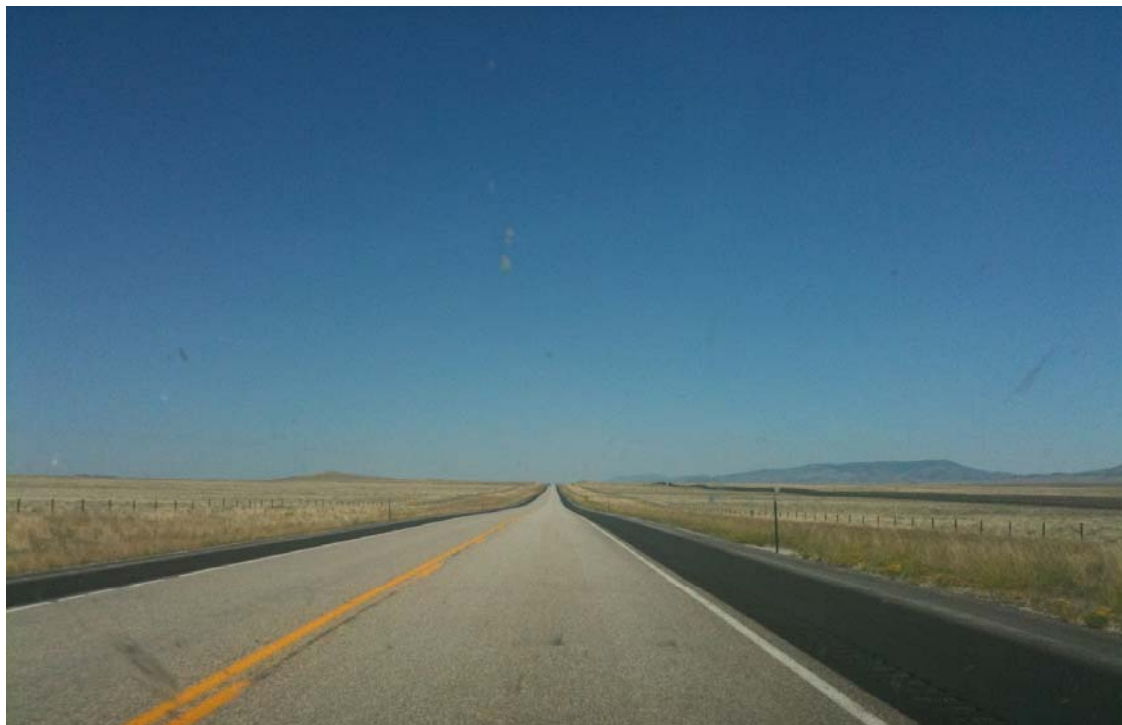


NOTO Petroleum Education Session Nov 2013



What is that, on the road ahead?



What is that on the Road, A Head?



With the upcoming TSSA Liquid Fuels Blitz there are two distinct customer sectors that might be affected. These are “Outfitters and Marinas”. We will discuss the “Marina” applications here.

If a customer is dispensing fuel into boats or tanks “On the Water” they are to be licensed as a Marina. If any Fuel Provider is delivering into the tank that actually fuels “Floating tanks or Containers” they must be licensed thru TSSA as a Marina.

If a customer is NOT licensed as a Marina they must have their tanks beyond 100 feet of the shoreline and use the fuel as long as they are not filling “Floating Tanks or Containers”. (as per LFHC 2007 Table 2 pg 97)

For any tanks that Distributors are delivering into, they must meet an inspection process and be safe to deliver into. And they need to be beyond 100 feet of the shoreline, or be TSSA Licensed as a Marina.



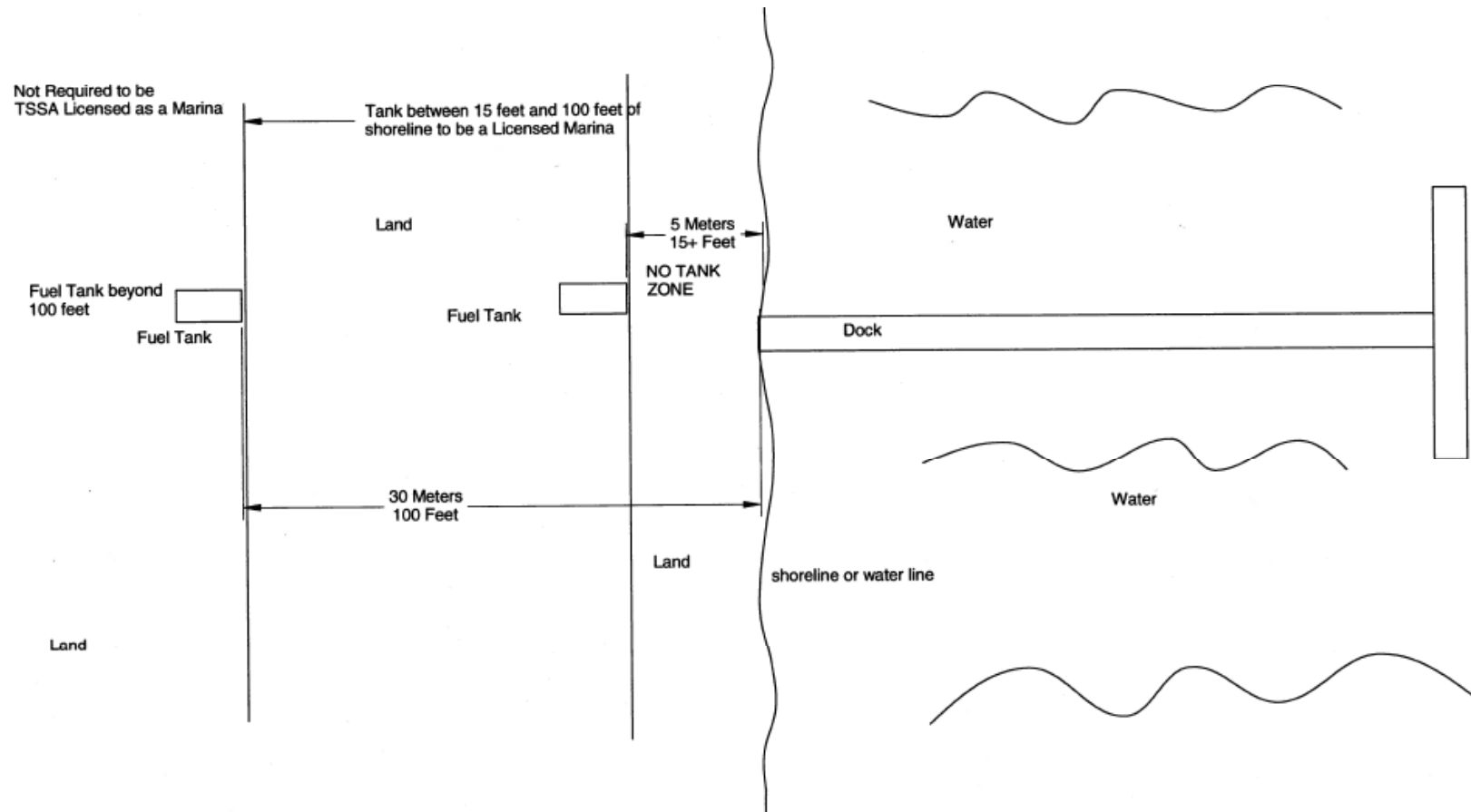
For locations that are deemed Federal Jurisdiction, TSSA is not the authority. This would apply to Native Lands or locations that fuel airplanes and locations deemed as Harbours under Federal jurisdiction. For sites that mainly fuel float planes, TSSA would not have jurisdiction.

For locations that Distributors fill tanks or containers that are then “transported or transferred to other locations” for further dispensing, this would not apply. Example of us fueling a mobile tank that is later “barged” to an island and used to fuel boats. The customer may still need to be licensed as a Marina, but MEI would not require verification of that as we are NOT delivering to the “end use tank”.

I have attached a simple drawing that should show where a tank is OK to be for a Marina and for NON-Marina purposes.



Tank Placement around Water



What is Retail??

“facility” means a permanent or mobile retail outlet, bulk plant, marina, cardlock/keylock, private outlet or farm where gasoline or an associated product is handled other than in portable containers;

“marina” means any premises at which gasoline or an associated product is dispensed for use as fuel for floating motorized watercraft

“retail outlet” means any premises to which the public is invited, at which gasoline or an associated product is sold and is put into the fuel tanks of motor vehicles, floating motorized watercraft or into portable containers;



Who does this Regulation apply to?

Application

2. (1) This Regulation applies to facilities where gasoline or an associated product is handled, loaded or dispensed to be used as a fuel in motor vehicles or as a fuel oil. O. Reg. 217/01, s. 2 (1).

(2) This Regulation does not apply to,

(a) equipment or installations associated with standby generators or heating oil systems;

(b) any matter regulated under Ontario Regulation 213/01 (Fuel Oil);

(c) any matter relating to the subject matter of this Regulation that is regulated by the Government of Canada;



Why we all need to Comply

Activities to comply with Regulation

5. (1) No person shall operate, install, alter, repair, service, test, remove or use any equipment or any other thing employed or to be employed in the handling or use of gasoline or an associated product or test, use, supply, transport, store, handle or transfer gasoline or an associated product except in accordance with this Regulation. O. Reg. 217/01, s. 5 (1).

(2) Every person who carries out an activity referred to in subsection (1) shall instruct their employees to comply with the Act and this Regulation and shall take every precaution that is reasonable in the circumstances to ensure that the employees comply with the Act and this regulation or any other applicable regulation. O. Reg. 217/01, s. 5 (2).



What is needed to apply

- (6) Subject to subsections (7), (8) and (10), an applicant who applies to the director for a licence shall, for each facility, prepare and submit a plan in triplicate which sets out,
- (a) the location of all storage tanks and pump islands;
 - (b) details of the storage tanks, including their capacity and material of construction;
 - (c) the location of property lines, buildings, kiosks and wells located within 30 metres of the storage tanks and pump;
 - (d) the distance from storage tanks and dispensers to property lines, buildings and wells;
 - (e) the location of vent pipes; and
 - (f) the location of the control equipment for self-serve stations. O. Reg. 217/01, s. 20 (6).



Some of the Concerns in the Field

- Here are a few pictures of installations and things we have come across that are of concern.
- As we all know, it takes just one to ruin it for all of us
- There is some very legitimate concerns out there, but also some that run a very nice and safe operation with respect to fuel and fuel storage
- Leaks and spills are the industries current major issue. This is causing some to struggle with insurance and litigation.
- Due to environmental reasons, Marina type applications have seemed to be the industries focus





M^cDougall
ENERGY

**BEST
MANAGED
COMPANIES**





















Liquid Fuels Handling Code 2007

Table 1
Location of aboveground storage tanks

Maximum tank capacity, L	Minimum distance to a property line or to a building on the same property, m
250 000	3
500 000	4.5
2 500 000	9
5 000 000	12
> 5 000 000	15

Note: *This Table has been reprinted from Table 4.3.2.A of the Ontario Fire Code.*

3.2.1.2

The minimum distance required in Table 1 between an aboveground storage tank containing only Class II liquids and a building on the same property may be reduced to

- (a) 1.5 m, provided that the tank capacity is not more than 50 000 L;
or
- (b) 0 m, provided that the tank capacity is not more than 2500 L.

Note: *This Clause has been reprinted and modified from Part 4 of the Ontario Fire Code.*



What is Required for A/G Storage Tanks

3.2.1.3

Aboveground storage tanks shall be installed

- (a) not less than 15 m from drilled water wells; and
- (b) not less than 30 m from a dug water well or waterway.

3.2.1.4

Aboveground storage tanks shall not be installed at a bulk plant without the requirements for firefighting accessibility having been accepted by the Chief Fire Official.

3.2.1.5

Supports for aboveground tanks shall be non-combustible and designed in accordance with good engineering practice.

3.2.1.6

Single-wall aboveground tanks less than 5000 L in capacity shall be installed, within 4 years of the effective date of this Code, on supports or on a concrete pad to allow the bottom to be inspected.



Marking of Tanks

3.2.3 Product identification

3.2.3.1

Aboveground storage tanks shall be permanently marked to identify the product they contain, on at least two sides, in a size to ensure clear legibility from at least 4.5 m or from outside a dike, whichever distance is greater.

3.2.3.2

Markings required by Clause 3.2.3.1 shall be

(a) of a colour specified in *Using the CPPI Colour-Symbol System* to

Mark Equipment and Vehicles for Product Identification on a contrasting background; and

(b) maintained to be clearly legible at all times.



CPPI Tags for what is to be put in the tank



What is required if Marina or Gas Station

5 Facility design

5.1 General

5.1.1

Product at a facility shall be dispensed by pumping, and the dispensing equipment shall be located not less than

- (a) 3 m from a property line;
- (b) 3 m from any highway as defined in the *Highway Traffic Act*;
- (c) 4.5 m from any opening in a building; and
- (d) 1 m from a building.

5.1.2

The distance between storage tank vents and dispensing equipment shall be in accordance with Table 2 of this Code.

5.2.2

No person under the age of 15 shall operate dispensing equipment at a self-serve facility.



Marina or Gas Station tank location

Table 2
Horizontal distance between storage tanks, vents, and dispensing equipment and distance from water wells to storage tanks at facilities, in metres

	NGS	NGD	PS	PD	GD	GV	LFAS
NGS	—	2.5 or 4*	6	4.5	4.5	0	6
NGD	2.5 or 4*	—	3	3	1.5	7.5	3
PS	6	3	—	—	6	0	6
PD	4.5	3	—	—	3	7.5	3
GD	4.5	1.5	6	3	—	3†	†
GV	0	7.5	0	7.5	3†	—	0
LFAS	6	3	6	3	†	0	—

Legend:

NGS — natural gas storage

NGD — natural gas dispenser

PS — propane storage

PD — propane dispenser

GD — gasoline/diesel dispenser

GV — gasoline tank vent

LFAS — liquid fuel aboveground storage (excluding propane)†§

**For 0 to 4000 L, the distance shall be 2.5 m, and for 4001 to 10 000 L,*

the distance shall be 4 m.

†Not applicable to aboveground storage tanks.

‡The distance from drilled water wells to storage tanks at any facility shall not be less than 15 m.

§The distance from a dug water well or waterway to a storage tank at any facility shall not be less than 30 m.



TSSA Licenses and Variance Application

- Hyperlinks to TSSA
- [TSSA Fuels Website](#)
- [TSSA Application for a Variance or Deviation](#)
- [TSSA Application for Retail Outlet or Marina](#)





Technical
Standards and
Safety Authority
www.tssa.org

14th Floor - Centre Tower
3300 Bloor Street West
Toronto, ON M8X 2X4
Tel: 416.231.4078
Customer Service: 1.877.682.8772
E-mail: intake@tssa.org

Application for an Ontario Licence to Operate a Retail Outlet or a Bulk Storage Plant

Technical Standards and Safety Act
Liquid Fuels Regulation

Please submit completed application and supporting documentation by mail, fax, or e-mail (in pdf format).

Check applicable box(es):

☐ New
☐ Modification¹
☐ Change of Licence Holder

☐ Gasoline Station - \$100.00
☐ Card/Keylock
☐ Full-Serve
☐ Self-Serve
☐ Split-Serve
☐ Off-Road Recreational Vehicle
☐ Remotely Monitored Retail Site

☐ Marine - \$125.00

Bulk Storage Plants

☐ Less than 950,000 L - \$220.00
☐ Between 950,000 L and 2,900,000 L - \$1,100.00
☐ Greater than 2,900,000 L - \$2,150.00

¹ Please attach details of modification.
Mail payment along with this completed application and 3 copies of the plans.

Storage Tank Information	Underground		Aboveground	
	Qty	Total Capacity	Qty	Total Capacity
Gasoline				
Diesel Fuel				
Other (Specify):				

Was this facility previously licensed under the Act? ☐ Yes ☐ No

If 'yes', provide name of previous owner: _____

Licence Number

Total Storage Capacity in Litres

A. LICENCE HOLDER INFORMATION

Person or Company Name: _____ Ontario Corporation No., if applicable: _____

Street Name / 911 Number/Address, if applicable: _____

Unit/Suite: _____ PO Box: _____

City/Town: _____ Province: _____ Postal Code: _____

Telephone No.: _____ Fax No.: _____ Cell No.: _____

E-mail: _____

Print Name of Contact Person: _____ Signature of Contact Person: _____

B. FACILITY LOCATION Same as: ☐ A
(Note this must be a delivery or fire route address.)

Person or Company Name: _____

Street Name / 911 Number/Address, if applicable: _____

Unit/Suite: _____

City/Town: _____ Province: _____ Postal Code: _____

Telephone No.: _____ Fax No.: _____ Cell No.: _____

E-mail: _____

Print Name of Contact Person: _____

C. TECHNICAL CONTACT Same as: ☐ A ☐ B ☐ D
(Person or Company we should communicate with regarding engineering AND/OR inspection approval on behalf of the owner.)

Person or Company Name: _____

Street Name / 911 Number/Address, if applicable: _____

Unit/Suite: _____ PO Box: _____

City/Town: _____ Province: _____ Postal Code: _____

Telephone No.: _____ Fax No.: _____ Cell No.: _____

E-mail: _____

Print Name of Contact Person: _____

Note: It is illegal to use an appliance, equipment, or work for its intended purpose unless it is approved.
Please note that this approval may be revoked or suspended if the relevant review and inspection fees are not paid in full.



Technical
Standards and
Safety Authority
www.tssa.org

14th Floor - Centre Tower
3300 Bloor Street West
Toronto, ON M8X 2X4
Tel: 416.234.3348
Fax: 416.231.7525
Customer Service: 1.877.682.8772
E-mail: tssubmissions@tssa.org

Application for a Variance/Deviation

Technical Standards and Safety Act
Fuels Safety Regulations

Please submit completed application and supporting documentation by mail, fax, or e-mail (in pdf format).

Check applicable box(es):

☐ Bio-Gas
☐ Digester Gas
☐ Fuel Oil

☐ Gasoline
☐ Landfill
☐ Natural Gas

☐ Propane
☐ Other _____

Code: _____ Clause: _____

Is this a field development project? ☐ Yes ☐ No

Equipment/Appliance/Component Involved:

Make: _____ Model: _____ Serial No.: _____

Reason for request and proposed method of equivalent safety (submit separate letter if required):

A. OWNER OF APPLIANCE, EQUIPMENT OR INSTALLATION

Company Name: _____ Ontario Corporation No., if applicable: _____

Street Name / 911 Number/Address, if applicable: _____

Unit/Suite: _____ PO Box: _____

City/Town: _____ Province: _____ Postal Code: _____

Telephone No.: _____ Fax No.: _____ Cell No.: _____

E-mail: _____

Print Name of Contact Person: _____ Signature of Contact Person: _____

B. LOCATION ADDRESS Same as: ☐ A
(Where appliance/equipment is to be installed/inspected. Note this must be a delivery or fire route address.)

Company Name: _____

Street Name / 911 Number/Address, if applicable: _____

Unit/Suite: _____

City/Town: _____ Province: _____ Postal Code: _____

Telephone No.: _____ Fax No.: _____ Cell No.: _____

E-mail: _____

Print Name of Contact Person: _____

C. TECHNICAL CONTACT Same as: ☐ A ☐ B ☐ D
(Company we should communicate with regarding engineering and inspection approval on behalf of the owner.)

Company Name: _____

Street Name / 911 Number/Address, if applicable: _____

Unit/Suite: _____ PO Box: _____

City/Town: _____ Province: _____ Postal Code: _____

Telephone No.: _____ Fax No.: _____ Cell No.: _____

E-mail: _____

Print Name of Contact Person: _____

Note: It is illegal to use an appliance, equipment, or work for its intended purpose unless it is approved.
Please note that this approval may be revoked or suspended if the relevant review and inspection fees are not paid in full.

Things TSSA require most to have

- Copy of the Liquid Fuels Handling Code – 2007 latest version, but a new version should be out in about 12 months.
- Copy of the Ontario Regulation 217/01
- Technical Standards and Safety Act. 2000
- Regardless of needing a license or not, they will expect all tanks and fuels to be handled as per the “code” – LFHC or B139 if the fuel is used for heating purposes. And the heating side of fuel has been at the forefront with Distributors such as MEI for about 11 years. We are in the midst of our first 10 year renewal on Comprehensive Inspections



These tanks had been filled



Just sitting on the bare ground???



With this underneath



Fuel will flow “like” water- Tank to catch basin and then.....



Unintended Consequences

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ENERGY

CANADA'S BEST
MANAGED
COMPANIES



Not what we want to be known for!!!



Would you deliver to this? (less the incline)



Someone did!

