

## Release Detection Compliance Measures Matrix - Addendum

This addendum provides additional information to assist UST inspectors in determining whether significant operational compliance has been achieved for a particular Regulatory Subject Area. Please note that the current federal regulatory framework does not necessarily require compliance with items presented in the “Hints/Inspection Tips” section. Individual states may choose to modify this Addendum to ensure it meets the state’s requirements and inspection procedures.

Although not all inclusive, this Addendum provides a cross-reference to items identified on the Release Detection Compliance Measures form.

Regulatory Subject Area		Corresponding Release Detection Measure #
	<p>Helpful resources to accompany inspection include:</p> <ul style="list-style-type: none"> <li>• State and federal regulations</li> <li>• NWGLDE List of third-party evaluations <a href="http://www.nwglde.org/">http://www.nwglde.org/</a></li> <li>• Other EPA literature <a href="http://www.epa.gov/oust/pubs/index.htm">http://www.epa.gov/oust/pubs/index.htm</a></li> </ul>	
	<p>Generally applicable information:</p> <ul style="list-style-type: none"> <li>• For purposes of EPA release detection requirements, the “portion of the tank that routinely contains product” does not typically include vent pipes, fill pipes (including remote fill pipes), and fittings on top of the tank, as long as the UST system is in compliance with overfill prevention requirements.</li> <li>• If documentation regarding release detection equipment is not on site, possible sources to obtain information include:               <ul style="list-style-type: none"> <li>○ NWGLDE</li> <li>○ Equipment manufacturer</li> </ul> </li> </ul>	2,3,5,6,7
<p><b>I. Release Detection Method Presence and Performance Requirements</b></p> <p style="padding-left: 40px;"><b>A. Inventory Control</b></p>	<p>To check that inventory control is being properly performed – Review records for improper recording/data collection and/or reconciliation activities.</p> <ul style="list-style-type: none"> <li>• Inventory data should be collected for all days facility was in operation (dispensing or deliveries conducted).</li> <li>• Height to volume should be properly translated.</li> <li>• Height data should show approx. 50% of measurements using 1/8-inch increments.</li> </ul>	2,3,5,7
	<p>Check the stick for proper length, proper increments, and good condition. Stick should not be broken or missing the button (i.e., its bottom portion).</p>	3,7
	<p>Check that proper tank conversion chart is being used. Chart is appropriate to the size of the tank being used.</p>	3,7
<p><b>B. Automatic Tank Gauging (ATG)</b></p>	<p>To determine proper setup, check the report of the leak detection test to determine adherence with the following:</p> <ul style="list-style-type: none"> <li>• Leak rate is appropriate.</li> <li>• Correct tank size is programmed into ATG.</li> </ul> <p>Check the report of the leak detection test to also determine adherence with specifications listed by sources such as NWGLDE:</p> <ul style="list-style-type: none"> <li>• Test period sufficient.</li> <li>• Test capacity appropriate (e.g., at least 50% full).</li> <li>• Size of tank doesn’t exceed equipment limitations.</li> </ul>	2  2,3,5,7

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<b>I. Release Detection Method Presence and Performance Requirements (Continued)</b>	Determine the level of product in the tank at the time of test to ensure that it is close to the normal high in the tank as determined from the inventory monitoring records.	2,3,5,7
	<b>B. Automatic Tank Gauging (ATG) (Continued)</b> Caution – Unless the inspector has been properly trained, tampering with the ATG is not recommended. Regardless of training, care must be exercised so as not to inadvertently reprogram or negatively affect the operation of the ATG.	2,5,7
<b>C. Manual Tank Gauging</b>	Check the stick for proper length, proper increments, and good condition. Stick should not be broken or missing the button. Reference EPA's publication on Manual Tank Gauging at: <a href="http://www.epa.gov/OUST/pubs/manltank.pdf">http://www.epa.gov/OUST/pubs/manltank.pdf</a>	2,3,7
<b>D. Tightness Testing</b>	Check the report to determine adherence with specifications listed by sources such as NWGLDE.	2,3
<b>E. Ground Water and Vapor Monitoring</b>	Ensure that the layout of the monitoring wells would detect a release from any portion of the tank system.	3,7
	Check the inside of the monitoring well to determine if the well is appropriately screened. <ul style="list-style-type: none"> <li>• Check to see if well is screened at proper depth for ground water monitoring. Proper depth is site specific.</li> <li>• Water level should be below screening to allow enough headspace for product phase change.</li> </ul>	3,7
<b>F. Interstitial Monitoring (Tank, piping, etc.)</b>	Visually inspect, if accessible. Look for obvious degradation of the tank top sump (piping interstice) or for water intrusion into the tank interstice or the tank top sump	2,6,7
	Ensure that float sensor, when used, is installed correctly (typically vertical and at the bottom of the sump) per manufacturer's instructions. Sensor should not be raised beyond an acceptable level. <ul style="list-style-type: none"> <li>• Verification of sensor position does not require removal of the sensor(s) from the UST system.</li> </ul>	2,6,7
	The presence of water is an indication of a problem. At best, the water is from surface run-off, which still shows that secondary containment system is not tight enough to prohibit water intrusion. And at worst, there is a breach allowing ground water intrusion. <ul style="list-style-type: none"> <li>• If the presence of water renders the release detection method inoperable so that a release could go undetected for more than 30 days, SOC has not been met.</li> </ul>	2,3,6,7
<b>G. Automatic Line Leak Detectors (ALLD) on Pressurized Piping</b>	Visually verify presence of ALLD or obtain written proof or affidavit from contractor that ALLD is present. <ul style="list-style-type: none"> <li>• In your visual inspection, look for either a mechanical line leak detector (MLLD) on the submersible pump head, or an electronic line leak detector (ELLD) located anywhere in-line.</li> <li>• ELLD will also have a console inside the office. If looking at the console, be sure to check that there is an ELLD hooked up and that tests are performed. If there is no visual evidence of leak detection equipment, inspector should also look for the annual operability test report.</li> </ul>	1,6,7
	Ensure that the ALLD is placed in a way that the entire piping system is covered.	2,6,7
	Ensure that any MLLD is product appropriate where necessary (e.g., diesel Red Jacket FX series on diesel system).	

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Regulatory Subject Area & Inspection Tips	Hints/Inspection Tips	Corresponding Release Detection Measure #
<b>I. Release Detection Method Presence and Performance Requirements (Continued)</b>  <b>H. Statistical Inventory Reconciliation (SIR)</b>	Check report to determine that sufficient amount of data was used to perform leak check.	2,3,5,7
<b>II. Release Detection Testing</b>	Search ATG memory for previous records.	5
<b>III. Hazardous Substance UST Systems</b>	Where applicable, look for interstitial monitoring for both the piping and the tank.	1,2,6,7
<b>IV. Temporary Closure</b>	---	---