

CHECKLIST FOR UNDERGROUND TANK INSTALLATION

Return Completed Checklist To:
Wisconsin Department of Safety and
Professional Services
Bureau of Petroleum Products and Tanks
P. O. Box 7837
Madison, WI 53707-7837

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. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 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)

inches of reinforced concrete or 6 inches of asphalt. Installer Verified Inspector Verified NA

F. TANK ANCHORAGE

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

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. Installer Verified Inspector Verified NA
- 2. Piping trench provides at least 18 inches of compacted backfill and paving on top of piping. Installer Verified Inspector Verified NA
- 3. Pipes are separated by at least twice the pipe diameter. Installer Verified Inspector Verified NA
- 4. Pipes are separated from the trench excavation sidewalls by at least 6 inches. Installer Verified Inspector Verified NA
- 5. Piping was isolated from the tank and dispenser and tested at 150% of operating pressure of the system (but not less than 50 psi) for 1 hour prior to and after backfilling. Installer Verified Inspector Verified NA
- 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 Installer Verified Inspector Verified NA
For flexible secondary piping, test at manufacturers' recommendation: _____ psi. Installer Verified Inspector Verified NA
- 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. Installer Verified Inspector Verified NA
- 8. Piping was isolated from the tank and dispenser and tested through another approved means prior to and after backfilling. Indicate method(s): Prior _____ Installer Verified Inspector Verified NA
After _____ Installer Verified Inspector Verified NA

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

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

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.