Guidelines for Re-Use of Underground Single-Wall Tanks

Fuels Safety inspectors are finding retail facilities that have been operating without a license. When found, these facilities are ordered to obtain a license.

Facilities applying for a license shall meet the current Code requirements unless they have equipment that is approved by virtue of having been installed in accordance with a previous Code (i.e. ‘grandfathered’ approvals). Grandfathered approval status is lost when a license is not maintained for longer than one year.

Typically, the facilities found operating without a license are installations with single-wall tanks and piping. The current Liquid Fuels Handling Code requires that all underground tank systems be double-walled. In order to allow the reuse of the single-wall tank system, the owner of the equipment shall apply for a variance from Section 2.1.1.1 of Liquid Fuels Handling Code.

A variance will not be considered for:

- single-wall tanks that have been out of use for more than two years;
- single-wall fibreglass tanks manufactured prior to 1986 since there is evidence that ethanol is absorbed into the walls of the tanks potentially causing a 30 to 50% reduction in structural strength. (Please refer to Advisory FS-077-06, The Compatibility of Ethanol with Fibre-Reinforced Plastic Tanks); or
- any tank system that has been upgraded, in accordance with sections 7(52)(b), (c) or (d) of Regulation 532 of Revised Regulations of Ontario 1990, with fibreglass lining or impressed current cathodic protection. Fibreglass lining has proven to be ineffective in containing product and there is no way to ascertain that an impressed current system has been in continuous operation.

Also variances for single-wall tanks will not be granted after September 1, 2013.

To consider the application for reuse of single-wall tanks and piping, the site shall be inspected by a Fuels Safety inspector before submitting an application. Then, the following documents shall be provided with the completed variance application form:

1. An environmental assessment report as per the TSSA guidelines titled “Environmental Assessment Requirements to Abandon an Underground Fuel Storage Tank in Place or Re-Use an Abandoned Tank”.

2. A precision leak test report, completed within the last 3 months, for the tank and piping system. The testing should be completed by a company that is listed in Advisory FS-100-07, Fuels Safety Recognition of Precision Leak Testing Companies.
3. For all underground steel tanks located at a facility, records required to confirm that the mandated cathodic protection has been effective for the life of the tank (i.e. a copy of all required, bi-annual cathodic protection surveys).

Please note the following:

- It may be more prudent for equipment owners to replace single-wall, underground steel tanks as variances will not be accepted under any circumstances if the applicant cannot provide all of the documentation required – specifically the complete history of cathodic protection for steel tanks.
- If a variance is granted, typical requirements may include replacement of galvanized product pipe with approved double-wall pipe, the installation of electronic line leak detection for single-wall fiberglass pipe and/or the installation of an electronic, in-tank leak detection system.
- A license will not be granted until the site has passed an inspection and there are no outstanding orders.
- Variance requests are subject to posting on the Environmental Bill of Rights registry.

This advisory will be effective as of April 1, 2010.