Updates to the Liquid Fuels Handling Code

The Fuels Safety Program, in consultation with industry stakeholders through the Liquid Fuels Risk Reduction Group (RRG), has developed proposals to update the CAD (Code Adoption Document). Most of the proposed amendments are editorial changes that have been brought to light both by TSSA and by industry since the last CAD amendment was published in June, 2017. Other changes are clarifications or a relaxation of existing requirements.

Proposed CAD Amendments

Harmonized Tank Record-keeping Requirements
Section 1.2.4: Records required by the Liquid Fuels Handling Code (LFHC) will now be required for seven years for the facility or equipment to which they relate. The previous provision in the CAD required that records be kept for the life of the facility or equipment. The seven-year requirement will harmonize the CAD with the Canadian Council of Ministers of the Environment (CCME) Environmental Code of Practice for Aboveground and Underground Storage Tank Systems Containing Petroleum and Allied Petroleum Products record-keeping requirements (s. 8.11). The seven-year requirement is also consistent with other record-keeping requirements, i.e. Canada Revenue Agency.

The one exception to this amendment relates to large vertical aboveground storage tanks designed to American Petroleum Institute (API) and S601 (formerly S630) standards set out in section 3.2.2. Owners of these tanks are to keep the two most recent inspection records on file because the operational lives of these tanks typically exceed 20 years.

Editorial Clarification on Standards Referenced
Sections 3.2.2.1 and 3.2.2.2 add the word “formerly” in reference to the withdrawn ULC-S630 (Standard for Shop Fabricated Steel Aboveground Tanks for Flammable and Combustible Liquids) to make it clearer to users of the 2017 LFHC that these sections apply to grandfathered S630 tanks as well as new tanks built to the vertical tank section of the superseding standard, CAN/ULC-S601-14 (Standard for Shop Fabricated Steel Aboveground Tanks for Flammable and Combustible Liquids). Sections 3.2.2.1 and 3.2.2.2 relate to in-service external inspection at intervals not exceeding five years and inspections of API Std 650 tanks that do not have double bottoms.

Additional Requirements for Cleaning CAN/ULC-S601 or API 650 Tanks
TSSA recognizes that in-field tank installation of API and ULC tanks – large aboveground tanks – requires special training that Petroleum Mechanic-3s (PM-3s) -- persons who may, without supervision, install, remove, alter, repair, test, service and maintain any type of aboveground installation – do not have. However, since TSSA cannot waive the requirements of the regulation to have a certificate holder install equipment, requiring a PM-3 to supervise the process seems to be the most reasonable and practical way to comply with the intent of the regulations. Thus, operators shall ensure that the persons installing or maintaining these tanks have the appropriate qualifications, certifications and required training for the job. The request for clarification of this requirement came from industry. OPCA fully supports the clarification.

Correction of Table Reference
Section 4.3.1.7(e) pertaining to vent pipe compliance with distances incorrectly referred to Table 3. The section is amended to refer to the correct table, namely Table 2.

Consolidation of References to Prohibitions in Additional Section of the LFHC
Section 5.5.9 requires marinas to post signage concerning fuel attendants onboard a watercraft during refueling, engine shut-off during refueling and engine start-up. The manner in which Section 5.5.9 is currently written it could be read to suggest that a marina owner has only to post the signage, but not comply with it. This editorial amendment lists these requirements in section 6.1.5 “Dispensing Operations” so that all relevant marina dispensing requirements – signage posting and compliance – are listed in one section for ease of reference.
Time to Comply Added to Fire Extinguisher Requirements
Section 5.8.10 only required that a fire extinguisher rated at 40B:C should be readily available “during fueling.” Section 5.8.10 now adds the words “within one year of the effective date of this code” a fire extinguisher with a minimum rating of 40B:C shall be readily available for use during fueling to harmonize with clauses 6.9.1 and 9.3.7, which allow one year to upgrade the fire extinguisher to 40B:C. The requirement for a fire extinguisher rated at 40B:C is consistent with requirements in the Ontario Fire Code and the National Fire Code of Canada.

Explanatory Background Added to Leak Detection and Monitoring of Aboveground Storage Tanks
To provide clear instructions on how to properly monitor an aboveground storage tank, the words “or double bottom” are added. Currently the LFHC only references the interstitial space between the two tanks be monitored to detect leaks, but a double-bottom is different from an interstitial space. This editorial change makes that distinction for clarity. Since these tanks are constructed of the thinnest steel that is permissible in accordance with minimum standards, the end-user should be made aware that the double-bottom space must be monitored, and water removed.

Editorial Change to Clarify Exemption
The dispenser exemption applying to section 8.2.4 in the 2017 LFHC – exempting environmental assessments where a dispenser is being replaced or upgraded and no excavation is taking place – should also apply to aboveground tanks referenced in clauses 8.2.6 and 8.2.8.

Compliance Costs
There are no new or significant compliance costs associated with the amendments to the CAD as the changes are either editorial in nature, clarification of existing requirements or a relaxation of current requirements.

Stakeholder Outreach
These amendments were developed in consultation with the Liquid Fuels Risk Reduction Group (RRG). The RRG is composed of representatives from the following stakeholders:
• Office of the Ontario Fire Marshal
• Underwriters' Laboratories of Canada
• Canadian Fuels Association
• Canadian Independent Petroleum Marketers’ Association
• Ontario Petroleum Contractors’ Association
• Equipment manufacturers (i.e. OPW)
• Engineering firms (e.g. J&B Engineering,)
• Precision leak detection firms (i.e. Cantest Solutions)

The effective date of these updates is scheduled for December 1, 2018. For more information, visit www.tssa.org