Fact sheet

ON-FARM GASOLINE & DIESEL FUEL STORAGE

The Technical Standards and Safety Authority (TSSA) is responsible for setting and enforcing the rules governing the storage of petroleum products. For diesel and gasoline, the Liquid Fuels Handling Code (LFHC) sets specific rules for different fuel storage facilities; gas stations, bulk plants and private fuel outlets. Private fuel outlets are places where petroleum products are dispensed into vehicles, watercraft or portable containers and are owned or used by the owner of the private fuel outlet. A private fuel outlet includes farms.

Requirements for Aboveground Farm Fuel Storage Tanks (diesel or gasoline):

REGISTRATION - There is no requirement to register farm tanks. However, tanks and associated equipment (pumps, hoses and supports) must be installed by a certified Petroleum Mechanic in accordance with the LFHC.

ACCEPTABLE TANKS - Only tanks certified by Underwriters’ Laboratories of Canada (ULC) may be used. Approved tanks must display a ULC sticker.

TANK LOCATION - Aboveground farm fuel storage tanks must be located in accordance with Part IV of the Ontario Fire Code:

- Diesel fuel tanks (Class II product) up to 50,000 litres (10,650 gallons) must be located at least 1.5 metres (5') from a building on the same property and at least 3 metres (10') from the property line.
- Gasoline tanks (Class I product) up to 250,000 litres (53,250 gallons) must be located at least 4.5 metres (14'9") from any opening in a building, at least 1 metre (3'3") from any building, AND all electrical hookups must comply with the Ontario Electrical Safety Code.

Aboveground farm fuel storage tanks must also be placed a safe distance from water wells and water courses. Farm fuel storage tanks must be no less than 15 metres (50') from a drilled well, or no less than 30 metres (100') from a dug well or water course. Tanks must be clearly marked (CLEAR DIESEL, COLOURED DIESEL or GASOLINE) to indicate the product contained.

For underground farm fuel storage tanks, refer to Section 2, LFHC, 2007.

DISPENSING EQUIPMENT - The pump must be located according to ALL of these specifications;

1. at least 3 metres (10') from a property line,
2. at least 3 metres (10') from a highway, as defined in the Highway Traffic Act,
3. at least 4.5 metres (14'9") from any opening in a building,
4. at least 1 metre (3'3") from any building, AND
5. all electrical hookups must comply with the Ontario Electrical Safety Code.
DIKING & SECONDARY CONTAINMENT - Aboveground tanks are exempt from diking and secondary containment if they have a maximum capacity of 5,000 litres (1065 gallons) and any loss or escape of product will not:

1. create a hazard to public health or safety,
2. contaminate any fresh water source or waterway,
3. interfere with the rights of any person, or
4. enter into a sewer system, underground stream or drainage system.

Tanks without a dike must be equipped with an approved overfill protection and spill containment.

Double wall tanks [maximum capacity of 80,000 litres (18,480 gallons)] are equivalent to diking.

TANK PROTECTION - Aboveground tanks must be protected from vehicle collisions. Posts, also known as bollards, provide one option. The Propane Storage and Handling Code contains these specifications for bollards;

1. spaced not more than 54” (1350 mm) apart,
2. buried not less than 36” (900 mm) below grade,
3. extend at least 30” (750 mm) above grade,
4. consist of: a 4” (100 mm) capped steel pipe, a 4” (100 mm) tube filled with concrete, an 8” (200 mm) square or round pressure-treated wood post, or a 6” (150 mm) minimum dimension reinforced concrete post, AND
5. spaced at least 3½ ft. (1 m) out from the storage tank.

ADDITIONAL REQUIREMENTS - Private fuel outlets also require at least two (2) fire extinguishers (rated 20-BC) that are readily accessible, AND the following signs;

- NO SMOKING - TURN IGNITION OFF, and
- APPROVED PORTABLE CONTAINERS

LIQUID FUELS HANDLING CODE - the code is available from CSA for $120 plus tax and shipping;

Canadian Standards Association
Phone: 416-747-4044 or toll-free 1-800-463-6727
Fax: 416-747-2510

FOR FURTHER INFORMATION - please refer to the TSSA website: www.tssa.org

The information provided here is based on the LFHC 2007. OFA acknowledges the assistance of TSSA in the preparation of this factsheet. For further information on fuel storage, contact TSSA, your OFA Member Service Representative, or the OFA Guelph office.