



Aboveground Used Oil Storage Tank Check Sheet

National Fire Code – 2019 Alberta Edition Division C 2.2.3.1.

**Drawings can be submitted electronically or two (2) hardcopies submitted to:
Red Deer Emergency Services – Fire Prevention Bureau**

Email: prevention@reddeer.ca Mail: PO Box 5008, Red Deer, Alberta T4N 3T4 Office: 403.346.5511

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.

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

**Please consult with The City of Red Deer Inspections & Licensing Department (IN&L)
in regards to requirements for a Development Permit**

**Approval will not be granted until reviewed by IN&L Development Department
Email: development@reddeer.ca Business: 403.342.8190**

The following should form part of the submitted drawings

- Code References - List of applicable codes and standards
- Site Classification - Card lock, self-serve, full serve
- Overall Site Plan - Site relative to adjacent streets and buildings, including distance to tanks, dispensers, buildings and property lines
- 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 applicable)
- Electrical Site Plan - emergency shut down locations, horns, strobes, communication devices
- Piping System - underground layout, distances, dispensers and sumps and associated details
- Tank Sections & Details - distances, tank size and listing, product, supporting slab, collision protection, vent rack, spill containment, etc.

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 application and installation.



Detail Check Sheet:

- | | |
|---|---|
| <input type="checkbox"/> Drawings have an engineer signed stamp | NFC-2019 Alberta Edition Div. C 2.2.3.1 |
| <input type="checkbox"/> Listed standard the tanks are designed to meet | NFC-2019 Alberta Edition 4.3.1.2 |
| <input type="checkbox"/> 6m from propane cylinder or tank | NFC-2019 Alberta Edition 4.3.2.3 |
| <input type="checkbox"/> Min 1m spacing between storage tanks | NFC-2019 Alberta Edition 4.3.2.2 |
| <input type="checkbox"/> Minimum Distances to a Building or Property Line: | NFC-2019 Alberta Edition 4.3.2.1 |
| <ul style="list-style-type: none">• 3m to property line• 3m to building if tank > 80,000L• 1.5m to building if tank > 5000L and < 80,000L• .5m to building if tank > 2500L and < 5000L• Zero from a building < 2500L• Zero if the tank is CAN/ULC S655 | |
| <input type="checkbox"/> Protection Against Mechanical Damage: | NFC-2019 Alberta Edition 4.3.7.4.(3) |
| <ul style="list-style-type: none">• Concrete/steel posts 1m from tank shell and spaced 1500mm on centre or,• Jersey barriers not less than 750mm high and the width of base not less than the height, spaced 500mm from the tank shell. | |
| <input type="checkbox"/> Location of Vent Pipe Outlets: | NFC-2019 Alberta Edition 4.3.5.2 |
| <ul style="list-style-type: none">• Outside the building• Not less than 2m above adjacent ground level• Not less than 1.5m from any building opening | |
| <input type="checkbox"/> Tank Supports and Foundation | NFC-2019 Alberta Edition 4.3.3.1 |
| <ul style="list-style-type: none">• On solid ground, steel, concrete or masonry (nothing combustible)• Where the clearance below the base of the tank exceeds 300 mm, drawings stamped by an engineer must be provided showing the base has a minimum 2 h fire-resistance rating | |
| <input type="checkbox"/> Product Identification on 2 sides of the tank | NFC-2019 Alberta Edition 4.3.1.7 |
| <input type="checkbox"/> Non-Combustible Piping | NFC-2019 Alberta Edition 4.5.2.1 |
| <input type="checkbox"/> Piping Labelled with Product | NFC-2019 Alberta Edition 4.5.4.1 |
| <input type="checkbox"/> Interior and Exterior Shut Off Valves on Piping at Entrances to a Building | NFC-2019 Alberta Edition 4.5.6.8 |
| <input type="checkbox"/> Overhead Piping - not < than 1.8m above the floor | NFC-2019 Alberta Edition 4.5.6.11 |
| <input type="checkbox"/> Protection of Pipe Risers | NFC-2019 Alberta Edition 4.5.6.13 |



Detail Check Sheet cont'd:

- | | |
|--|--|
| <input type="checkbox"/> Spill Control and Drainage Systems | NFC-2019 Alberta Edition 4.1.6.1 and 4.3.7.1 |
| <input type="checkbox"/> Secondary containment for single walled tanks <ul style="list-style-type: none">• Made of non-combustible material• Can hold 110% of a single storage tank• 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.• Wall of containment no closer than 1.5m to tank shell | NFC-2019 Alberta Edition 4.3.7. |
| <input type="checkbox"/> Overfill Protection | NFC-2019 Alberta Edition 4.3.1.8. (1) |
| <input type="checkbox"/> Bonding and Grounding (Inside Buildings) | NFC-2019 Alberta Edition 4.3.13.12 and NFPA 30 6.5.4.2 |
| <input type="checkbox"/> Transfer | NFC-2019 Alberta Edition 4.1.8.3 |
| <input type="checkbox"/> Fire Department access to within 60m of tank in outside storage area | NFC-2019 Alberta Edition 4.3.2.4 |
| <input type="checkbox"/> Accessible Portable Fire Extinguisher | NFC-2019 Alberta Edition 2.1.5 |
| <input type="checkbox"/> Door to room Placarded | NFC-2019 Alberta Edition 4.3.14.5 |

If engineered drawings are required the application for permit will be reviewed once the electronic or 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:

Red Deer Emergency Services – Fire Prevention Bureau

Email: prevention@reddeer.ca

Mail: PO Box 5008, Red Deer, Alberta T4N 3T4