



State of Wisconsin  
Governor Tony Evers

**Department of Agriculture, Trade and Consumer Protection**  
Secretary-designee Randy Romanski

**Directions/Guide for Completing the Underground Tank System  
Functionality & Verification Form - TR-WM-139**

**Applicability:**

Wisconsin Administration Code § ATCP 93.510(2) Annual Calibration Verification establishes the TR-WM-139 form's assessments and respective documentation. NFPA 30, 30A, and PEI 400, 500, 900 and 1200 also have annual assessment testing requirements. For administrative efficiency and simplicity all the required test documentation was incorporated into the TR-WM-139 form. The TR-WM-139 assessment requirements apply to federally regulated USTs and fuel oil USTs greater than 4,000 gallon capacity; typically most USTs on the tank inspector's inspection list, with the exception of used oil USTs with manual tank gauging.

A service company may insert their company logo / letter head in place of the DATCP heading.

**SECTION A:**

Complete the respective information

OWNER INFORMATION	SITE INFORMATION	CONTRACTOR INFORMATION
<p>This is the business headquarters address and contact information.</p>	<p><u>Facility/Business ID#:</u> Required. This number can be found on the permit and also can be located online using the DATCP Storage Tank Database tank search feature.</p> <p><u>Facility/Business Name:</u> Location where functionality and verification is taking place</p>	<p><u>Contractor Name:</u> Company performing the evaluation.</p> <p><u>Email Address:</u> Used for correspondence with the company or technician. Email will also allow a contractor to question, send answers or forward required tests to an inspector.</p> <p><u>Contact Person:</u> The contractor's designated contact.</p> <p><u>Telephone and Fax Numbers:</u> Required for contact when necessary.</p> <p><u>Work order number:</u> For contractor's use.</p>

**NOTE:** If the work involves multiple forms it is not necessary to repeat the fill in of owner's and contractor's information on each form. Use the facility/business ID# for subsequent forms as identifier for work completed at same time for the facility.

## **SECTION B: RESULTS OF TESTING**

### **Tech's Manufacturer's Certification Number**

A certification is issued to technicians indicating levels of expertise in operating, testing and repair of specific tank gauge systems. The level earned by the tech also needs to be included, i.e., Veeder Root Level 2 (Some older systems may no longer have certification programs associated with the equipment; technicians holding comparable training and certification will be allowed to perform verifications).

**ATG/Automatic Tank Gauge:** Document make, model and software version. Check the "CSLD" box if the ATG can perform some form of Continuous Statistical Leak Detection. Enter the version of the installed software.

**All equipment tested and verified as functional and properly installed.** Indicate "Yes" or "No", box must be checked.

The terminology "All Equipment tested and verified . . ." relates to the respective assessment elements on the TR-WM-139 form. The principle purpose of the TR-WM-139 assessments is to maintain operational functionality of equipment or assess equipment functions that have a direct relationship to release prevention/detection, fire prevention, and environmental and/or human safety. For example, a top of the line ATG may have a probe with the ability to activate alarms related to numerous events. The only probe alarm that we can verify by the functionality process is the alarm(s) related to tank overfill prevention.

**Are all deficiencies corrected?** Indicate "Yes" or "No", box must be checked. This line is to advise the owner that corrections need to be made.

If the contractor wants to list dispenser lights that are out, or similar items in this space that is okay; however these are not items that we expect the inspector to follow-up on.

**NOTE:** If either "No" box is checked a copy of TR-WM-139 page 1 must be forwarded to DATCP at: [DATCPWeightsandMeasures@wisconsin.gov](mailto:DATCPWeightsandMeasures@wisconsin.gov)

**Comments Section:** List deficiencies found on the site.

Examples:

- Unleaded Mechanical flow restrictor failed, new restrictor installed and tested.
- Water removed from diesel tank sump. Boot on electrical product pipe must be repaired or replaced.
- Water and fuel in over spill bucket. Removed mix and cleaned out waste.
- Overspill bucket not liquid tight must be repaired or replaced.
- Overfill drop tube damaged must be repaired or replaced.
- A mix of water and fuel in tank sump needs to be removed. Sensor replaced.
- ATG lights "Not functioning need new bulbs. Bulbs replaced.
- Overfill alarm lights not functioning.
- ATG in alarm several months. Interstitial sensor needs replaced. Water in submersible sump. Water to be properly removed by station owner.
- Overfill alarm visible not working. Ordered replacement bulb will replace bulb within 30 days.
- Containment sump flexible boot tore. Owner requesting bid prices to repair.
- No test reports on pressurized pipe line for 5 months. Reported problem to Owner, Owner having problem repaired and ordering compliance testing.

**Certification and signature:** Check appropriate box(es)

Technician performing the site functionality review must sign the form.

Facility / operator signature and date required to acknowledge services performed and results provided.

**NOTE:** Set up and alarm history reports need to be printed and maintained with the original form at the facility.

### **SECTION C: INVENTORY OF EQUIPMENT**

Verify and complete the check boxes for each tank; use additional sheets if necessary.

List Product Name Check Manifolder Tank Block if tanks are manifolded by a siphon bar.

If the site has a Tank Probe check 'Yes' and list 'Make' and 'Model.'

EXAMPLE: EMC-PAO265 / TLS-8473 / EBW-960 / EBW-970 / ECT.

NOTE: *Capacitance probes only valid in diesel and gasoline products without ethanol.*

Check Yes/No or N/A for each item.

Tank interstitial Sensor is Functioning - check the box if float Type Sensor.

*[Note: Sensor must be removed from tank to test per PEI/RP 900, and manufacturer's or PEI/RP 1200 test method must be used. Flipping the sensor over does not necessarily prove the sensor is operating correctly]*

Mechanical Line Leak Detector Installed and list Model.

EXAMPLE: RJXLP/ RJFX2 / VMI99LD2000/ FE-STPMLD-D / ECT.

Electronic Leak detector Installed list Model.

EXAMPLE: VR/PLLD/ VRWPLLD/ GILBARCOVLLD/ INCON TS-LLD ECT.

Tank Overfill-90% Alert Installed – check "Yes" if both visual and audible alert is installed and functioning.

### **SECTION D: OVERFILL**

This section includes the overfill prevention programming and outside location, whereas section C applied to the overfill prevention in relation to the tank. Overfill prevention via alarms are not required on tanks that take product by hand transfer of 25 gallons or less.

BALL FLOATS - Ball floats may be left in after height is verified to be greater than overfill shut-off actuation height and documented that they will not interfere with the primary overfill device in the drop tube.

### **SECTION E: CONTAINMENT**

Verify and complete the check boxes.

It is expected that service techs have a working knowledge of the functionality testing procedures of the various manufacturers and models of sensors. Most, but not all, sensors must be removed from the sump to perform a functionality test of the sensor. Sensors must be reinstalled in the sump as the manufacturer expected the sensor to be installed and located in the sump.

Functionality testing includes stand-alone sensors, which are those sensors that only shut down the dispenser they are connected with. They normally are not connected with the monitor console, only the dispenser.

Is the interstitial system an open system or a closed system? A system closed at both ends between two sumps cannot be considered as a secondary containment interstice line monitoring method of line leak detection. There must be a sensor located down-gradient and the interstice must be open into the sump. Checking "Yes" indicates that the service tech has verified that at least the down gradient interstice is open to the sump with a sensor.

## **SECTION F: GENERAL**

Verify and complete the check boxes. Water check and verifying the functionality of the respective floats or water monitor is dependent upon the type of equipment and service practice to determine operational functionality.

In-Tank Gauging: ". . . is not functioning" if a tank monitor is installed on the wall, but is not in use or not operable regardless if another means of leak detection is being used.

Electrical wiring inspection is a cursory assessment to determine if wiring and connections are loose, frayed or corroded and should be checked by an electrician.

Ultrasonic probes do not need to be removed; Capacitance probes do not have to be removed unless there is water reading on the tank monitor; other probes must be removed from tank and inspected and cleaned per manufacturer's instructions.

If there is not a mechanical or electronic Line Leak Detector Flow Restrictor in a pressurized pipeline this piping cannot go back into service. List in section B comments.

Functionality is verified by passing a 3.0gph @ 10 PSI leak rate induced on the line. The TR-WM-139 form is not used as leak detector test documentation; the TR-WM-123 form must be completed to satisfy this annual test requirement.

## **SECTION G: DISPENSERS**

Verify and complete the check boxes.

To determine the operational functionality of the shear valve it is expected that the technician will close the shear valve and with the dispenser turned on to activate either the submersible or suction pump, to ensure the valve shuts off the flow.

Questions? Contact the Bureau of Weights and Measures at (608) 224-5150