



## Aboveground Used Oil Storage Tank Checksheet

If the single storage tank is >8000L, the aggregate sum of all storage tanks is >20,000L or any piping is buried underground then engineered drawings are required.

Drawings - Electronic set of drawings stamped and signed by an engineer licensed to practice in the Province of Alberta – National Fire Code – 2019 Alberta Edition “C” 2.2.3.1; inclusive of all piping and transfers systems requiring excavation.

Unless otherwise specified all references are to the National Fire Code – 2019 Alberta Edition [NFC(AE)] Division “B”

### The following should form all or part of the submitted drawings

- Overall Site Plan - showing the site relative to adjacent streets and buildings
- Site Finished Grades - indicating a spill is designed to stay on the property
- Mechanical Site Plan - showing underground drainage (catch basins, piping, oil/water separator if there is one)
- Tank Sections & Details - distances, tank size and listing, product, supporting slab, collision protection, vent rack, spill containment etc.

### *General Information to be included on the drawings or attached documents;*

1. List of applicable codes and standards, product and tank size.
2. Dimensions, distances to tanks, buildings, property lines, dispensers.
3. Spec sheet for the tank.

If engineered drawings are submitted ensure the below items are shown. If the application does not require drawings use the check sheet as a guide for your online application and installation.

### *Detail Check Sheet:*

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|-------------------------------------------------------------------------|------------------------|
| <input type="checkbox"/> Drawings have an engineer signed stamp         | NFC(AE) Div. C 2.2.3.1 |
| <input type="checkbox"/> Listed standard the tanks are designed to meet | NFC(AE) 4.3.1.2        |
| <input type="checkbox"/> 6m from propane cylinder or tank               | NFC(AE) 4.3.2.3        |
| <input type="checkbox"/> Min 1m spacing between storage tanks           | NFC(AE) 4.3.2.2        |
| <input type="checkbox"/> Distances to building and property line:       | NFC(AE) 4.3.2.1        |
| • 3m to property line                                                   |                        |
| • 3m to building if tank > 80,000L                                      |                        |
| • 1.5m to building if tank > 2500L and < 80,000L                        |                        |
| • Zero to building if tank < 2500L                                      |                        |
| • Zero if the tank is CAN/ULC S655                                      |                        |

**Detail Check Sheet cont'd:**

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|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------|
| <input type="checkbox"/> Collision protection by:                                                                                                                                                                                                                                                                                                                                                                    | NFC(AE) 4.3.7.4(3)                    |
| <ul style="list-style-type: none"> <li>• Concrete/steel posts 1m from tank shell and spaced 1500mm on centre or,</li> <li>• Jersey barriers not less than 750mm high and the width of base not less than the height, spaced 500mm from the tank shell.</li> </ul>                                                                                                                                                    |                                       |
| <input type="checkbox"/> Vent Piping, both normal and emergency, shall terminate:                                                                                                                                                                                                                                                                                                                                    | NFC(AE) 4.3.5.2                       |
| <ul style="list-style-type: none"> <li>• Outside the building</li> <li>• Not less than 2m above adjacent ground level</li> <li>• Not less than 1.5m from any building opening</li> </ul>                                                                                                                                                                                                                             |                                       |
| <input type="checkbox"/> Tank supports and foundation                                                                                                                                                                                                                                                                                                                                                                | NFC(AE) 4.3.3.1                       |
| <ul style="list-style-type: none"> <li>• On solid ground, steel, concrete or masonry (nothing combustible)</li> <li>• If base is &gt; 300mm drawings stamped by an engineer licensed to practice in Alberta need to be supplied showing the base has a minimum 2 hr fire-resistance rating.</li> </ul>                                                                                                               |                                       |
| <input type="checkbox"/> Product identification on 2 sides of the tank                                                                                                                                                                                                                                                                                                                                               | NFC(AE) 4.3.1.7                       |
| <input type="checkbox"/> Non-combustible piping                                                                                                                                                                                                                                                                                                                                                                      | NFC(AE) 4.5.2.1                       |
| <input type="checkbox"/> Piping labelled with product                                                                                                                                                                                                                                                                                                                                                                | NFC(AE) 4.5.4.1                       |
| <input type="checkbox"/> Interior & exterior shut off valves on piping at entrances to a building(outside tank)                                                                                                                                                                                                                                                                                                      | NFC(AE) 4.5.6.8                       |
| <input type="checkbox"/> Indoor overhead piping not < than 1.8m above the floor                                                                                                                                                                                                                                                                                                                                      | NFC(AE) 4.5.6.11                      |
| <input type="checkbox"/> Collision protection for pipe risers                                                                                                                                                                                                                                                                                                                                                        | NFC(AE) 4.5.6.13                      |
| <input type="checkbox"/> Spill Control (ground or floor designed to keep spill away from waterway)                                                                                                                                                                                                                                                                                                                   | NFC(AE) 4.1.6.1 and 4.3.7.1           |
| <input type="checkbox"/> Secondary containment for single walled tanks                                                                                                                                                                                                                                                                                                                                               | NFC(AE) 4.3.7                         |
| <ul style="list-style-type: none"> <li>• Made of non-combustible material</li> <li>• Can hold 110% of a single storage tank</li> <li>• Can hold the capacity of the largest storage tank in the contained space plus 10% of the greater of the largest tank or the aggregate capacity of all other storage tanks in the contained space.</li> <li>• Wall of containment no closer than 1.5m to tank shell</li> </ul> |                                       |
| <input type="checkbox"/> Overfill protection                                                                                                                                                                                                                                                                                                                                                                         | NFC(AE) 4.3.1.8                       |
| <input type="checkbox"/> Bonding grounding of tank                                                                                                                                                                                                                                                                                                                                                                   | NFC(AE) 4.3.13.12 and NFPA 30 6.5.4.2 |

**Detail Check Sheet cont'd:**

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|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------|
| <input type="checkbox"/> Tank is equipped with a fixed suction tube                                                                                                                                                                                                                       | Required by AHJ  |
| <input type="checkbox"/> If Catch basin used to collect and then pump used oil: <ul style="list-style-type: none"><li>○ Has a shut off valve on the piping to stop vapours from re-entering the building.</li><li>○ Is made of steel including a steel lid with a fusible link.</li></ul> | NFC(AE) 4.3.6.4  |
| <input type="checkbox"/> Fire Department access to within 60m of tank in outside storage area                                                                                                                                                                                             | NFC(AE) 4.3.2.4  |
| <input type="checkbox"/> Accessible portable fire extinguisher                                                                                                                                                                                                                            | NFC(AE) 2.1.5    |
| <input type="checkbox"/> Door to room placarded                                                                                                                                                                                                                                           | NFC(AE) 4.3.14.5 |

**If engineered drawings are required the application for permit will be reviewed once the hard copy drawings are received. If the application or drawings are incomplete an email requesting more information will be sent to the applicant. Once all supplied information is correct a permit will be issued and work on the installation can begin at that time.**

Submit Drawings to:

Edmonton Fire Rescue Services  
Fire Prevention – Technical Services  
10425 106 Ave  
Edmonton, Alberta T5H 0P5