

What's the Risk?

Protect Tanks from Vehicular Impact



THE ISSUE

Damage to propane, gas or oil tanks from vehicular traffic can occur if they are not protected. Tanks are often placed in areas on farms or commercial properties that are well travelled by vehicles and other farm equipment exposing them to impact damage. Damaged tanks can lead to spills, leaks, explosions, fire and environmental damage.



WHAT'S THE RISK?

Even a minor bump by a vehicle, tractor or other equipment could be extremely damaging. Tank movement from impact can be significant and if the force is severe, the service line could leak or even break. Tanks could also be damaged to the point where the contents spill or escape.



WHAT CAN BE DONE?

Installation of bollards around tanks provides the protection required to prevent vehicular impact. A bollard is a short post designed to identify or segment a location, guide traffic, or protect sensitive areas. Bollards are used in many applications, including road or boundary markings, managing vehicle traffic and protecting buildings and landscapes. They also provide a very effective visual barrier and offer significant impact protection where required.

In Ontario, the Liquid Fuels Handling Code requires above ground tanks, exposed to vehicular traffic, be protected from impact and constructed in accordance with good engineering practice. Below are excerpts from CSA B149.2-00 the Propane Storage and Handling Code, outlining best engineering practices for installing bollards.

Section 6.19.4.1 (CSA B149)

Posts used for the protection of a tank shall

- (a) Be spaced not more than 54 inches (1350 mm) apart.
- (b) Be buried not less than 36 inches (900 mm) below grade.
- (c) Extend at least 30 inches (750 mm) above grade; and
- (d) Be one of the following:
 - i. 4 inch (100 mm) capped steel pipe.
 - ii. 4 inch (100 mm) tubing filled with concrete.
 - iii. 8 inch (200 mm) pressure-treated wood, either square or round, or
 - iv. 6 inch (150 mm) minimum dimension reinforced concrete

