



PLANNING & BUILDING SERVICES

FUEL STORAGE TANKS

UNDERGROUND STORAGE TANK GENERAL INFORMATION

- Per Liberty Lake Code, all new installations of critical material storage in the Aquifer Sensitive Area, including underground storage tanks, shall have secondary containment.
- Underground storage tanks are required to be reviewed and approved by the City of Liberty Lake, unless otherwise exempt.
- As a condition of receiving approval, tanks must be tested each year (tanks with approved secondary containment and monitoring may be tested once every five years).
- A precision leak test is any method capable of reliable measurement down to five hundredths of a gallon per hour.
- Tank owners must maintain and reconcile U.S.T. inventory records with accurate, updated information on a daily basis, except on weekends and legal holidays.

The records must include the following information:

- Type of product received, stored or delivered;
- Volume thereof; and,
- Name and address of vendor of product.
- Inventory records must be maintained on site along with results of the most recent leak test.
- Permits are required from Planning and Building Services for all tank installations, removals, and abandonments.
- All U.S.T.'s are assumed to have a forty year life.
- On or before July 1, 1993, all single-walled U.S.T. installations forty years old or older as of July, 1988, shall have been withdrawn from operation and either physically removed or converted to satisfy abandoned status, according to the department requirements.
- U.S.T.'s and associated piping shall be permitted to be repaired only once. A repaired U.S.T. shall not extend the forty year life.
- The U.S.T. Ordinance does make provisions for different categories of use, such as short-term out-of- service, long-term out-of-service, and abandoned- in-place.
- The Washington State Department of Ecology (456-2926) will maintain a list of underground tank site management/soil sampling companies, as well as tank removal contractors and tank testing contractors.
- A leak monitoring method approved by the Building Official is to be implemented by January 1, 1998. Monitoring includes automatic tank gauging, vapor monitoring, and interstitial monitoring.
- Registration is required to obtain a permit to install or remove these tanks.

This handout serves as a brief overview on Fuel Storage Tanks, for more information on specific requirements, please refer to the City of Liberty Lake Building & Fire Codes.

Permits are also required for the removal and/or abandonment of underground storage tanks to assure that the removal is performed in accordance with Liberty Lake standards and that the tank removal will not endanger the health, safety, welfare or property of the general public.

State Environmental Policy Act (SEPA) Review may be required for some tank installations, consult Planning & Building Services for more information.

UNDERGROUND STORAGE TANK APPLICATION PROCEDURES

In order to submit an application for a permit, the following information should be provided:

- Parcel number or street address of the site.
- Site plan, on 8.5 x 11" paper indicating tank and structure locations.
- Capacity of the tank(s) and a description of the contents.

If the application and plans are complete and the proposal clearly conforms to the codes and ordinances adopted by Liberty Lake, the permit may be issued within 2 to 3 days after review by City staff.

An inspection is required prior to the removal or abandonment of the tank(s) to verify the purging of the tank and to advise the applicant as to what procedures will need to be followed to complete the project.

UNDERGROUND STORAGE TANK REMOVAL & ABANDONMENT REQUIREMENTS

The following items are a guide to the procedures that should be used when removing or abandoning underground tanks:

- No cutting torch or other flame or spark producing equipment may be used until the tank has been completely purged or otherwise rendered safe.
- For a tank temporarily out of service, the fill line shall be capped, and gauge opening and pump suction secured against tampering. The vent line shall remain open.
- For abandoning underground tanks in place, all flammable or combustible liquids shall be removed from the tank and from all connecting lines. The suction inlet gauge and vent lines shall be disconnected. The tank shall be completely filled with an inert, solid material.
- For removal of underground tanks, all flammable or combustible liquids must be removed from the tank and all connecting lines. Disconnect the suction inlet gauge and vent line, remove sections of connecting lines which are not to be used further and cap or plug inlets, outlets and leaks, if any. The tanks shall be purged and free from gas before removal from the premises.
- Tanks disposed of as junk shall be retested for flammable vapors and if necessary rendered gas free prior to removal. After junking and before releasing to junk dealer, a sufficient number of holes and openings should be made in the tank to render it unfit for further use.
- Reuse of underground tanks - Used tanks which are to be reused for flammable or combustible liquid service shall meet all the requirements of the Liberty Lake Code for installation of underground tanks.
- A permit shall be obtained prior to removing, abandoning, or disposing of any flammable or combustible liquid tank. Any tank not used for a period of ninety (90) days shall be safeguarded by the appropriate procedures above.
- Depending on the installation, additional requirements of the International Fire Code and/or Washington State Dept. of Ecology may be applied.

ABOVE GROUND STORAGE TANKS

Storage and Dispensing of Motor Vehicle Fuel

The Liberty Lake Planning and Building Services may upon request, review on a case by case basis, the use of above ground tanks, for dispensing fuel into the tanks of motor vehicles, subject to consultation and input from FD #1, conformance with NFPA 30A, (8-3), conformance with applicable provisions of Chapter 22 of the I.F.C., conformance with other applicable regulations such as local land use ordinances, and subject to the following:

- The customer will be required to submit a written request and application, which includes a description of the proposed tank and verification of its listing, a site plan of the installation, indicating what liquid is stored in each tank, and pay the application/permit fees. The site plan shall include any special features, such as topographical conditions, walls, warning and identification signage, location of barricades or other means of protection from vehicular damage, clear space, adequacy and location of adjacent building exits, nature of adjacent occupancies, proximity to buildings or adjoining property and type of construction of such buildings, capacity and construction of proposed tank, nature of process, degree of any private fire protection to be provided, the adequacy/ availability of water supply and other facilities for the fire district to cope with flammable and combustible liquid fires, methods/location of spill containment, site security, etc.
- Upon review and approval by the City and FD #1, the permit shall be issued, and the inspector and FD #1 shall inspect the premises as provided by NFPA 8-3.5(a) prior to the installation of any tanks. The Inspector, after consultation with FD #1, may make written requirements or corrections before authorizing the tank installations. Such requirements may include items referenced in the preceding paragraph. Note: To address concerns raised in part by the fire district(s), installation will be limited to an aggregate of 6,000 gallons unless otherwise approved by the fire district due to circumstances peculiar to the particular project.
- After the customer receives site inspection approval from the Inspector, installation work may proceed.
- When the installation is completed, the customer shall request a final inspection prior to filling the tank.
- When the Inspector has verified that all applicable requirements are complied with, he shall leave an approval sticker on the tank.
- After the customer receives approval from the Inspector, the tank may be filled and used.

Installation of Tanks

Tanks shall be installed in accordance with the International Fire Code (IFC) and shall be installed in special enclosures constructed per the IFC or in listed and approved tank enclosures or materials providing fire protection of not less than 2 hours. The following additional criteria shall apply:

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- Guard posts or other means shall be provided to protect the area where tanks are installed. The design shall be in accordance with the IFC,
- Each tank and each special enclosure shall be surrounded by a clear space of not less than 3 feet to allow for maintenance and inspection,
- Warning signs and identification signs shall be installed to clearly identify hazards. The design shall be in accordance with the IFC. Conspicuous signs prohibiting simultaneous tank filling and fuel dispensing shall be posted,
- Tanks containing motor fuels shall not exceed a 6,000-gallon individual or 18,000-gallon aggregate capacity. Installations having the maximum allowable aggregate capacity shall be separated from other such installations by not less than 100 feet, and;
- Tanks shall be provided with automatic fuel shut-off devices capable of stopping the delivery of fuel when the level in the tank reaches 90 percent of tank capacity.

The tank storage shall comply with NFPA 30, Chapter 2. Copies of this regulation may be ordered from:
National Fire Protection Association,
Batterymarch Park,
Post Office Box 9101,
Quincy, MA, 02269-9904
1-800-344-3355.

Propane Tanks

Propane is a liquefied petroleum gas (LPG) which is heavier than air. The rules for propane installations are found in the International Fire Code (IFC) and the International Fuel Gas Code (IFGC).

LPG appliances shall not be installed in a pit, basement or similar location where the heavier-than air gas might collect. Appliances so fueled shall not be installed in an above-grade under-floor space or basement unless such location is provided with an approved means for removal of unburned gas. The following information represents a compilation of typical requirements found in the codes. It is intended to be used as a guide and does not reflect a complete listing of requirements.

LPG INSTALLATION GUIDE:

Piping

- Metal piping shall be minimum 12 inches depth
- Must have machine applied protective coatings
- Field wrap is restricted to sections and fittings stripped for threading
- Primer shall be used with wrapping tape
- Isolation unions are required
- 60 psi pressure test for 30 minutes with a 100 psi gauge
- Copper is not approved unless internally tinned
- Minimum No. 12 copper tracer wire is required for non-metallic piping, attached every six feet

Containers - Clearances to structure or property line are as follows:

- Less than 125 gallons 5 ft.: (special requirements)
- 125 to 500 gallons: 10 feet.
- 500 to 2,000 gallons: 25 feet.

Appliances - Must be listed for propane.

ABOVE GROUND STORAGE TANK APPLICATION PROCEDURES

Permits and inspections are required for the installation of such appliances and for the associated piping and storage tank.

To apply for a permit bring in to our office:

- A site plan showing the proposed location of the tank(s) and distances to buildings and property lines;
- The tank(s) capacity and the type of contents to be stored;
- Completed application with contractor's current Washington State Contractor license number, business name, address, and phone number.

The following inspections will be required:

- Air Test
 - Inspection of all equipment/piping before cover
 - Final Inspection
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Please note that while every effort is made to assure the accuracy of the information contained in this brochure it is not warranted for accuracy. This document is not intended to address all aspects or regulatory requirements for a project and should serve as a starting point for your investigation.

For detailed information on a particular project, permit, or code requirement refer directly to applicable file and/or code/regulatory documents or contact the City of Liberty Lake Planning & Building Services.

FOR MORE INFORMATION PLEASE CONTACT:

LIBERTY LAKE PLANNING AND BUILDING SERVICES
22710 E. COUNTRY VISTA DRIVE, LIBERTY LAKE, WA 99019
TELEPHONE: (509) 755-6707, FAX: (509) 755-6713
WWW.LIBERTYLAKewa.GOV