

## Release Detection Compliance Measures Matrix

*Instructions – To Determine the Compliance Status of Measures #1-7,  
Use the Worksheet “Commonly Used Release Detection Methods”.*

Regulatory Subject Area	Measure #	SOC Measure/ Federal Citation	In Compliance?		
			N/A	Y	N
<b>I. Release Detection Method Presence and Performance Requirements</b>	1	Release detection method is present. [280.40(a)]			
	2	Release detection system is operating properly (i.e., able to detect a release from any portion of the system that routinely contains product). [(280.40(a)(1)]			
	3	Release detection system meets specific performance standards in 280.43 or 280.44 (reference worksheet below for applicable standards). [(280.40(a)(3)]			
	4	Implementing agency has been notified of suspected release as required. [(280.40(b)] <input type="checkbox"/> Non-passing results reported and resolved in accordance with implementing agency’s directions. [280.40(b)]			
<b>II. Release Detection Testing</b>	5	Tanks and piping are monitored monthly (or a periodic line tightness test is performed) for releases and records are available (must have records for the two most recent consecutive months and for 8 months of the last 12 months). [280.41(a)(b), and 280.45(b)]			
<b>III. Hazardous Substance UST Systems</b>	6	Hazardous substance UST system leak detection meets the requirements (i.e., either secondarily contained or otherwise approved by the implementing agency). [280.42(b)]			
<b>IV. Temporary Closure</b>	7	Release detection requirements are complied with (i.e., method present, operational, releases investigated and reported as required) for UST systems containing product. [280.70(a)]			

### Worksheet - Commonly Used Release Detection Methods

(Use this worksheet to help determine compliance with the release detection matrix.)

Tank <small>(Choose one)</small>	Pressurized Pipe <small>(Choose Two)</small>	Non-exempt Suction Pipe <small>(Choose one)</small>	Release Detection Method <small>(Applicable items below must be checked for compliance)</small>
<input type="checkbox"/>			<b>A. Inventory Control with Tank Tightness Testing (T.T.T.)</b> <ul style="list-style-type: none"> <li><input type="checkbox"/> Inventory control is conducted properly.                             <ul style="list-style-type: none"> <li><input type="checkbox"/> T.T.T. performed as required (See “D” below).</li> <li><input type="checkbox"/> Inventory volume measurements for inputs, withdrawals, and remaining amounts are recorded each operating day and reconciled as required. [280.43(a)(1), 280.43(a)(3)]</li> <li><input type="checkbox"/> Equipment is capable of 1/8-inch measurement. [280.43(a)(2)]</li> <li><input type="checkbox"/> Product dispensing is metered and recorded within local standards for meter calibration to required accuracy. [280.43(a)(5)]</li> <li><input type="checkbox"/> Water is monitored at least monthly. [280.43(a)(6)]</li> </ul> </li> </ul>

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Worksheet (Continued) - Commonly Used Release Detection Methods			
Tank (Choose one)	Pressurized Pipe (Choose Two)	Non-exempt Suction Pipe (Choose one)	Release Detection Method (All applicable items below must be checked for compliance)
<input type="checkbox"/>			<b>B. Automatic Tank Gauge (ATG)</b> <ul style="list-style-type: none"> <li><input type="checkbox"/> ATG is set up properly. [280.40(a)(2)]</li> <li><input type="checkbox"/> ATG can detect a 0.2 gal/hr leak rate from any portion of the tank routinely containing product. [280.43(d)(1)]</li> <li><input type="checkbox"/> ATG is checking portion of tank that routinely contains product. [280.40(a)(1)]</li> </ul>
<input type="checkbox"/>			<b>C. Manual Tank Gauging (MTG)</b> <ul style="list-style-type: none"> <li><input type="checkbox"/> Tank size is appropriate for using MTG. [280.43(b)(5)]                             <ul style="list-style-type: none"> <li><input type="checkbox"/> Tanks 1001 gals to 2000 gals (as per EPA memo) restricted to use with T.T.T. (See “D” below)</li> </ul> </li> <li><input type="checkbox"/> Method is being conducted correctly. [280.43(b)(4)]</li> <li><input type="checkbox"/> No liquid was added to or taken out of the tank during the test. [280.43(b)(1)]</li> <li><input type="checkbox"/> Equipment is capable of 1/8-inch measurement. [280.43(b)(3)]</li> </ul>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<b>D. Tightness Testing</b> (Safe Suction piping does not require testing) <ul style="list-style-type: none"> <li><input type="checkbox"/> Testing method is capable of detecting a 0.1 gal/hr leak rate from any portion of the UST routinely containing product. [280.43(c)]</li> <li><input type="checkbox"/> Tightness testing is conducted within specified time frames for method:                         <ul style="list-style-type: none"> <li><input type="checkbox"/> <b>Tanks</b> (when combined with IC or MTG) – every 5 years [280.41(a)(1)]</li> <li><input type="checkbox"/> <b>Pressurized Piping</b> – annually [280.41(b)(1)(ii)]</li> <li><input type="checkbox"/> <b>Non-exempt suction piping</b> – every 3 years [280.41(b)(2)]</li> </ul> </li> <li><input type="checkbox"/> Tightness testing is conducted following manufacturer’s instructions. [280.40(a)(3)]</li> </ul>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<b>E. Ground Water or Vapor Monitoring</b> <ul style="list-style-type: none"> <li><input type="checkbox"/> Ground water in the monitoring well is never more than 20 feet from the ground surface. [280.43(f)(2)]</li> <li><input type="checkbox"/> Vapor monitoring well is not affected by high ground water. [280.43(e)(3)]</li> <li><input type="checkbox"/> Site assessment has been done for vapor or ground water monitoring. [280.43(e)(6), 280.43(f)(7)]</li> <li><input type="checkbox"/> Wells are properly designed and positioned. [280.43(e)(6), 280.43(f)(7)]</li> </ul>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<b>F. Interstitial Monitoring</b> <ul style="list-style-type: none"> <li><input type="checkbox"/> Secondary containment can be used to detect a release. [280.43(g)(1)], 280.43(g)(2)]</li> <li><input type="checkbox"/> Sensor properly positioned. [280.40(a)(2)]</li> </ul>

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<b>Worksheet (Continued) - Commonly Used Release Detection Methods</b>			
<b>Tank</b> <small>(Choose one)</small>	<b>Pressurized Pipe</b> <small>(Choose Two)</small>	<b>Non-exempt Suction Pipe</b> <small>(Choose one)</small>	<b>Release Detection Method</b> <small>(All applicable items below must be checked for compliance)</small>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<b>G. Automatic Line Leak Detector (ALLD)</b> <ul style="list-style-type: none"> <li><input type="checkbox"/> ALLD is present and operational. [280.44(a)]</li> <li><input type="checkbox"/> Annual function test of the ALLD has been conducted and records are available. [280.44(a)]</li> </ul>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<b>H. Other Methods [e.g., Statistical Inventory Reconciliation (S.I.R.)]</b> <ul style="list-style-type: none"> <li><input type="checkbox"/> The method can detect a 0.2 gallon per hour leak rate or a release of 150 gallons within a month and meet the 95/5 requirement [280.43(h)(1)]; or</li> <li><input type="checkbox"/> The implementing agency has approved the method as being as effective as tank tightness testing, automatic tank gauging, vapor monitoring, ground water monitoring, or interstitial monitoring and the operator complies with any conditions imposed by the implementing agency. [280.43(h)(2)]</li> <li><input type="checkbox"/> S.I.R. - Results are received within time frame established by implementing agency. [280.41(a) &amp; 280.43(h)]</li> </ul>

**Notes:** N/A – Indicates that the measure is not applicable.

Any mark in the “N” (No) column means that the facility is not in Significant Operational Compliance (SOC) with Release Detection Compliance Measures.

In order for a compliance measure to be in SOC, all applicable check-box items must be in compliance.