

# Requirements for Self Contained Above Ground Tanks for Petroleum Storage



As of April 1, 1995, all new above ground petroleum storage tanks must comply with *The Hazardous Substances and Waste Dangerous Goods Regulations*. Existing above-ground storage tanks were required to be upgraded by December 31, 1997.

Exemption: All above ground farm and residential storage tanks which are not used for any commercial purpose are exempt. Facilities on the same or adjoining properties where cumulative capacity of above ground tanks is below 4,000 litres are exempt.

## Before You Begin

Before you begin any construction or upgrading, you must obtain approval from Saskatchewan Environment. Additionally, plans are to be submitted to the municipality for review as required by the Saskatchewan Fire Code Regulations.

Note: Contaminated soil discovered during upgrading should be removed and dealt with according to department guidelines.

## What are the Requirements?

Self Contained Above Ground Tanks which meet the following specifications are acceptable, provided the other requirements of the regulations are met:

C ULC/ORD-C142.3-1991  
 C CAN4 - S601  
 C CAN4 - S630  
 C ULC - S643

Since the enactment of the Regulations, subject to Clause 15(1), additional acceptable specifications have been developed including:

C ULC/ORD-C142.5 - 1992  
 C ULCS655-1998  
 C ORD-142.20-1995

## Containment

The leak control design of Self Contained Above Ground Tanks shall be considered as having met acceptable requirements for containment.

## Tank Capacity

Self Contained Above Ground Tanks at service stations must have an individual capacity less than 50,000 litres.

### Separation Distances

Tanks for flammable liquids at service stations must be located more than three metres from any right-of-way, property line or buildings. (These distances can be reduced by one-half if tank has a ULC-approved 2 hour fire resistance rating). For residential areas tanks must be located at least 15 metres from property lines or buildings.

Dispensing equipment must be located at least three metres from any right-of-way or property line, 7.5 metres horizontally from open flame, 7.5 metres from other ignition sources and 4.5 metres from building openings.

### Access to Tank Storage Area

Access to the tank storage area must be restricted to authorized personnel only. Signs to this effect must be posted in a conspicuous place. Public access shall be restricted by suitable fencing, locking retractable access ladders or other acceptable means.

### Overfill Protection

Tanks must be protected against overfill with a minimum capacity of 15 litres or as approved by authority having jurisdiction.

### Solenoid Valves

Bottom draw tanks which deliver fuel through connected dispensers require a normally closed electrically-operated solenoid valve. Top draw systems do not require a solenoid valve, but will require an anti-siphon valve.

### Collision Protection

Posts or guardrails must be at most 1.4 m apart and at least 1.5 m from tanks and equipment. Tanks and equipment must be protected from collision by either:

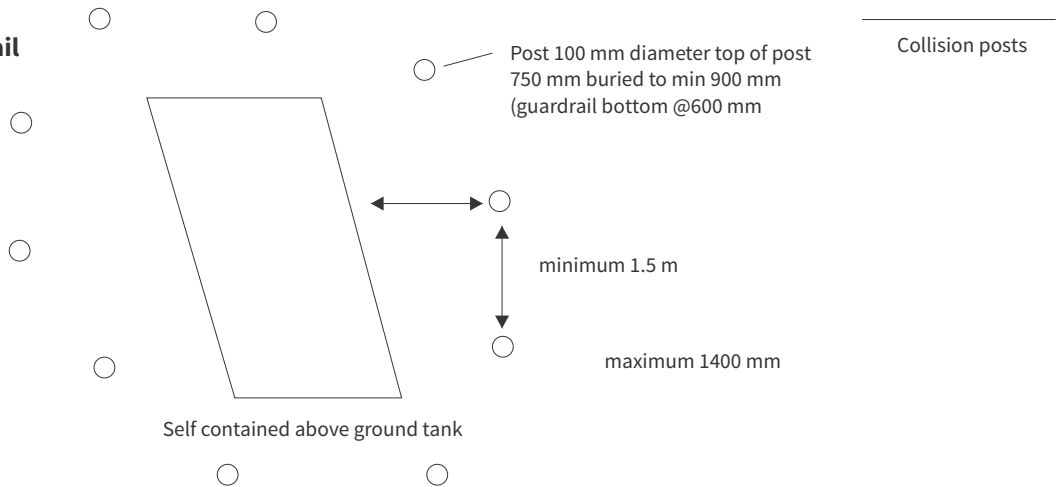
C Posts: concrete filled steel pipe with a diameter of at least 100 mm, buried at least 900 mm into ground, with top of pipe at least 750 mm above ground.

C Standard highway of guardrails: firmly anchored with bottom of guard rails at 600 mm above ground.

### Other Requirements

Tanks must be marked to identify their contents. Steel piping which extends below ground level requires cathodic protection.

### Protection: Highway Guardrail



## More info?

Contact the Saskatchewan Ministry of Environment  
Client Service Office at  
Tel: 1-800-567-4224  
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