

## Existing Below Ground, and New Above Ground Storage of Petrol on Farms

### Introduction

Farms<sup>1</sup> may store petrol in either above ground or below ground tanks. This Information Sheet sets out what is required for farms that are considering changing from below ground to above ground storage. It is provided to assist users in understanding the different requirements for above and below ground storage, but it is recommended that users refer to the full legislation.

### Existing<sup>2</sup> Below Ground Storage

#### Certification

All tanks situated below ground must have a Location Test Certificate (for the place where the petrol is stored). To obtain a Location Test Certificate the following requirements must be met:

- Annual inspection by a test certifier
- Site plan
- Weekly stock reconciliation of the contents of the tank

If the tank is greater than 5000 litres capacity a stationary container system test certificate is also required<sup>3</sup>.

#### Filling<sup>4</sup>

The following is a summary of the requirements to fill a below ground tank:

- A calibrated non-ferrous dip stick for the tank with the maximum permitted filling level marked on the dipstick.
- The fill pipe must:
  - have a liquid and air tight connection for filling, and a vapour tight cap when not being used;

<sup>1</sup> A farm is an area of land of not less than 4 hectares in size, and does not include golf courses. The land must be used principally for the purposes of agriculture.

<sup>2</sup> This refers to tanks that were installed and in use prior to 1 April 2004.

<sup>3</sup> Refer to Parts 1.5, 2.11, and 9 of the Code of Practice for the Management of Existing Stationary Container Systems up to 60,000 litres Capacity:

<http://www.ermanz.govt.nz/resources/publications/pdfs/COP13-1.pdf>.

<sup>4</sup> Refer to the HSNO Code of Practice for Filling of Below Ground Petrol Tanks by Pumping:

<http://www.ermanz.govt.nz/resources/publications/pdfs/COP14-1.pdf>.

- be separated from ignition sources by a minimum of 3 metres;
- be clearly identified for petrol;
- extend to the bottom of the tank.
- A vent pipe of minimum size 25mm diameter terminating 4 metres above the ground and 1.5 metres from an opening into a building.
- If the tank is to be pump filled the pumping rate must be kept below 200 litres per minute, unless the vent pipe diameter is increased to 32 mm diameter when the pumping rate can be increased to 300 litres per minute.
- The vent pipe is to be fitted with a 500 micron anti-flash gauze
- An annual check that the vent pipe and gauze are clear of obstructions
- Electrical continuity must be maintained between the delivery tanker, hose and tank. To achieve this an earthing connection must be provided at the fill point on the tank, or electrical continuity maintained through the hose.

### **Decommissioning of a below ground tank<sup>5</sup>**

Should you wish to stop using a below ground tank it is preferable to remove and dispose of the tank. However, the tank may be left in the ground if the following conditions are met:

- All petrol must be removed from the tank.
- The tank must be filled with an inert material such as concrete slurry or sand.
- All piping and fittings above ground must be removed.
- All connections into the tank must be sealed.
- All requirements of the regional council and/or territorial authority must be met.

### **New Above Ground Storage**

All new tanks must fully comply with the HSNO legislation. A summary of the requirements is provided below.

#### **Certification:**

Tanks situated above ground must have the following certificates:

- Location Test Certificate, if the quantity stored is greater than 2000 litres<sup>6</sup>.
- Stationary Container System Certificate, if the tank capacity is greater than 2500 litres

To obtain a Location Test Certificate the following minimum requirements must be met:

- Annual inspection by a test certifier
- Site plan

To obtain a Stationary Container System Certificate the following minimum requirements must be met:

- 5 yearly inspection by a test certifier.
- A vent pipe of minimum size 25mm terminating 4 metres above the ground and 1.5 metres from an opening into a building.
- The vent pipe is to be fitted with a 500 micron anti-flash gauze.
- An annual check that the vent pipe and gauze are clear of obstructions.

<sup>5</sup> These requirements are currently being consulted as a code of practice. Approval anticipated March 2007.

<sup>6</sup> A Location Test Certificate is not required if the farm is not less than 4 hectares in size and following conditions are met:

- quantity held not greater than 2000 litres
- tank complies with the design, construction and installation requirements
- the tank is located at least 20 metres from dwellings or other buildings made of combustible materials and at least 6 metres from other dangerous goods or any combustible materials
- the tank is compounded (bunded) or otherwise located so that any spillage will not endanger any building, or flow into any natural water body.

### **Design and installation of new tanks:**

All new tanks must comply with the requirements of the HSNO controls<sup>7</sup>. These include:

- Construction to a recognized standard
- Seismic and wind loading considerations
- Separate venting
- Liquid level indicator

Tripod tanks are not considered suitable for the storage of fuel.

### **Other Considerations:**

Requirements of other legislation must also be met. This includes:

- Health and Safety in Employment legislation (in particular access provided to fill the tank).
- Resource Management Act.

Further guidance is provided in the ERMA New Zealand Approved Practice Guide for Safe Above-Ground Fuel Storage on Farms<sup>8</sup>.

## **ERMA New Zealand Information Sheets**

ERMA New Zealand publishes information sheets on a range of topics to provide background information on current issue or proposals being dealt with by the Authority.

All publications may be viewed and downloaded from our website at [www.ermanz.govt.nz](http://www.ermanz.govt.nz) or may be requested by contacting ERMA New Zealand, P O Box 131, Wellington 6140. Ph +64 4 916 2426 Fax +64 4 914 0433 Email [info@ermanz.govt.nz](mailto:info@ermanz.govt.nz).

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<sup>7</sup> Refer to Part 3, Schedule 8 of the Hazardous Substances (Dangerous Goods and Scheduled Toxic Substances) Transfer Notice 2004 (as amended)

<sup>8</sup> Available on the ERMA web site [http://www.ermanz.govt.nz/resources/publications/pdfs/ER-APC\\_03-1.pdf](http://www.ermanz.govt.nz/resources/publications/pdfs/ER-APC_03-1.pdf)

# CHANGE FROM A BELOW GROUND PETROL TANK TO A NEW ABOVE GROUND TANK

KEY:	
CoP	ERMA NZ Code of Practice
SCS	Stationary Container System
TC	Test Certifier
LTC	Location Test Certificate
RMA	Resource Management Act
APG	Approved Practice Guide
A/G	Above Ground

