

# INSPECTION CHECKLIST

## *Underground Flammable Combustible Liquid Tank Installation*

The following requirements apply to newly-installed underground tanks used for dispensing flammable or combustible liquids. Since these are often found at service stations, the requirements for dispensing are also included.

Y = Meets Requirements; N= Does Not Meet Requirements

Y N

### **UNDERGROUND TANKS:**

- Tanks designed, fabricated, constructed and installed per NFPA 30 (IFC 3404.2.7)
- Corrosion protection required (IFC 3403.6.5)
- Flexible joints required (IFC 3403.6.9):
  - Piping connects to UG tanks
  - Piping terminates at pump islands and vent risers
  - At points where differential movement in the piping can occur
- Normal venting provided (IFC 3404.2.7.3)
- Vent pipe terminates at least 12 ft. above ground (IFC 3404.2.7.3.3)
- Vent pipe terminates at least 5 ft. from building openings (IFC 3404.2.7.3.3)
- Pressure/Vacuum vent required for flammable liquid tanks (IFC 3404.2.7.3.6)
- Fill pipe and discharge lines shall enter only through top of tank (IFC 3403.2.7.5.5.2)
- Fill lines to be sloped toward tank (IFC 3404.2.7.5.5.2)
- Tight fill device required for tanks greater than 1,000 gallons (IFC 3403.2.7.5.5.2)
- Minimum distance from tank to basement, pit, building, or property line – 3 feet (IFC 3404.2.11.2 (2))
- Minimum separation distances between tanks – 1 foot (IFC 3404.2.11.2 (3))
- Tanks to be surrounded with at least 6 inches of non-corrosive, inert material (such as clean sand) – (IFC 3404.2.11.3)
- Spill container & overfill protection required (IFC 3404.2.11.4)
- Leak detection required (IFC 3404.2.11.5.2)
- Upon installation, tanks and piping to be tested per NFPA 30 (IFC 3404.2.12.1)

Y N

### **DISPENSING DEVICES:**

- Located at least 10 feet from property lines (IFC 2203.1)
- Located at least 10 feet from combustible buildings or overhangs (IFC 2203.1)
- Located so all portions of vehicles be re-fueled shall be on premises (IFC 2203.1)
- Located so the nozzle fully extended cannot reach within 5 feet of building openings (IFC 2203.1)
- Located 20 feet or more from fixed sources of ignition (IFC 2203.1)
- Emergency disconnect switch to be readily accessible (IFC 2203.2)
  - Clearly identified: **Emergency Fuel Shut-off** (IFC 2203.2)
  - Located at least 20 feet from dispensers (IFC 2203.2)
  - Located within 100 feet of dispensers (IFC 2203.2)
- Supervision of dispensing:
  - Attended Self-Service (IFC 2204.2)
  - Unattended Self-Service (IFC 2204.3)
- Smoking & open flames prohibited (IFC 2205.4)
- Vehicles to be shut-Off during fueling (IFC 2205.4)
- Fire extinguisher (2-A:20-B:C minimum-rated) to be within 75 feet of pumps, dispensers, and fill openings (IFC 2205.5)
- Dispensers to be mounted on concrete Island (min. 6" in height) or have vehicle impact protection (IFC 2206.7.3)
- Fire/Impact valve required at base of dispenser (IFC 2206.7.4)
- Dispenser hose – maximum length of 18 feet (IFC 2206.7.5)
- Dispenser hose to have break-away device (IFC 2206.7.5.1)
- Nozzles to be automatic closing (can have latch open device) (IFC 2206.7.6)

This checklist is intended as a guide to assist fire inspection personnel in identifying general fire and life safety hazards, other possible code requirements may apply. Please refer to other checklists for information on certain occupancies/topics.