

CHECKLIST FOR UNDERGROUND TANK INSTALLATION

Return Completed Checklist To:

Bureau of Weights & Measures
Permit & Licensing Section
P.O. Box 7837
Madison, WI 53707-7837
(608) 224-5155

Reg Obj #: For Office Use Only

**Complete one form for each
tank and related piping.**

The information you provide may be used for
secondary purposes [Privacy Law, s.15.04(1)(m)].

This checklist covers

installation of: Tank; Piping; Vapor Recovery; Spill Containment; Overfill Protection;
 Leak Detection; Corrosion Protection; Automated Fueling (key-card-code); Lining

A. IDENTIFICATION: (Please Print)

| | | | | | | | | |
|--|----------------------------------|-----------------------------------|-------------------------------------|-------------------------------|--|-----------------------------------|----------|----------|
| 1. Installation Name | | | | 2. Owner Name | | | | |
| Installation Street Address (not P.O. Box) | | | | Owner Street Address | | | | |
| <input type="checkbox"/> City | <input type="checkbox"/> Village | <input type="checkbox"/> Town of: | | <input type="checkbox"/> City | <input type="checkbox"/> Village | <input type="checkbox"/> Town of: | State | Zip Code |
| State | Zip Code | County | | County | Telephone No. (include area code) () | | | |
| 3. Installation Company Name (print) | | | Installation Company Street Address | | | State | Zip Code | |
| Company Telephone No. (include area code) () | | | Certified Installer Name | | | Installer Certification No. | | |

B. PLAN APPROVAL

- | | Installer Verified | Inspector Verified | NA |
|---|--------------------------|--------------------------|--------------------------|
| 1. Plans have been submitted and approved. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 2. State plan number/LPO plan number is: _____ | | | |
| 3. Tank Capacity: _____ gallons. Tank contents, if known: _____ | | | |

C. TANK CONSTRUCTION

- | | | | |
|---|--------------------------|--------------------------|--------------------------|
| 1. Tank is new and carries UL or other national testing label. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 2. Tank is used, but has been recertified to meet the EPA new tank standard. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 3. Tank is corrosion protected (<input type="checkbox"/> cathodically protected steel, <input type="checkbox"/> fiberglass or <input type="checkbox"/> composite tank) and matches the equipment listed in the plan review. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 4. Test stations have been installed for monitoring cathodic protection on the tank. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 5. Gasoline and other Class I flammable tank vents discharge at least 12 feet above ground level, discharge only upward, and do not terminate under eaves or near a building opening. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 6. Fuel oil, diesel or other Class II or III A liquid storage tank vents are at least 4 feet above ground level. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 7. Overfill protection device is installed and matches plan submittal. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 8. Spill containment device installed. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

D. TANK HANDLING AND TESTING

- | | | | |
|---|--------------------------|--------------------------|--------------------------|
| 1. Tank coating was inspected and any damage to the coating repaired. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 2. Pre-installation test of single wall tank conducted by pressurizing tank with 3-5 psi air pressure, soaping all surfaces, seams, and fittings and inspecting for bubbles. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| or | | | |
| Preinstallation test of double-walled tank: pressurize inner tank to a maximum of 5 psi, seal inner tank and disconnect external air supply, monitor for one hour. After one hour, pressurize the interstitial space with a maximum 5 psi air from the inner tank and use a second gauge for monitoring the pressure. Soap all surfaces, seams and fittings and inspect for bubbles. | | | |
| 3. Tank tested after backfilling through precision test, approved tank gauge or interstitial monitor. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 4. Tank gauge or interstitial monitor verified as operative. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

E. TANK SITE AND BACKFILL

- | | | | |
|---|--------------------------|--------------------------|--------------------------|
| 1. Tank located a minimum of 3 feet from property lines and 1 foot from buildings. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 2. Tank is spaced a minimum of 2 feet from any other tank. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 3. Backfill for steel or fiberglass clad steel tank is clean, washed, well granulated sand, crushed rock, or pea gravel no larger than 3/4 inch. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 4. Backfill for fiberglass tank is pea gravel naturally round with minimum diameter of 1/8 inch and maximum size of 3/4 inch or crushed rock or gravel between 1/8 and 1/2 inch in size. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 5. Minimum of 1 foot of compacted backfill in bottom of excavation. (If hold down pads are used, bedding may be reduced to 6 inches.) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 6. Hold down pads compacted backfill over top of pad: <input type="checkbox"/> Fiberglass tank - 1 foot <input type="checkbox"/> Steel tank - 6 inches | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 7. Backfill material placed over tank to a depth of at least 1 foot. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 8. Backfill compaction is adequate to securely and evenly support the tank and prevent movement/settlement. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 9. Excavation is in a bog, swampy area or landfill and a filter fabric was used to prevent the migration of the backfill material. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 10. Tank in area of vehicle traffic, 3 feet of earth cover or 18 inches of earth plus 6 inches of reinforced concrete or 8 inches of asphalt. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 11. Tank in area not subject to traffic, a minimum of 2 feet of earth or 1 foot of earth plus 4 | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

E. TANK SITE AND BACKFILL (continued)

Installer Verified Inspector Verified NA

inches of reinforced concrete or 6 inches of asphalt. [] [] []

F. TANK ANCHORAGE

- 1. Installation is in an area of high water table or subject to flooding and tank is anchored. [] [] []
a. Anchor straps for fiberglass tank were nonmetallic and were placed according to manufacturer's specifications. [] [] []
b. Anchor straps for steel tank were either nonmetallic or electrically isolated from the tank structure. (All metal fittings are protected from corrosion.) [] [] []
c. Mid anchoring with non conductive material between tank and concrete. [] [] []

G. PIPING (Indicate whether piping is [] Fiberglass; [] Steel; or [] Flexible; then check one of the types below before proceeding to answer 1-8.

- [] Pipe installation is vapor recovery pipe only.
[] Pressurized piping with [] auto shutoff, [] alarm or [] flow restrictor.
[] Suction piping with check valve at tank. [] Suction piping with check valve at pump and inspectable.

- 1. Piping maintains a 1/8 inch per foot slope to a sump or a tank. [] [] []
2. Piping trench provides at least 18 inches of compacted backfill and paving on top of piping. [] [] []
3. Pipes are separated by at least twice the pipe diameter. [] [] []
4. Pipes are separated from the trench excavation sidewalls by at least 6 inches. [] [] []
5. Piping was isolated from the tank and dispenser and tested at 150% of operating pressure of the system (but not less that 50 psi) for 1 hour prior to and after backfilling. [] [] []
6. Secondary containment piping was tested for tightness before it was covered, enclosed or placed in use. For rigid secondary piping test at 10 psi [] [] []
For flexible secondary piping, test at manufacturers' recommendation: _____ psi. [] [] []
7. After backfilling, piping was isolated from the tank and dispenser and precision tested at 110% of operating pressure but not less than 50 psi for 1 hour. [] [] []
8. Piping was isolated from the tank and dispenser and tested through another approved means prior to and after backfilling. Indicate method(s): Prior _____ [] [] []
After _____ [] [] []

H. PRE-OPERATIONAL FUNCTIONALITY VERIFICATION (Both TANK and PIPING)

- 1. Tank test including ullage verified tank is tight [] [] []
2. Sumps and spill buckets have been verified as liquid tight [] [] []
3. All sensors have been verified as functional [] [] []
4. ATG setup has been verified as accurate and functional [] [] []
5. Leak detection method has been verified functional within the respective methodology parameters [] [] []

H. PRIMARY LEAK DETECTION (Check which applies under both TANK and PIPING)

1. Tank

- [] Electronic interstitial monitoring [] Automatic tank gauging [] Tightness testing and inventory control
[] Manual tank gauging (only for tanks of 1,000 gallons or less) [] Statistical Inventory Reconciliation (SIR)

2. Manufacturer / Vendor: _____ Probe #: _____

3 Model Name/#: _____ Material Approval #: _____

4. Piping ⇨ [] single wall, [] double wall

Primary Piping System Type: [] Pressurized piping with ⇨ A. [] Pump auto shutoff - ELLD; B. [] flow restrictor - MLLD
[] Suction piping with check valve at tank [] Suction piping with check valve at pump and inspectable [] Not needed if waste oil

Piping Leak Detection Method: [] Interstitial monitoring ⇨ Electronic: [] NO [] YES ⇨ Sump or cable sensor [] Yes [] No
[] Tightness testing [] Electronic line monitor -ELLD [] SIR [] Not required

5. Manufacturer / Vendor: _____ Probe #: _____

6 Model Name/#: _____ Material Approval #: _____

7. Catastrophic Manufacturer Name: _____ Model: _____ Material Approval #: _____

I. Comments:

J. INSPECTOR INFORMATION

Inspection Dates: 1) _____ 2) _____ 3) _____ 4) _____ 5) _____ 6) _____

Inspector Signature: _____ Inspector #: _____ Local Operator #: _____

Date Signed: _____ Fire department providing coverage: _____ FDID #: _____

K. INSTALLER CERTIFICATION

I certify that the tank and related piping was installed according to the manufacturers' instructions and comply with one of the following standards: [] API 1615, [] PEI RP100 or [] ANSI B31.4.

Installer Signature: _____ Date Signed: _____

TANK INVENTORY FORM ERS-7437 SIGNED BY THE OWNER MUST BE SUBMITTED WITH EACH INSTALLATION CHECKLIST.