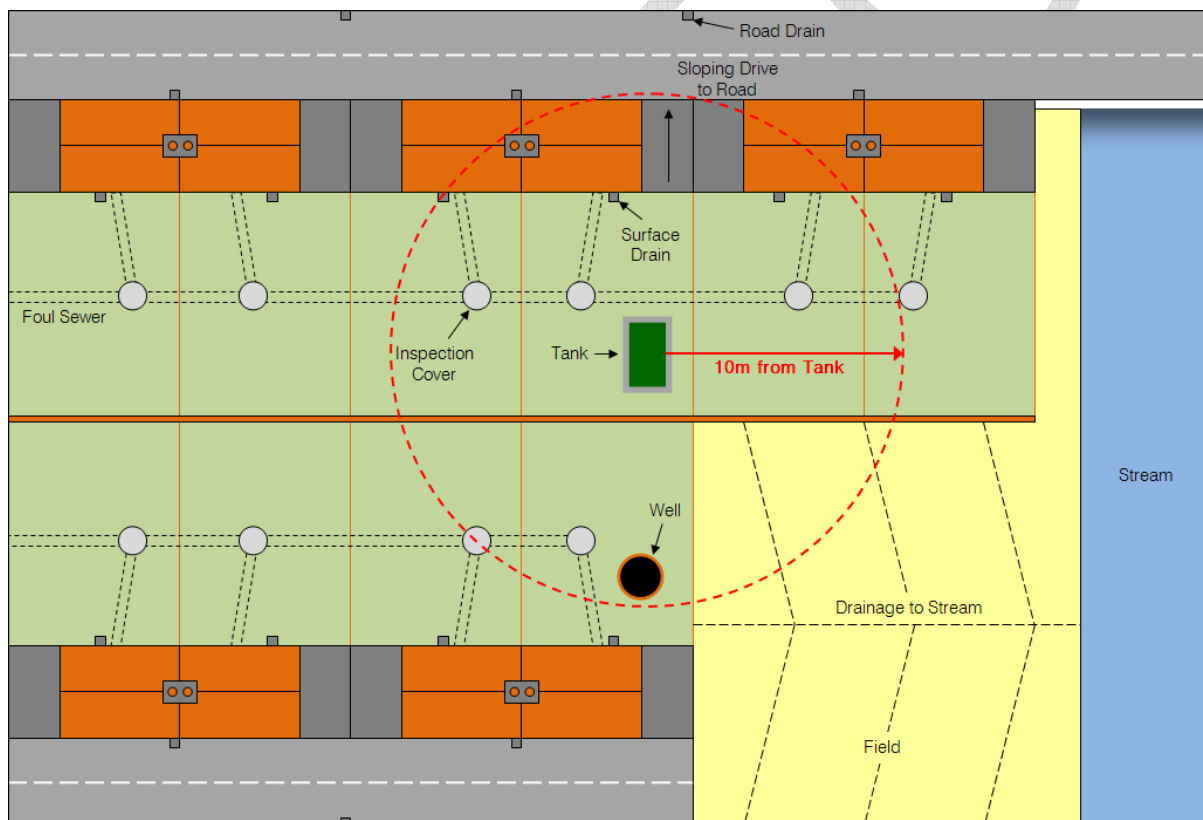
The necessary protection of aquifers and other unknown and unseen water sources and pollution risks is not captured by the current Risk Assessment process. Such an on-site assessment of risk – as currently defined – does not capture or identify all risks, thus leaving the assessor at risk of negligence if secondary containment is not shown as being required to be provided even when in reality it is. Additionally this approach has been shown to be open to unscrupulous commercial exploitation due to the cost difference between compliant & non-compliant installations.

This situation has caused conflict between LABC & EA officers where a completed Risk Assessment has deemed that the site does not of necessity require secondary containment and received LABC Building Regulatory approval - for a single skinned tank installation - only to be countered by the Environment Agency as the development was located over an aquifer. LABC departments are to our knowledge being called to account where single skinned oil tank installations were approved by themselves yet preventable oil pollution incidents have occurred as a result of such decisions.

OFTEC has specific expanded industry guidance within its Technical Book 3 regarding a further detailed explanation of where an individual may seek additional information on unseen risks such as aquifers, bores, springs or wells, but many existing domestic wells and extractions are unlisted and so a pollution risk cannot be identified by enquiries to licensing bodies, let alone by a site assessment. The identification of geographical areas of specific risk is not available for use on site.

The provision of such additional expanded industry guidance as provided by OFTEC also leaves open to question the undertaking of such a risk evaluation by those who have not been trained and assessed, registered and monitored to undertake same.

Despite such additional industry guidance as utilised by OFTEC Registered Technicians the 10m & 50m locality rules are in reality impractical to apply. For example an individual attending a site would in normal circumstances only have authority to inspect the property on which the oil tank is proposed to be installed (as would an LABC Officer when policing same). If for example a street of houses have 8m wide plots then the assessor would not have legal access to the adjacent properties under the 10m rule, let alone the total 14 properties (7 up and 7 down the street) and for example the additional 15 properties which may lie behind the proposed site to ascertain any potential risk under the 50m rule. How does one identify for example where perforated land drainage pipes (please see 5.9 above and diagram below) are installed either at the site in question or adjacent land or properties?



OFTEC receives complaints from householders with regard to the reluctance of buildings insurers to either provide cover against the risk of pollution or limits such cover to high excess / very low financial levels based upon the risk associated with clean up costs from installations without secondary containment.

Even if the actual data of geographical risk areas and specific points of risk were readily identifiable and available to be utilised alongside a site Risk Assessment then any such option as a means of compliance should only be made available to properly trained and monitored competent individuals in the field. This should provide

at least some additional layer of assurance that a risk assessment could be undertaken to enable proper evaluated insurances to be provided. As this is not the case the only pragmatic solutions to this situation we believe are as follows.

OFTEC proposals:

As a consequence of the identified concerns cited above OFTEC proposes that:

- Requirement J6 should always require compliance by the provision of secondary containment following current guidance from 5.10 “*When secondary containment is considered necessary*” to 5.12 inc.
- Additionally Requirement J6 should include;
 - oil storage tanks with capacities above 3500 litres (See BS 5410 part 2),
 - oil storage tanks that are located within buildings or structures (BS 5410 parts 1 & 2),
 - buried oil storage tank systems (see Environment Agency publication PPG27) and storage tanks serving buildings other than a private dwelling (see BS 5410 part 2)

These installations are currently not captured and would therefore by omission be unregulated despite their risk to the environment, built or natural.

Cost impact analysis

Any additional cost for the provision of secondary containment has to be set against the cost savings achieved by the provision of property insurances, reduced clean up and environmental impact cost potentials - as can be ascertained from real cases. Such additional installation costs then realistically should be spread over a 20 year life period for the installation as a plus cost per annum compared to a consumer insurance and environmental cost saving per annum.

It is important to note that any vessel designed to store liquids will have a finite life dependant on site variables including installation and maintenance. The question here therefore is not “what happens if a storage vessel comes to the end of its useful life?” but “what are we going to do about the inevitable contamination of the environment when an unprotected storage vessel comes to the end of its useful life?”

The proposal to require secondary containment for new and replacement oil storage tanks via the Building Regulations also has the effect of changing market practices in a controlled manner being rolled out in a cost and resource manageable way as and when new or replacement oil storage tanks are installed.

Ends.