

**Installation of Aboveground Storage Tanks
(Plans, Drawings and Specifications)**

ISSUE:

For a number of years the Alberta Fire Code has required that all storage tank installations are required to have plans submitted that bear the stamp of a professional engineer. This requirement was introduced to ensure such installations were appropriate with regard to property lines, openings, separation distances, tank construction, etc.

BACKGROUND:

Although all of this information is necessary to ensure code compliance it is considered by many major jurisdictions a hindrance in gaining compliance. An example of this is an automotive company that is prepared to install a code compliant aboveground used oil storage tank; however, the cost of providing engineered plans is considered an additional unnecessary expense and they continue to store their used oil in 45 gallon drums at the rear of their building prior to removal. Although this practice is acceptable the installation of an aboveground storage tank may be more appropriate.

When the authority having jurisdiction has staff that are competent in the review of plans for certain aboveground storage tank installations they should be permitted to undertake such plans review.

CODE REQUIREMENTS:¹

2.2.3. Approvals

2.2.3.1. Storage Tank Systems

...

- 2) No person shall install or alter any storage tank system referred to in this Part, unless
- a) required permits or approvals have been obtained from the *authority having jurisdiction*,
 - b) plans, drawings and specifications of the system or equipment have been examined by the authority having jurisdiction, and
 - c) the plans, drawings and specifications referred to in Clause (b) bear the stamp and seal of a professional engineer licensed to practice in Alberta.

¹ All references are to Division C of the Alberta Fire Code unless otherwise stated.

VARIANCE:

No person shall install or alter any outside aboveground storage tank system referred to in Part 4, unless

- a) required permits or approvals have been obtained from the authority having jurisdiction,
- b) plans, drawings and specifications of the system or equipment have been examined and accepted by the authority having jurisdiction, and
- c) all on-site individual storage tanks shall not exceed a capacity of 8 000 L and their aggregate capacity shall not exceed 20 000 L.

Plans, drawings and specifications are to be submitted in a form that is acceptable to the authority having jurisdiction and if the installation is deemed by the authority having jurisdiction to be of a complex nature they may be required to bear the stamp and seal of a professional engineer licensed to practice in Alberta. Plans, drawings and specifications for all storage system installations shall include sufficient information to allow a Safety Codes Officer to complete a plan examination and site inspection that verifies full compliance to the Alberta Fire Code.

This Variance only applies to storage tank systems where all storage tanks and piping is aboveground and visible and the tank capacities are within specified limits. A post-installation inspection cannot be done on components of the system that are buried or normally not visible. It would not be practical, for example, to inspect an aboveground tank system with a secondary containment system that incorporates a liner which has been buried.

This Variance applies throughout the province of Alberta.