



**OFFICE OF THE ILLINOIS STATE FIRE MARSHAL**

**Division of Petroleum and Chemical Safety**

1035 STEVENSON DRIVE

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(217)785-1020 or (217)785-5878

**EQUIPMENT TESTING GUIDE**

<b>TANKS</b>	<b>LEAK DETECTION RECORDS</b>	<b>MONTHLY</b>	<b>ANNUAL</b>	<b>3 YEAR</b>	<b>5 YEARS- 10 YEARS</b>
Manual tank gauging (up to 600 gallon tanks)	Weekly stick measurements and monthly reconciliations records kept for 2 years.	X			
Manual tank gauging (601-2,000 gallon tanks); allowed only for the first 10 years after the date Cathodic Protection was first installed (and no new USTs may use this on or after 5/1/03)	Weekly stick measurements, monthly reconciliations, and yearly tank precision test records kept for 2 years.	X	X Precision Test		
Inventory Control – allowed only for the first 10 years after the date Cathodic Protection was first installed (and no new USTs may use this on or after 5/1/03)	Daily stick measurements, monthly reconciliation kept for 2 years, and tank tightness records kept for 5 years (done once every 5 years, but this form of release detection not allowed after the 10 <sup>th</sup> year).	X			X Precision test 5 years & 10 years from Cathodic Protection installation
Automatic Tank Gauging	Printout tape of the tank leak test showing at least one Pass is required each month for each tank and records kept for 2 years.	X			
Interstitial Monitoring	Monthly printout tape showing normal or pass status or a log showing Date, Operator Initials, Alarm Status and power Status, kept for 2 years. Also requires a total system test by an Il. Licensed contractor each year and records kept for 2 years.	X	X Test of System Equipment		
Vapor or Groundwater Monitoring	Monthly log showing Date, Operator Initials and results of leak monitoring or report from leak testing service for each well, with all results and log records kept for 2 years.	X		X Vapor Sensor Functionality Test	
S.I.R./Warren Rogers	Each tank must Pass monthly and monthly results and records kept for 2 years; <b>Note:</b> Precision test required at start date and each year, with an additional tank precision test anytime a tank does not pass and records kept for 2 years. Sites with blending pumps or siphon bars are allowed until 1/1/06 and then another form is required.	X	X Precision Test		

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<b>LINES</b>	<b>LEAK DETECTION RECORDS</b>	<b>MONTHLY</b>	<b>ANNUAL</b>	<b>3 YEAR</b>	<b>5 YEARS- 10 YEARS</b>
Mechanical line leak detectors/Pressurized piping	Precision test of lines and functionality test of line leak detectors each year.		X Precision and Functionality Tests		
Electronic line leak detectors/Pressurized piping	No line test required with a 0.1 rate line test print out tape showing a Pass – must detect at 3 gph (at 10 lbs./sq. in.) & .1gph (at 1.5X operating pressure) yearly, records kept for 2 years.  If above print-out tapes are absent, perform yearly line precision test .1 gph leak rate (at 1.5X operating pressure). Annual functionality test at 3 gph leak rate (at 10 lbs./sq. in.) also required. Records must be kept for 2 years.		X		
Interstitial Monitoring	Monthly print out tape showing normal status or log showing date, initials of Inspector, alarm status and power status and records kept for 2 years. Also requires a total system test by an II. Licensed contractor each year, records kept for 2 years.	X	X Test of System Equipment, including Sensor Functionality Tests		
Vapor or Groundwater Monitoring	Monthly log showing date, initials of Inspector and results of leak monitoring or report from leak testing service for each well, with all results and log records kept for 2 years.	X		X Vapor Sensor Functionality Test	
American Suction	Precision test of lines each year. <b>NOTE:</b> European suction requires not testing.		X Precision Test		
European Suction	No equipment tested: Cathodic Protection testing still required if metal piping or metal components.				

**NOTE: All line leak detectors must be tested yearly.**

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CATHODIC PROTECTION	TEST RECORDS	MONTHLY	ANNUAL	3 YEAR	5 YEARS- 10 YEARS
Impressed Current Systems	Inspected once every 30 days, with a log showing date of inspection, initials of inspector, hour, volt and amp readings and power on verifications. Also, an IL licensed corrosion protection contractor must check total system operation annually from date of installation. Both monthly inspection and annual total system check records must be kept for 2 years.	X	X Test of System Equipment		
Sacrificial Anodes	Readings from -875 MV and larger, tested every 3 years with records kept for 6 years.			X	
	Readings from 850 MV to 875 MV, tested yearly with records kept at least 2 years (last 2 systems tests).		X		
	Readings from 850 MV to 875 MV with a 100 MV shift, tested every 3 years with records kept for 6 years.			X	
Internal Lining	<p><b>For Linings installed prior to September 1, 2010:</b></p> <p>--Initial inspection is 10 years from date of installation of lining</p> <p>--All repeat lining inspections must be done once every 5 years</p> <p>--All lining inspection records must be kept for the life of the UST, with records for the last inspection kept on site.</p>				<p align="center">X</p> <p align="center">All repeat lining inspections must be done once every 5 years</p>
	<p><b>For Linings installed after September 1, 2010 (allowed for compatibility purposes only):</b></p> <p>--Initial inspection is due 5 years after lining installation</p> <p>--All repeat lining inspections must be done once every 5 years</p> <p>--All lining inspection records must be kept for the life of the UST, with records for the last inspection kept on site.</p>				<p align="center">X</p> <p align="center">Initial and all repeat inspections due once every 5 years</p>