

# Gatwick Airport Directive

Title: <b>Liquid storage, use and disposal</b>	Ref No : GAD / F04 / 15
	Expiry Date: 21/01/2018
<p><b>It is the responsibility of all employers to ensure that relevant Airport Notices are brought to the attention of their staff. However individuals remain responsible for their own actions and those who are in any doubt should consult their supervisor or manager.</b></p>	
<p><b>Introduction:</b></p>	
<p><b>This directive supersedes GAD/F43/11 which should be destroyed</b></p>	
<p>This GAD applies to all individuals working at the Airport and sets out the necessary control and procedures that must be followed to prevent unauthorised or uncontrolled discharges to foul or surface water systems and to prevent land contamination.</p> <p>A wide variety of potentially polluting liquids are stored in containers ranging in capacity from a few litres, to 50,000 litres. Liquids can be stored in small containers, drums, intermediate bulk containers (IBC's) of 1000 litres and fixed bulk storage tanks. Examples of liquid substances in use at Gatwick include oil, fuel, lubricants, greases, solvents, degreasing agents, battery acid, antifreeze, detergents, chemicals, paint, aircraft / runway de-icers, herbicides and firefighting foam concentrate.</p>	
<p><b>Programme :</b></p>	
<p>Applicable with immediate effect</p>	
<p><b>Operational Impacts :</b></p>	
<p><b><u>STORAGE</u></b></p> <p><b>Bulk Storage (greater than 200 litres)</b> Chemical and fuel tanks, with the required associated bunding, must comply with the specific requirements detailed within the appendix below. Any deviation from these requirements must be agreed in writing by the Water Quality Manager (waterqual_lgw@gatwickairport.com) or the Environment Leader (Hannah.Deacon@gatwickairport.com).</p> <p>With the exception of de-icer vehicles on stand-by, all bulk liquid storage must be bunded (secondary containment) as per the appendix. Road fuel tankers and mobile fuel bowsers must be assessed for the regulatory requirement under Oil Storage Regulations and Carriage of Dangerous Goods Regulations (ADR).</p> <p>Road tankers that are utilised as static units will not be exempt from the bunding requirement and must be contained within a suitable bund.</p> <p><b>Containers smaller than 200 litres</b> These materials must be stored in accordance with the appropriate legislation, H&amp;S requirements and any other guidelines such as those issued by the Fire Service.</p> <p>All fuels, chemicals and hazardous liquids, must be contained in designated areas with appropriate containment or bunding to capture any potential spills.</p> <p>Individual containers must be clearly labelled with the nature of their contents and any hazard it may pose, dedicated stores must display the appropriate warning signs at access points. Quantities of materials stored must be kept to a working minimum. A detailed and up-to-date product inventory must be maintained containing such information as product types, trade names, COSHH data and the location on the site or within the store.</p>	

**Batteries**

Batteries must be stored intact and upright in purpose built battery storage bins.

**Labelling**

All containers, including tankers and bowsers, must be labelled with owner, contents, volume and where bunds are present, the capacity of the bund.

**USE**

**Materials Handling**

Liquid materials must be used as directed by the manufacturers. All liquids must be COSHH assessed and staff briefed on the correct use. Drip trays must be used where there is a risk of a spillage of fuels or chemicals. Where appropriate, permission must be obtained to use the product, see GAD "Control of discharges to Foul or Surface water".

**Emergency Procedures**

As per GAD "Spill prevention, response and reporting requirements" all individuals and companies must have the appropriate spill kits for the chemicals used and train their staff in the appropriate use of the spill kit. All spills must be reported.

**DISPOSAL**

**Liquid Material Disposal**

Liquid waste must be collected in suitable container appropriate for the material, stored in banded areas and either reused, recycled or disposed of to an appropriate licensed waste handler, see GAD "Airport Waste Notice".

Under no circumstances should such liquids be allowed to enter the surface water drainage system or foul system without an appropriate consent. See GAD "Control of discharges to foul or surface water".

**Further Information:**

Hannah Deacon, Environment Lead, [Hannah.Deacon@gatwickairport.com](mailto:Hannah.Deacon@gatwickairport.com)  
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**Name**



Ian Chalk

Head of EHS

**for and on behalf of the Chief Executive Officer of Gatwick Airport Limited**

**Consultation :**

Has Consultation on this Directive taken place? NO

**Distribution :**

**FULL**

Date of Issue: 21/01/2015

Date of Expiry: 21/01/2018

**QA Approved:**



**R C Hulse**  
**Head of Quality Assurance**

## Appendix: Chemical & Fuel Storage Tanks - Specific Requirements

### Location and installation of tanks

The proposed location of the tank must be risk assessed. Tanks must not be located:

- within 10 metres of a watercourse
- places where spilt oil or other chemicals could enter open drains
- places where a spill could run over hard ground to enter a watercourse or soak into the ground
- above roof level as spilt oil can run down guttering which is connected to surface water systems
- places where tank vent pipe outlets cannot be seen from the filling point;

The tank must be placed in areas that provide access for maintenance and deliveries to the tank, taking into account pollution prevention and health and safety aspects.

Tanks should not be positioned in areas at risk of flooding. If there is no alternative location, the tanks must be raised above the predicted flood levels.

Where applicable, tanks must be installed by a suitably qualified tank installer who is registered with a professional scheme for the type of tank being installed.

Tanks must be sited on an appropriately designed and constructed base or support with sufficient room around it to protect the tank from fire in the surrounding area.

The delivery and dispensing area around the tank must have an impermeable surface and be isolated from surface water systems.

### Tank design

The manufacturer must demonstrate that the tank is suitable for the proposed contents, is of sufficient strength and structural integrity to ensure that it won't burst or leak in ordinary use.

British Standards must be complied with, where applicable.

The pressure relief rating, capacity and pressure rating of the tank must be appropriate to the means of filling and emptying the tank.

All tanks must have a method to prevent drain down by gravity e.g. top off-take and/or isolating check valves.

The tank must have a mechanism to determine volume of contents.

The tank must have an automatic leak detection system in addition to mandatory daily wetstock monitoring.

Tanks containing more than 200L of oil, petroleum spirit or diesel must be fully compliant with the Pollution Prevention (Oil Storage) (England) Regulations.

There must be a mechanism in place to ensure that the tank is not overfilled.

All new tanks must be fitted with screw fitting or other fixed coupling or drip proof couplings except where a specific fitting type is prescribed by the British or European Standard. In such cases, the specified fitting type must be used.

The fill point of all tanks:

- must have a lockable fill cap with a chain and be marked clearly with the product type and tank capacity.
- be located at the tank where possible and within the secondary containment system or in a suitable cabinet with a drip tray to catch any oil spilled during deliveries.
- have drip trays large enough to hold all the oil that could be lost when the fill point shut off valve has been closed and the delivery hose is disconnected.

If there is more than one tank, provide separate fill pipes or ensure that the connection balance pipe has a greater flow capacity than the fill point.

Sight gauges must be:

- located in the secondary containment,
- properly supported so that it cannot come loose,
- fitted with a valve that closes automatically when the gauge is not in use.

Vent pipes must be within the secondary containment and arranged so that any discharge is directed vertically downwards into the bund.

The tank must be fitted with an automatic overfill protection device, if the filling operation is controlled from a place where it is not reasonably practicable to see the tank and any vent pipe.

### **Secondary containment**

All chemicals and oil tanks must have secondary containment. This includes vehicles and trailers used for static storage (storage for more than one week).

Bundling must be capable of holding 110% of the volume of the tank it is designed to contain. If more than one container/tank is in the system, the bunding must be capable of storing 110% of the biggest tank's capacity or 25% of the total capacity, whichever is greatest.

All ancillary equipment, such as valves, filters, sight gauges and vent pipes, must be within the secondary containment system so that any discharges of oil are retained.

Secondary containment must be impermeable to oil/water and chemicals and with no direct outlet to drains or unmade ground.

Pipework should not pass through the secondary containment floor or walls. If unavoidable, the joint between pipe and bund must be sealed with a material that is resistant to the substance stored to ensure the containment remains leak proof.

The bund must not be used for storage as this will reduce the volume available in the event of a spill and may cause a fire risk.

### **Signage**

All tanks must be labelled with volume, contents and hazard signs as indicated by the Material Safety Data Sheet (MSDS) information for the product.

### **Chemical and oil pipework**

All pipework must be:

- made of a material suitable for use with the oil/chemical being stored
- supported securely and cannot come loose

- positioned or protected to minimise the chances of damage or collision
- where appropriate, insulated to prevent freezing or frost damage

Feed lines from tanks must have anti-siphon and isolating valves to prevent the tank contents draining down because of leaks, damage, theft or vandalism.

Pumped dispensing must be used, where possible.

Underground pipe work should be avoided as it cannot easily be checked for damage or leaks and have a greater risk of causing pollution. Underground pipe should only be used where pipe cannot be fitted above ground. All new underground oil and chemical pipes must be:

- double-skinned within concrete ducting
- have as few joints as possible

Underground pipework must be protected against corrosion and physical damage. If mechanical joints are used, they must be readily accessible for inspection under a hatch or cover.

There must be adequate facilities for detecting leaks from underground pipework.

#### **Flexible delivery pipes**

Flexible delivery pipes must only be installed when there is a need to move the end delivery point, i.e. fuelling vehicles.

The delivery end must be fitted with a tap or valve that closes automatically when not in use.

#### **Mobile Bowsers containing oil or chemicals**

Bowsers containing more than 200L of fuel or oil must comply with the Pollution Prevention (Oil Storage) (England) Regulations.

Bowsers containing more than 200L must have secondary containment of more than 110% of the bower contents.

Any flexible pipe, tap or valve must be fitted with a lock where it leaves the container and be locked shut when not in use.

Flexible delivery pipes must be fitted with manually operated pumps or valve at the delivery end that closes automatically when not in use.