

### Construction

#### General

Oil and fuel storage is a term used to describe fixed tanks, mobile bowzers, generators, intermediate bulk containers (IBCs), drums, cans and other receptacles that contain:

- Petrol;
- Diesel;
- Biofuels;
- Kerosene;
- Synthetic oils (normally lubricating oils, e.g. motor oil);
- Oils used as solvents;
- Biodegradable oils (usually lubricating or hydraulic oils);
- Liquid bitumen-based (waterproofing / damp proofing products and road surface coatings).

For convenience, throughout this document, the substances listed above will be collectively referred to as 'oil'.

#### Planning

The location of all oil storage areas and mobile bowzers must be inspected and approved by Kier before use. Where practicable, separate oil storage areas should be established for each subcontractor.



Where a mobile bowser is moved from an approved oil storage area to refuel plant or equipment, the bowser must be returned immediately to the subcontractor's storage area following use.

The total volume of oil stored on temporary or permanent sites must be proportionate to the supply required and activities being undertaken. Containers holding more than 3500 litres are only permitted on site following a detailed safety, health and environmental assessment and written authorisation from a Kier Construction environmental manager.

Oil storage areas (including generator locations) that are likely to be in use for more than 2 months must have an impermeable surface, i.e. concrete. The impermeable surface must extend a sufficient distance to ensure minor leaks and spills from refuelling operations can be safely identified and contained. Plant Nappies or equivalent pads and well stocked, appropriately sized spill kit(s) must be located at each oil storage area, i.e.  $\leq 1000$  litres of oil storage capacity = 1x 240 litre spill kit. Spill kits as a minimum shall comprise: absorbent pads, socks, cushions, 1x Dammit® mat, 1x 800g Dammit® ready mix, 3x disposable bags with ties, goggles and oil resistant gloves. It may be necessary to obtain and, possibly, deploy additional pollution prevention equipment if your site is located within 50m of a surface water, e.g. river or reservoir. Please contact your environmental manager for further guidance.

#### Containers > 200 Litres (including generators)

Basic requirements are listed in section 1, page 3 of this minimum standard. Specific requirements that may also be applicable are detailed below:

- Connection and / or disconnection of hydraulically linked tanks and generators must be undertaken by a competent person, i.e. an engineer from the equipment supplier. On receipt, a delivery note must be provided which states training has been provided to a Kier or subcontractor member of staff. This member of staff must supervise all subsequent movements of the hydraulically linked tanks and generators.
- Above ground pipework must be adequately supported and flexible hoses must be steel armoured;
- Pipework and steel-armoured flexible hoses at ground level must be protected by ramp(s) or other suitable means.
- Where fixed tanks are hydraulically linked, they must be treated as a single container, so the bund must be 110% of the combined capacity of all the tanks that are linked;
- If a fixed tank has a flexible pipe or hose permanently attached to it to dispense oil, the pipe must be in a secure cabinet that is locked shut when not in use, or;  
The pipe must be kept within the bund and there must be a lockable valve at the point where the pipe leaves the tank, which must be locked shut when the tank is not in use;
- If a fixed tank has a pump it must have a valve in its feed line that prevents the contents of the container emptying if damage occurs to the pump or feed line;
- If the vent pipe of a fixed tank cannot be seen from where the container is being filled, an automatic overfill prevention device must be fitted;
- Any hand pump used to dispense oil must be physically locked shut when the container is not in use;
- IBCs and drums must be stored within interceptor cages or on proprietary drip trays that are sheltered from the rain.

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#### Containers ≤ 200 Litres

Requirements are detailed below:

- Oil must be stored in appropriately labelled proprietary containers;
- When in use, containers should be located on Plant Nappies or equivalent pads;
- Containers must be returned to an oil storage area immediately after use;
- Containers must be stored within interceptor cages or on proprietary drip trays that are sheltered from the rain. Where this is not possible, daily checks must be undertaken to monitor and, where required, manage rain / oily water in accordance with Waste Management Standard [SHEMS-STD-GR-065](#).

#### Container Maintenance

Maintenance must be undertaken by registered, competent technicians in accordance with the manufacturer's instructions. Details of maintenance tasks must be recorded on the notice accompanying the container.

#### Documentation

Before use, agreed oil storage areas and mobile bowser locations must be labelled on the Site Constraints Layout Plan.

#### Monitoring & Record Retention

All oil storage areas and mobile bowzers must clearly display an Enviro-tag. Enviro-tags must be completed by Kier as part of the inspection regime prior to installation and first use of all oil storage areas and mobile bowzers. Subsequent routine monitoring must be undertaken as a minimum on a weekly basis.

During inspections, relevant guidance provided in this minimum standard should be referenced by scanning the QR code printed on the Enviro-tag. Where non-compliance is identified, the inspecting member of staff must complete the Enviro-tag, remove it from its holder and hand it to the Kier project environmental coordinator (PEC). Items requiring action must be recorded using Weekly Monitoring Report [SHEMS-FOR-GR-089](#). Please note, mobile devices may only be used within designated areas, e.g. in areas away from traffic and other hazards.

Where an Enviro-tag has been removed from its holder, the area and / or mobile bowser should not be used until the issue(s) have been resolved and the Enviro-tag has been reinstated by the Kier PEC or his / her nominee. Used or old Enviro-tags must be retained in the weekly SHE monitoring folder. Weekly Monitoring Reports and Enviro-tags must be retained for a minimum of 3 years in accordance with record retention register [SHEMS-REG-GR-010](#). Electronic copies of these records are acceptable providing they are legible.

#### Procurement

This minimum standard should be communicated to subcontractors and suppliers so that suitable oil storage arrangements are made and costed. Appropriate spill kits (see *Planning*, above) can be found in the [Darcy Spillcare Products Brochure](#).

#### Competence & Training

Connection and / or disconnection of hydraulically linked tanks and generators must be undertaken by a competent person (see *Containers > 200 Litres (including generators)*, above). Legible copies of commissioning / decommissioning certificates or evidence of training must be retained on site with associated maintenance records for the duration of the project.

Spill response and refuelling procedure training will be delivered via a formal training programme and / or through toolbox talk style workshops. Training must include a spill response drill using pads and socks. Induction and Short Duration Training Record Sheet [SHEMS-FOR-GR-034](#) must be used to record delivery of the above.

#### Emergency Response

The project Fire and Emergency Plan will detail the emergency response procedure.

#### Further Guidance / Reference

Enviro-tags can be ordered by e-mail: [REDACTED]

Pollution and Nuisance Standard [SHEMS-STD-GR-063](#)

Inspection and Weekly Monitoring Standard [STD-GR-2004](#)

Waste Management Standard [SHEMS-STD-GR-065](#)

Refuelling Minimum Standard [SHEMS-MST-GR-0046](#)

Oil and Fuel Storage Checklist ([SHEMS-FOR-GR-136](#))

[Pollution Prevention Guidelines: Above Ground Oil Storage Tanks PPG2](#)

[Working at Construction and Demolition Sites PPG6: Pollution Prevention Guidance](#)

[Darcy Spillcare Products Brochure](#)

[Kier Sign Schedule](#)

For hard copies of documentation referenced in this minimum standard, please contact a Kier member of staff.

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#### ABOVE GROUND OIL & FUEL STORAGE INSTALLATION AND ROUTINE MONITORING GUIDANCE

<b>1</b>	<b>INITIAL ASSESSMENT (undertaken prior to installation and first use of oil storage areas and mobile bowzers)</b>
a	Connection and / or disconnection of hydraulically linked tanks and generators has been undertaken by a competent person
b	Location minimises risk of fire, and a fire point and other necessary equipment is located at the oil / fuel storage area
c	Where possible, not within a Groundwater Source Protection Zone and / or area prone to flooding (refer to Constraints Layout Plan)
d	50m or more from wells and boreholes and 10m or more from drains and watercourses (refer to Constraints Layout Plan)
e	Not on a roof or elevated ground where spilt oils / fuel could escape into drains, watercourses or to groundwater
f	On stable, level ground (impermeable concrete surface if oil / fuel is going to be stored for more than 2 months)
g	Location minimises risk of impact damage from vehicles and plant (may require the use of barriers and fences)
h	Location provides safe access to refill, refuel, remove and replace containers, e.g. tanks, generators and drums
i	Location is free from waste and other obstructions that could allow leaks to go undetected
j	Where underground pipework is present, it has been tested and the route marked and protected
k	Where applicable, above ground pipework is adequately supported and flexible hoses are steel armoured
l	Pipework and steel-armoured flexible hoses at ground level are protected by ramp(s) or other suitable means
m	Where applicable, the tank vent pipe will be visible from its filling point
n	Bunds are impermeable, free from drainage valves and do not contain oil / fuel (oil / fuel may indicate a leak)
o	Bunds and containers are in good condition, and free from leaks, impact damage and worn pipework / hoses
p	Bunds are 110% of the largest single container or 25% of the combined volume of containers, whichever is greater
q	Where fitted, bund alarm and automatic over-fill prevention device has been tested
r	Valves, gauges, pipework and ancillary equipment are located securely within the bunded area
s	Where fitted, sight gauges can be read and are in good working order
t	The delivery valve built into refuelling nozzle closes automatically when trigger is released – it cannot be locked in place
u	Plant Nappy or equivalent pad and well stocked, appropriately sized spill kit(s) are located at the oil / fuel storage area
v	Enviro-tag and other notices are clearly displayed, i.e. COSHH, manufacturer, make and model, maximum quantity, maintenance dates, Kier Oil Spillage Procedure, red diesel - not for use as road fuel and no smoking (see <a href="#">Kier Sign Schedule</a> )
<b>2</b>	<b>ROUTINE MONITORING (undertaken as a minimum on a weekly basis)</b>
a	Enviro-tag is missing, or containers (including generators) have been relocated since the last inspection (complete section 1)
b	Fire point and other necessary equipment is located at the oil / fuel storage area
c	Area around containment is free from waste and other obstructions that could allow leaks to go undetected
d	Where underground pipework is present, the route is marked and protected
e	Bunds are free of rainwater, debris, litter and oil / fuel (oil / fuel may indicate a leak)
f	Bunds and containers are in good condition, no leaks and free from impact damage and worn pipework / hoses
g	Bunds are 110% of the largest single container or 25% of the combined volume of containers, whichever is greater
h	Valves, gauges, pipework and ancillary equipment are located securely within the bunded area
i	Where fitted, sight gauges are in good working order and bund alarm and automatic over-fill prevention device has been tested
j	Where applicable, taps and valves through which oil / fuel can leave the container are locked shut when not in use
k	Interceptor cages and proprietary drip trays have a capacity equal to 25% of all the containers being stored
l	Plant Nappy or equivalent pad and well stocked, appropriately sized spill kit(s) are located at the oil / fuel storage area
m	Personnel have been trained on how to deploy the spill kit and dispose of any used materials
n	Defined refuelling procedure is being followed and oil / fuel deliveries are being supervised
o	Notices clearly displayed, e.g. maintenance dates and Kier Oil spillage Procedure (see <a href="#">Kier Sign Schedule</a> )
p	The maintenance plan is being followed and is up-to-date

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