## **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
I. Release Detection Method	1	Release detection method is present. [280.40(a)]			
Presence and Performance Requirements	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)]			
		Non-passing results reported and resolved in accordance with implementing agency's directions. [280.40(b)]			
II. Release Detection Testing	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)]			
III. Hazardous Substance UST Systems	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)]			
IV. Temporary Closure	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 (Choose one)	Pressurized Pipe (Choose Two)	Non-exempt Suction Pipe (Choose one)	Release Detection Method (Applicable items below must be checked for compliance)	
			A. Inventory Control with Tank Tightness Testing (T.T.T.)	
			☐ Inventory control is conducted properly.	
			☐ T.T.T. performed as required (See "D" below).	
			☐ 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)]	
			☐ Equipment is capable of 1/8-inch measurement. [280.43(a)(2)]	
			Product dispensing is metered and recorded within local standards for meter calibration to required accuracy. [280.43(a)(5)]	
			□ Water is monitored at least monthly. [280.43(a)(6)]	

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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)
			B. Automatic Tank Gauge (ATG)
			$\Box$ ATG is set up properly. [280.40(a)(2)]
			☐ ATG can detect a 0.2 gal/hr leak rate from any portion of the tank routinely containing product. [280.43(d)(1)]
			□ ATG is checking portion of tank that routinely contains product. [280.40(a)(1)]
			C. Manual Tank Gauging (MTG)
			☐ Tank size is appropriate for using MTG. [280.43(b)(5)]
			☐ Tanks 1001 gals to 2000 gals (as per EPA memo) restricted to use with T.T.T. (See "D" below)
			☐ Method is being conducted correctly. [280.43(b)(4)]
			□ No liquid was added to or taken out of the tank during the test. [280.43(b)(1)]
			☐ Equipment is capable of 1/8-inch measurement. [280.43(b)(3)]
			D. Tightness Testing (Safe Suction piping does not require testing)
			☐ 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)]
			☐ Tightness testing is conducted within specified time frames for method:
			☐ Tanks (when combined with IC or MTG) – every 5 years [280.41(a)(1)]
			□ <b>Pressurized Piping</b> – annually [280.41(b)(1)(ii)]
			□ Non-exempt suction piping – every 3 years [280.41(b)(2)]
			☐ Tightness testing is conducted following manufacturer's instructions. [280.40(a)(3)]
			E. Ground Water or Vapor Monitoring
			$\Box$ Ground water in the monitoring well is never more than 20 feet from the ground surface. [280.43(f)(2)]
			□ Vapor monitoring well is not affected by high ground water. [280.43(e)(3)]
			☐ Site assessment has been done for vapor or ground water monitoring. [280.43(e)(6), 280.43(f)(7)]
			□ Wells are properly designed and positioned. [280.43(e)(6), 280.43(f)(7)]
			F. Interstitial Monitoring
			□ Secondary containment can be used to detect a release. [280.43(g)(1)], 280.43(g)(2)]
			☐ Sensor properly positioned. [280.40(a)(2)]

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## **Release Detection Compliance Measures Matrix**

Worksheet (Continued) - Commonly Used Release Detection Methods			
Tank	Pressurized Pipe	Non-exempt Suction	Release Detection Method
(Choose one)	(Choose Two)	Pipe	(All applicable items below must be checked for compliance)
(choose one)		(Choose one)	
			G. Automatic Line Leak Detector (ALLD)
			☐ ALLD is present and operational. [280.44(a)]
			☐ Annual function test of the ALLD has been conducted and records are available. [280.44(a)]
			H. Other Methods [e.g., Statistical Inventory Reconciliation (S.I.R.)]
			☐ 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
			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)]
			□ S.I.R Results are received within time frame established by implementing agency. [280.41(a) & 280.43(h)]

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.

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