



1. This Note gives outline guidance only on the storage of LPG cylinders in a purpose built and portable cage located on the forecourt of a petrol filling station.

1.1 Further detailed information on the small scale storage and display of LPG at retail premises is given in the LP Gas Association’s Code of Practice No 7 ‘Storage of Full and Empty LPG Cylinders & Cartridges’.

## 2. Liaising with the Petroleum Enforcing Authority (PEA)

2.1 The keeper of the site should notify the PEA, in writing, of their intention to keep LPG cylinders within the confines of the filling station.

2.1.1 Written notification should be accompanied with a drawing showing the proposed position of the caged storage facility.

## 3 Construction of the Cage

3.1 The cage should, typically, be constructed from strongly welded 40mm and 25mm square box sections and 40mm and 25mm angle iron supported on either 150mm square plate feet or 250mm diameter nylon casters.

3.1.1 Steel shelving should be constructed and fitted so as not to retain any rain water.

3.1.2 To secure the cage from unauthorised access and vandalism, the frame should be enclosed with a steel mesh. The access door(s) must be lockable, preferably with a padlock.

Note: Cages fitted with casters should be effectively secured to prevent unauthorised removal on or from the premises.

## 4 Warning Notices

4.1 A prominent notice bearing the words “LPG HIGHLY FLAMMABLE - NO SMOKING NO NAKED LIGHTS” should be displayed on the cage.

## 5 Location

5.1 The cage must be positioned in the open air on level concrete or compacted ground and should comply with the following separation distances:

7.5m	Tank vents and fill points
3m	Dispensing equipment, and underground tank manholes
1m	Boundaries, buildings, fixed ignition sources and motor vehicles
2m	Openings to buildings (doors, windows etc), drains and gullies
3m	Flammable liquid tank bund, LPG dispensers and bulk tanks up to 5000 litres
0m	Boundary wall not less than 2m high, extending 1m either side of the storage cage and of not less than 30 minutes fire resisting construction

Note: This table applies generally to the keeping of LPG cylinders (up to 400kg total capacity) within the confines of a petrol filling station.

5.1.2 The cage should be located in a well ventilated position which will not prejudice the means of escape from the filling station building or adjacent premises.

5.1.3 Where necessary the cage should be protected from vehicular impact by a kerb or other suitable fixed barrier.

## **6 Cylinder Storage**

6.1 The outlet valve of every cylinder should be kept closed whilst in the cylinder cage. Plastic caps should be fitted to cylinders even when they are known to be empty.

6.1.1 Cylinders must be stored with their valves uppermost. Any leak in the valve area will not then allow the liquid to escape.

6.1.2 Cages are normally designed to accommodate 3.9 kg and 13 kg propane cylinders and/or 4.5 kg, 7 kg and 15 kg butane cylinders to a maximum of 400kg

6.1.3 The cage should be solely appropriated to the keeping of LPG cylinders.

6.1.4 To prevent instability, cylinders should not be placed on the top shelf unless the bottom shelf is full.

Note: LPG is odorised before distribution so that its distinctive smell can give warning of gas escape

## **7. Forecourt Supervision**

7.1 With the exception of a delivery by the distributor of the LPG, cylinders may only be removed from, or returned to the cage by the licensee or an authorised member of staff.

Note: All attended self-service sites; this will necessitate switching off the petrol pumps when the attendant is in sole charge of the premises.

## **8 Staff Training**

8.1 Everyone employed at the filling station should be instructed and trained to ensure that they understand the fire precautions and what they should do if there is a fire or leakage of LPG. All staff should receive instruction and training appropriate to their responsibilities in the event of an emergency. Notices stating the emergency procedures should be prominently displayed near the cage or at the forecourt point.

Note: Details of the actions to be taken in case of leakages of fire are given in Section 5 of Code of Practice No 7

## **9 Firefighting Equipment**

9.1 A dry powder extinguisher conforming to BS5306-8:2012 and rated at 43A:183B (e.g. 9kg) should be provided in the vicinity of the cage. This extinguisher may comprise one of the extinguishers already provided for the protection of the filling station.