

## INSPECTION GUIDELINES

Fire Code Reference: Chapter 34  
NFPA Standard 30

### A. PERMITS:

A permit is required to temporarily place out of service, remove, abandon, or otherwise dispose of any flammable or combustible liquid tank. (I.F.C. 3401.4)

### B. CODE:

The temporary placing out of service, removal, abandonment or other such disposition of flammable or combustible liquid tanks is done under permit from the Tukwila Fire Department.

Definitions:

1. TEMPORARILY OUT OF SERVICE means to discontinue the use of the tank for a period less than 90 days.
2. ABANDONMENT of tanks means to discontinue the use for a period longer than 90 days.
3. REMOVAL OF TANKS means to physically remove tank from the location it was installed.

### C. GUIDELINES:

1. Permit conditions to place temporarily out of service
  - a. Fill lines, gauge openings and pump connections must be secured against tampering.
  - b. Vent lines shall remain open and be maintained in accordance with the requirements of I.F.C. Chapter 34, section 3404.2.13.1.1.
2. Permit conditions to remove tanks
  - a. The Department of Ecology must be notified at least 30 days prior to beginning the tank closure/removal process
  - b. A site investigation/assessment is required prior to taking a tank permanently out of service.
  - c. Permits shall expire 90 days from the date of application.
  - d. TANKS MAY BE REMOVED ONLY AFTER FIRE DEPARTMENT INSPECTION.
  - e. Two (2) 20 BC portable fire extinguishers are to be on site within 50' of the operation.
  - f. Rope or ribbon barricades must be provided circling 10' from the operation or be enclosed in a fenced yard.
  - g. "No Smoking" signs must be posted in readily visible locations.
  - h. No hot works allowed unless the tanks are certified gas free. A separate Fire Department permit is required for cutting and welding operations.

i. The inspection procedure is as follows:

- Call twenty-four (24) hours prior to removal to arrange for an appointment.
- Remove all flammable or combustible liquids from tank and from connecting lines.
- To ensure that the tank atmosphere has been inverted, one (1) pound of dry ice (carbon dioxide) per 50 gallon liquid capacity of the tank, must be inserted in the tank. (A 1,000 gallon tank would require 20 pounds of dry ice.) This should be done prior to the use of heavy equipment for excavating.

i. Wait a minimum of 60 minutes for dry ice to vaporize. At this time, vapors should begin to show at the fill pipe, which should be left open.

ii. CO<sub>2</sub> fire extinguishers or compressed gas are not to be used for inerting purposes, because of the production of static electricity which may result in an explosion. This restriction may be waived when the procedure is performed by a certified marine chemist.

iii. The contractor shall demonstrate to the fire department inspector that the oxygen content of the tank atmosphere is 10% or less.

Tanks with baffles to prevent movement of liquid (or tanks larger than 10,000 gallons) must be certified gas free by a Marine Chemist or Petroleum Industry Safety Engineer regularly engaged in that business, prior to removal.

After the tanks are removed, the openings should be sealed so the CO<sub>2</sub> gas will remain in the tank during transit. In addition, tanks large enough to allow a person to enter to perform repair work should be marked on one side with spray paint "No Air - Inert Gas. DO NOT ENTER".

### 3. Permit Conditions to leave a tank abandoned in place

Underground tanks may be abandoned in place only if they meet the following criteria:

- a. Removal of the tank will cause structural damage.
- b. Removal of the tank will damage underground utilities.

Proof of damage to structure or utilities must be provided in writing prior to authorization to abandon tank in place.

Call 206-575-4407, twenty-four (24) hours prior to filling to arrange for an appointment.

Tanks to be completely empty of all flammable or combustible liquids prior to filling.

The tank must be completely filled with slurried cement, dry sand, or another material approved by the Fire Chief.

If the tank is baffled, it will have to be certified gas free by a Marine Chemist or Petroleum Industry Safety Engineer before openings are made in each baffled section to ensure complete filling. A separate Fire Department permit is required for cutting and welding operations.

## D. PERMIT CONDITIONS TO INSTALL TANKS

## Permits

1. A permit is required to install, operate, repair or modify pipelines, equipment or facilities where flammable or combustible liquids are produced, processed, dispensed, stored, handled or used. (I.F.C. Chapter 34, section 3403)
2. A permit is required to install, construct, alter or operate tank vehicles, equipment, tanks, plants, terminals wells, refineries and similar facilities where flammable and combustible liquids are produced, processed, transported, stored, dispensed or use. (I.F.C. Chapter 34, section 3406.5.4.5)

## Inspection Requirements

1. Before being covered or placed in use, tanks and piping connected to underground tanks shall be inspected and tested for tightness in the presence of a fire department inspector.
2. Before being placed in use, aboveground tanks and all piping, valves, fitting and other appurtenances shall be inspected and approved the fire department.
3. Any modifications to existing tanks and/or piping shall require a tightness test in the presence of a fire department inspector.