



# Testing Requirements for UST's and AST's.



*By Mark Lindsey*

*June 27<sup>th</sup>, 2013*

*<http://www.tanknology.com/>*



# Testing Requirements for UST's and AST's

## UST Testing Requirements:

- ❖ Owner/Operator must maintain on site the most current copies of all testing, certifications and permits. The minimum testing records required during annual inspections are the following:
  - Annual Monitor Certification Test(Includes LD Test)
  - Annual Fill Spill Bucket Test
  - Initial Tank Test (.2 Monthly or .1 Annually for SW)
  - Initial Line Test (Annual for SW)
  - Annual or Bi-Annual Air Quality Stage I and II testing
  - Tri-annual SB989 Secondary Containment Test
  - Other Test (If Applicable)



# Testing Requirements for UST's and AST's

## AST Testing Requirements:

- ❖ Owner/Operator must maintain on site the most current copies of all testing, certifications, plans and permits. The minimum records required during annual inspections are the following:
  - Annual Monitor Certification Test if more than 10% of total product stored is underground(Includes LD Test)
  - Spill Prevention, Control and Countermeasure (SPCC-Title 40, Part 112) must be in place specifying the type of Integrity Testing to be used (SP001 Recommended Standards).
  - Air Quality Standing Loss Control(SLC), Stage I and II testing for Gasoline tanks.
    - VR-301D (Existing AST-SLC)
    - VR-302C (New AST-SLC)
    - CP- 206 (Annually for GDF w/SLC)



# Testing Requirements UST's



- ❖ Owner/Operator must maintain on site the most current copies of all testing, certifications and permits. These records must be readily available for the inspector to view when visiting a GDF for required annual testing. Also, these documents have to be verified present on a monthly basis by the Designated Operator (DO).

Remember.....One NOV from an Inspector could mean several return visits. You are now under a **Microscope** of continued compliance. Not to mention, the Penalty.



# Testing Requirements UST's

## Monitor Certification/LD Test

❖ This certification must have been performed during the last 12 month period.



### MONITORING SYSTEM CERTIFICATION

For Use By All Jurisdictions Within the State of California  
Authority: Civil Chapter 47, Health and Safety Code; Chapter 16, Division 5 Title 25, California Code of Regulations  
This form must be used to document testing and servicing of monitoring equipment. It must be done on a monitoring system owned or installed at the facility, a separate application must be submitted for installation of monitoring equipment installed by the technician who performs the work. A copy of this form must be provided to the tank system manufacturer. The manufacturer must submit a copy of this form to the local agency regulating UST systems within 30 days of test date.

A. General Information  
Facility Name: SANJO CLUB # 4832 City: MURRIETTA CA Zip: 92569  
Site Address: 46492 MURRIETTA HGT SPRINGS Contact Phone No: 896-4500  
Date of Testing/Servicing: 10/09/2008

Facility Contact Person: MNAGGEO  
Make/Model of Monitoring System: TL50007  
Work Order Number: 316257

### B. Inventory of Equipment Tested Certified

Check the appropriate boxes to indicate specific equipment inspected/serviced

Form ID:	SP 500701	Tank ID:	SP 500701	Model	MMG 2
<input checked="" type="checkbox"/>	In-Tank Gauging Probe	<input checked="" type="checkbox"/>	In-Tank Gauging Probe	Model	MMG 2
<input checked="" type="checkbox"/>	Annular Space or Vault Sensor	<input checked="" type="checkbox"/>	Annular Space or Vault Sensor	Model	303
<input checked="" type="checkbox"/>	Piping (Surge/Trench Sensor)	<input checked="" type="checkbox"/>	Piping (Surge/Trench Sensor)	Model	308
<input checked="" type="checkbox"/>	F/Bump Sensor(s)	<input checked="" type="checkbox"/>	F/Bump Sensor(s)	Model	308
<input checked="" type="checkbox"/>	Mechanical Line Leak Detector	<input checked="" type="checkbox"/>	Mechanical Line Leak Detector	Model	PXTV
<input checked="" type="checkbox"/>	Electronic Line Leak Detector	<input checked="" type="checkbox"/>	Electronic Line Leak Detector	Model	EXTERNAL ALARM
<input checked="" type="checkbox"/>	Tank Overfill/High-Level Sensor	<input checked="" type="checkbox"/>	Tank Overfill/High-Level Sensor	Model	EXTERNAL ALARM
<input checked="" type="checkbox"/>	Other specific equipment type and model in Section C on page 2:	<input checked="" type="checkbox"/>	Other specific equipment type and model in Section C on page 2:		
<input checked="" type="checkbox"/>	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/>	<input type="checkbox"/> Yes <input type="checkbox"/> No		
<input checked="" type="checkbox"/>	In-Tank Gauging Probe	<input checked="" type="checkbox"/>	In-Tank Gauging Probe	Model	MMG 2
<input checked="" type="checkbox"/>	Annular Space or Vault Sensor	<input checked="" type="checkbox"/>	Annular Space or Vault Sensor	Model	303
<input checked="" type="checkbox"/>	Piping (Surge/Trench Sensor)	<input checked="" type="checkbox"/>	Piping (Surge/Trench Sensor)	Model	308
<input checked="" type="checkbox"/>	F/Bump Sensor(s)	<input checked="" type="checkbox"/>	F/Bump Sensor(s)	Model	308
<input checked="" type="checkbox"/>	Mechanical Line Leak Detector	<input checked="" type="checkbox"/>	Mechanical Line Leak Detector	Model	PXTV
<input checked="" type="checkbox"/>	Electronic Line Leak Detector	<input checked="" type="checkbox"/>	Electronic Line Leak Detector	Model	EXTERNAL ALARM
<input checked="" type="checkbox"/>	Tank Overfill/High-Level Sensor	<input checked="" type="checkbox"/>	Tank Overfill/High-Level Sensor	Model	EXTERNAL ALARM
<input checked="" type="checkbox"/>	Other specific equipment type and model in Section C on page 2:	<input checked="" type="checkbox"/>	Other specific equipment type and model in Section C on page 2:		
<input checked="" type="checkbox"/>	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/>	<input type="checkbox"/> Yes <input type="checkbox"/> No		

\* If the facility contains more tanks or dispensers, copy this form, include information for every tank and dispenser at the facility.

### C. Certification

I certify that the equipment identified in this document was inspected/serviced in accordance with the manufacturer's guidelines. Attached to this certification is information (e.g. manufacturer's checklists) necessary to verify that this information is correct and it is in compliance with the applicable regulatory requirements. For any equipment operator or generating work reports, I have also attached a copy of the (check all that apply):  System set up  Alarm history report

Technician Name (print): WILLIAM ROGERS Signature: [Signature]  
Certification No.: A23984 License No.: 26130 (Class B - General Engineers/Contractors Licensed)  
Testing Company Name: Technology Phone No.: (951) 962-4959  
Site Address: 11200 N. Mojave Expressway, suite 500, Austin, TX 78759 Date of Testing/Servicing: 10/09/2008

### Monitoring System Certification

Site Address: 46492 MURRIETTA HGT SPRINGS Date of Testing/Servicing: 10/09/2008

### D. Results of Testing/Servicing

Software Version Installed: 33A.03

Complete the following checklist:

<input checked="" type="checkbox"/>	Yes	<input type="checkbox"/>	No	is the audible alarm operational?
<input checked="" type="checkbox"/>	Yes	<input type="checkbox"/>	No	is the visual alarm operational?
<input checked="" type="checkbox"/>	Yes	<input type="checkbox"/>	No	were all sensors visually inspected, functionally tested, and confirmed operational?
<input checked="" type="checkbox"/>	Yes	<input type="checkbox"/>	No	were all sensors installed at correct point or secondary containment and protected so that other equipment will not interfere with their proper operation?
<input checked="" type="checkbox"/>	Yes	<input type="checkbox"/>	No	if alarms are tested to a remote monitoring station, is all communications equipment (e.g. modem) operational?
<input checked="" type="checkbox"/>	Yes	<input type="checkbox"/>	No	for pretested tank systems, does the turbine automatically shut down if the testing secondary containment monitoring system detects a leak, fails to operate, or is incorrectly disconnected? If yes, when sensors indicate positive shut-down (check all that apply): <input type="checkbox"/> Surge/Trench Sensors <input checked="" type="checkbox"/> Dispenser Containment Sensors <input type="checkbox"/> Do you confirm positive shut-down due to leakage sensor failure/disconnection? <input type="checkbox"/> Yes <input type="checkbox"/> No
<input checked="" type="checkbox"/>	Yes	<input type="checkbox"/>	No	for tank systems that utilize the monitoring system as the primary leak overfill warning device (i.e. the mechanical overfill prevention valve is installed), is the overfill warning alarm visible and audible at the tank fill point(s) and operating properly? If so, at what percent of tank capacity does the alarm trigger? <u>98 %</u>
<input type="checkbox"/>	Yes	<input checked="" type="checkbox"/>	No	was any monitoring equipment replaced? If yes, identify specific sensor, probe, or other equipment replaced and list the manufacturer name and model for all replacement parts in Section H, below
<input type="checkbox"/>	Yes	<input checked="" type="checkbox"/>	No	was liquid found inside any secondary containment systems designed as dry systems? (check all that apply) <input type="checkbox"/> Product <input type="checkbox"/> Water, if yes, describe causes in Section E, below
<input checked="" type="checkbox"/>	Yes	<input type="checkbox"/>	No	was monitoring system set-up reviewed to ensure proper settings? Attach set-up reports, if applicable.
<input checked="" type="checkbox"/>	Yes	<input type="checkbox"/>	No	is all monitoring equipment operational per manufacturer's specifications?

In Section E, below, describe how and when these deficiencies were or will be corrected.

### E. Comments:

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

### Monitoring System Certification

Site Address: 46492 MURRIETTA HGT SPRINGS Date of Testing/Servicing: 10/09/2008

### F. In-Tank Gauging / SIR Equipment

Check this box if no tank gauging or SIR equipment is installed.  Check this box if no tank gauging or SIR equipment is installed.

Check this box if no tank gauging or SIR equipment is installed.

This section must be completed if in-tank gauging equipment is used to perform leak detection monitoring.

Complete the following checklist:

<input checked="" type="checkbox"/>	Yes	<input type="checkbox"/>	No	Has all input wiring been inspected for proper entry and termination, including testing for ground faults?
<input checked="" type="checkbox"/>	Yes	<input type="checkbox"/>	No	Were all tank gauging probes visually inspected for damage and residue buildup?
<input checked="" type="checkbox"/>	Yes	<input type="checkbox"/>	No	Was accuracy of system ground level readings tested?
<input checked="" type="checkbox"/>	Yes	<input type="checkbox"/>	No	Was accuracy of system water level readings tested?
<input checked="" type="checkbox"/>	Yes	<input type="checkbox"/>	No	Were all probes reinstalled properly?
<input checked="" type="checkbox"/>	Yes	<input type="checkbox"/>	No	Were all items on the equipment manufacturer's maintenance checklist completed?

In the Section H, below, describe how and when these deficiencies were or will be corrected.

### G. Line Leak Detectors (LLD) :

Check this box if LLDs are not installed.

Complete the following checklist:

<input checked="" type="checkbox"/>	Yes	<input type="checkbox"/>	No	For equipment start-up or annual equipment certification, was a leak simulated to verify LLD performance? (check all that apply): simulated leak rate: <input type="checkbox"/> 2 gpm <input type="checkbox"/> 5 gpm <input type="checkbox"/> 10 gpm
<input checked="" type="checkbox"/>	Yes	<input type="checkbox"/>	No	Were all LLDs confirmed operational and accurate within regulatory requirements?
<input checked="" type="checkbox"/>	Yes	<input type="checkbox"/>	No	Was the testing apparatus properly calibrated?
<input checked="" type="checkbox"/>	Yes	<input type="checkbox"/>	No	For mechanical LLDs, does the LLD restrict product flow if it detects a leak?
<input checked="" type="checkbox"/>	Yes	<input type="checkbox"/>	No	For electronic LLDs, does the turbine automatically shut off if any portion of the monitoring system is disabled or disconnected?
<input checked="" type="checkbox"/>	Yes	<input type="checkbox"/>	No	For electronic LLDs, does the turbine automatically shut off if any portion of the monitoring system malfunctions or fails a test?
<input checked="" type="checkbox"/>	Yes	<input type="checkbox"/>	No	For electronic LLDs, have all accessible wiring connections been visually inspected?
<input checked="" type="checkbox"/>	Yes	<input type="checkbox"/>	No	Were all items on the equipment manufacturer's maintenance checklist completed?

In the Section H, below, describe how and when these deficiencies were or will be corrected.

### H. Comments:

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_



# Testing Requirements UST's

## Spill Bucket Testing

- ❖ Fill adapter spill buckets.
- ❖ This test is now normally done with the monitor certification.
- ❖ Must be done once every 12 months.



SWRCB, January 2002 Page 1.

**Secondary Containment Testing Report Form**

*This form is intended for use by contractors performing periodic testing of UST secondary containment systems. Use the appropriate pages of this form to report results for all components tested. The completed form, when not provided, and photos (where applicable), should be provided to the facility owner/operator for submission to the local regulatory agency.*

**1. FACILITY INFORMATION**

Facility Name: SAM'S CLUB # 4709 Tank of Testing: 05/04/2009  
 Facility Address: 1395 E. ONTARIO AVE S/ST 15 FWY., CORONA, CA, 92719  
 Facility Contact: MANAGER Phone: (951) 582-9313  
 Date Local Agency Was Notified of Testing: 04/20/2009  
 Name of Local Agency Inspector of present during testing:

**2. TESTING CONTRACTOR INFORMATION**

Company Name: TANKOLOGY, INC.  
 Technician Conducting Test: WILLIAM RUGGERS  
 Credentials:  CSLB Licensed Contractor  SWRCB Licensed Tank Tester  
 License Type: TANK TESTER License Number: 3-1647

**3. SUMMARY OF TEST RESULTS**

Component	Pass		Fail		Component	Pass		Fail	
	Tested	Not Tested	Tested	Not Tested		Tested	Not Tested	Tested	Not Tested
Spill Box 1 REG FILL	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Spill Box 2 REG FILL	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Spill Box 3 REG VAPOR	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Spill Box 4 REG VAPOR	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Spill Box 5 REG VAPOR	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

*If hydrostatic testing was performed, describe when done with the water after completion of tests:*

**CERTIFICATION OF TECHNICIAN RESPONSIBLE FOR CONDUCTING THIS TESTING**  
 I hereby certify that all the information contained in this document is accurate and in full compliance with legal requirements.  
 Technician's Signature: *William Ruggers* Date: 05/06/2009

SWRCB, January 2006

**9. Spill Bucket Testing Report Form**

*This form is intended for use by contractors performing annual testing of UST spill containment systems. The completed form and photos (where applicable), should be provided to the facility owner/operator for submission to the local regulatory agency.*

**1. FACILITY INFORMATION**

Facility Name: SAM'S CLUB # 4709 Date of Testing: 05/04/2009  
 Facility Address: 1395 E. ONTARIO AVE S/ST 15 FWY., CORONA, CA, 92719  
 Facility Contact: MANAGER Phone: (951) 582-9313  
 Date Local Agency Was Notified of Testing: 04/20/2009  
 Name of Local Agency Inspector of present during testing:

**2. TESTING CONTRACTOR INFORMATION**

Company Name: TANKOLOGY, INC.  
 Technician Conducting Test: WILLIAM RUGGERS  
 Credentials:  CSLB Contractor  SWRCB Tank Tester  Other (Specify) TANK TESTER  
 License Number: 3-1647

**3. SPILL BUCKET TESTING INFORMATION**

Test Method Used:  Hydraulic  Vacuum  Other

Test Equipment Used	Equipment Revision			
Identify Spill Bucket (By Tank Number, Street Address, etc.)	1 REG FILL	1 REG VAPOR	2 REG FILL	2 REG VAPOR
Bucket Installation Type:	<input type="checkbox"/> Direct Bury <input checked="" type="checkbox"/> Contained in Sump	<input type="checkbox"/> Direct Bury <input checked="" type="checkbox"/> Contained in Sump	<input type="checkbox"/> Direct Bury <input checked="" type="checkbox"/> Contained in Sump	<input type="checkbox"/> Direct Bury <input checked="" type="checkbox"/> Contained in Sump
Bucket Diameter:	10	12	10	12
Bucket Depth:	15 MINS	15 MINS	15 MINS	15 MINS
Wait time between applying vacuum/water and testing (s):	8:30	8:30	8:30	8:30
Initial Reading (PSI):	9.5	9.5	9	10
Final Reading (PSI):	9:30	9:30	9:30	9:30
Final Reading (R#):	8.5	9.5	8	10
Test Duration:	1 HOUR	1 HOUR	1 HOUR	1 HOUR
Change in Reading (E - R):	0	0	0	0
Pass/Fail Threshold or Criteria:	0	0	0	0
Test Results:	<input checked="" type="checkbox"/> Pass <input type="checkbox"/> Fail	<input checked="" type="checkbox"/> Pass <input type="checkbox"/> Fail	<input checked="" type="checkbox"/> Pass <input type="checkbox"/> Fail	<input checked="" type="checkbox"/> Pass <input type="checkbox"/> Fail

*Comments - (include information on repairs made prior to testing, and recommended follow-up for failed tests)*

**CERTIFICATION OF TECHNICIAN RESPONSIBLE FOR CONDUCTING THIS TESTING**  
 I hereby certify that all the information contained in this report is true, accurate, and in full compliance with legal requirements.  
 Technician's Signature: *William Ruggers* Date: 05/06/2009

<sup>1</sup> State laws and regulations do not currently require testing to be performed by a qualified contractor. However, local requirements may be more stringent.

SWRCB, January 2006

**9. Spill Bucket Testing Report Form**

*This form is intended for use by contractors performing annual testing of UST spill containment systems. The completed form and photos (where applicable), should be provided to the facility owner/operator for submission to the local regulatory agency.*

**1. FACILITY INFORMATION**

Facility Name: SAM'S CLUB # 4709 Date of Testing: 05/04/2009  
 Facility Address: 1395 E. ONTARIO AVE S/ST 15 FWY., CORONA, CA, 92719  
 Facility Contact: MANAGER Phone: (951) 582-9313  
 Date Local Agency Was Notified of Testing: 04/20/2009  
 Name of Local Agency Inspector of present during testing:

**2. TESTING CONTRACTOR INFORMATION**

Company Name: TANKOLOGY, INC.  
 Technician Conducting Test: WILLIAM RUGGERS  
 Credentials:  CSLB Contractor  SWRCB Tank Tester  Other (Specify) TANK TESTER  
 License Number: 3-1647

**3. SPILL BUCKET TESTING INFORMATION**

Test Method Used:  Hydraulic  Vacuum  Other

Test Equipment Used	Equipment Revision			
Identify Spill Bucket (By Tank Number, Street Address, etc.)	1 REG FILL	1 REG VAPOR	2 REG FILL	2 REG VAPOR
Bucket Installation Type:	<input type="checkbox"/> Direct Bury <input checked="" type="checkbox"/> Contained in Sump	<input type="checkbox"/> Direct Bury <input checked="" type="checkbox"/> Contained in Sump	<input type="checkbox"/> Direct Bury <input checked="" type="checkbox"/> Contained in Sump	<input type="checkbox"/> Direct Bury <input checked="" type="checkbox"/> Contained in Sump
Bucket Diameter:	10	12	10	12
Bucket Depth:	15 MINS	15 MINS	15 MINS	15 MINS
Wait time between applying vacuum/water and testing (s):	8:30	8:30	8:30	8:30
Initial Reading (PSI):	9.5	9.5	9	10
Final Reading (PSI):	9:30	9:30	9:30	9:30
Final Reading (R#):	9	9.5	9	10
Test Duration:	1 HOUR	1 HOUR	1 HOUR	1 HOUR
Change in Reading (E - R):	0	0	0	0
Pass/Fail Threshold or Criteria:	0	0	0	0
Test Results:	<input checked="" type="checkbox"/> Pass <input type="checkbox"/> Fail	<input checked="" type="checkbox"/> Pass <input type="checkbox"/> Fail	<input checked="" type="checkbox"/> Pass <input type="checkbox"/> Fail	<input checked="" type="checkbox"/> Pass <input type="checkbox"/> Fail

*Comments - (include information on repairs made prior to testing, and recommended follow-up for failed tests)*

**CERTIFICATION OF TECHNICIAN RESPONSIBLE FOR CONDUCTING THIS TESTING**  
 I hereby certify that all the information contained in this report is true, accurate, and in full compliance with legal requirements.  
 Technician's Signature: *William Ruggers* Date: 05/06/2009

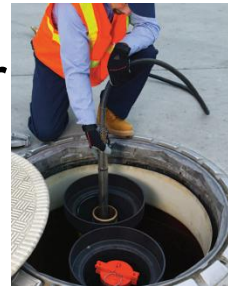
<sup>1</sup> State laws and regulations do not currently require testing to be performed by a qualified contractor. However, local requirements may be more stringent.



# Testing Requirements UST's

## Tank Testing

- ❖ This may have been done at startup on double walled tanks.
- ❖ Must maintain .2 Monthly tapes/.1 Annual tapes for SW tanks (If not, subject to a precision test).
- ❖ Must have most current test available.



**TANKNOLOGY CERTIFICATE OF TESTING**  
 801 N MONROE CORPORSWAY, SUITE 400 AUSTIN, TEXAS 78708  
 TELEPHONE 512-451-8554 FAX 512-451-1508

**TEST RESULT SUMMARY REPORT**

PURPOSE: COMPLIANCE  
 TEST DATE: 06/07 WORK ORDER NUMBER: 012428  
 CLIENT: SAMP CLUB DEPT. 8483 3951 GRAND AVENUE CHENO, CA 91710  
 888 SOUTHWEST 8TH STREET BENTONVILLE, AR 72716  
 NPHS AREA: 070000-0103

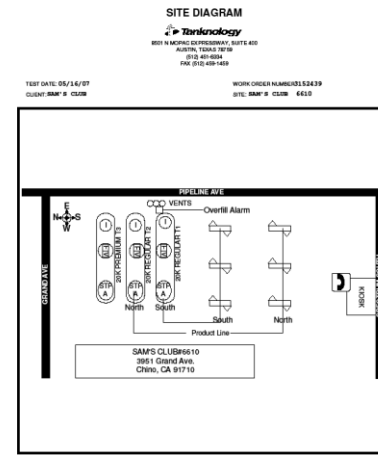
TANK ID	PRODUCT	Tank Tightness Test Results			TEST TYPE: VAPOR	
		CAPACITY	DATE	MATERIAL	LEVEL	WATER LEVEL
878	1 UNLEADED	19,703	118.0	DM FIBRO	85.00	PASS
878	2 UNLEADED	19,703	118.0	DM FIBRO	92.25	PASS
9A	3 DIESEL	19,703	118.0	DM FIBRO	45.00	PASS

LINE ID	LINE MATERIAL	DELIVERY TYPE	TEST RESULT		FINAL LEAK RATE (gpm)	TEST METHOD	VALVE POSITION
			A	B			
878	1 DM FIBER	PRESSIONE	P	0.000	0.000	TSLO-1	Y
878	2 DM FIBER	PRESSIONE	P	0.000	0.000	TSLO-1	Y
9A	3 DM FIBER	PRESSIONE	P	0.000	0.000	TSLO-1	Y

LINE ID	MANUFACTURER	MODEL #	SERIAL #	EXISTING LINE LEAK DETECTOR TEST	
				RESULT	REPAIRS
878	UNDERWOOD	PELV	40544442		
878	UNDERWOOD	PELV	40544494		
9A	UNDERWOOD	PELV	305447470		

For more product information, visit [www.tankology.com](http://www.tankology.com) and visit Us on LinkedIn, Facebook or on our YouTube Channel.

Tank Name: PATRICK W PIPING Tanknoology Certification Number: 1888



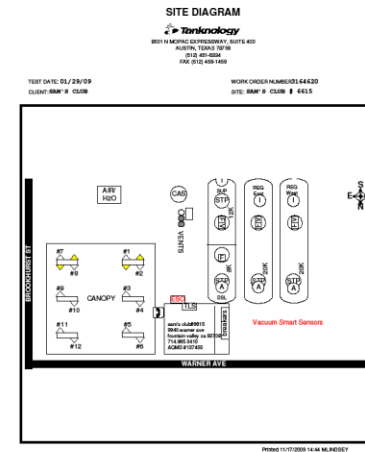
# Testing Requirements UST's

## Line Tests

- ❖ Normally done with Monitor Certification every 12 months if lines are **single wall lines only**.
- ❖ Must have most current test available.



Tankology TAMANOLOGY CERTIFICATE OF TESTING 8801 N MARIPOSA EXPWAY, SUITE 400, FOUNTAIN VALLEY, CA 92708 TEL: 949.251.8100 FAX: 949.251.8100									
PURPOSE: COMPLIANCE					TEST RESULT SUMMARY REPORT				
TEST DATE: 01/28/19					WORK ORDER NUMBER: 114880				
CLIENT: TAMCO CLUB					SITE: TAMCO CLUB # 8915				
DEPT: 888					880 N MARIPOSA AVE				
888 SOUTHWEST 8TH STREET					FOUNTAIN VALLEY, CA 92708				
RAVIA AVE					HOBART				
(CITY/STATE)					CA 92708-4400				
Product Pipe Thickness Test Results TEST TYPE: TLD-1									
LINE ID	LINE PRODUCT	LINE MATERIAL	DELIVERY TYPE	A	B	C	D	FINAL LEAK RATE GPM	WAVC VALUE
87 main 1	HDPE/CLAR	DM F238D	PRESSURE	P				0.000	0
87 main 2	HDPE/CLAR	DM F238D	PRESSURE	P				0.000	0
81	3 DRINKING	DM F238D	PRESSURE	P				0.000 0.000	0
81 main 4	0 CERREL	DM F238D	PRESSURE	P				0.000	0
Existing Line Leak Detection Test									
LINE ID	MANUFACTURER	MODEL #	SERIAL #	RESULT	MANUFACTURER	MODEL #	SERIAL #	RESULT	
87 main 1	RED JACKET	FC2V	80907047	P					
87 main 2	RED JACKET	FC2V	80907048	P					
81	RED JACKET	FC2V	80907057	P					
81 main 4	RED JACKET	FC2-VV	140007084	P					
New Installation Line Leak Detection Test									
LINE ID	MANUFACTURER	MODEL #	SERIAL #	RESULT	MANUFACTURER	MODEL #	SERIAL #	RESULT	





# Testing Requirements UST's

## Stage II Air Quality Inspection

- ❖ Stage II Compliance. Annual test and inspections as follows:
  - Stage II Daily Check Sheet (Owner Responsibility)
  - Visual Inspection of Hanging Hardware(Owner Responsibility)
  - Monthly Throughput(Owner Responsibility)
  - Annual/Bi-annual/Quarterly Testing (Hired Third Party Required-Certifications needed).



# Testing Requirements UST's

## SB 989 (Secondary Containment)

- ❖ Secondary containment testing completed within the required testing period.
- ❖ Within 6 months from opening and every 3 years thereafter.



SWRCB, January 2002  
Page 1.

**Secondary Containment Testing Report Form**

*This form is intended for use by contractors performing periodic testing of UST secondary containment systems. Use the appropriate pages of this form to report results for all components tested. The completed form, written test procedures, and photos (if applicable), should be provided to the facility owner/operator for submission to the local regulatory agency.*

**1. FACILITY INFORMATION**

Facility Name: **SMF'S 8413** Date of Testing: **01/21/2009**  
 Facility Address: **951 NORTH HILLSHIRE AVE., ONTARIO, CA, 95744**  
 Facility Contact: **STEVE** Phone: **(939) 476-9253**  
 Date Local Agency Was Notified of Testing: **/ /**  
 Name of Local Agency Inspector (if present during testing): **/ /**

**2. TESTING CONTRACTOR INFORMATION**

Company Name: **TANKNOLOGY, INC.**  
 Technician Conducting Test: **JEFFERY SHANKLE**  
 Credentials:  CSLB Licensed Contractor  SWRCB Licensed Tank Tester  
 License Type: **LOC** License Number: **892845-07**

Manufacturer: **FRANKLIN FUELING** Date Training Expires: **10/01/2010**  
 Component(s): **IBC00 #2327393741**

**3. SUMMARY OF TEST RESULTS**

Component	Pass			Fail			Repeats Made
	Pass	Fail	Not Tested	Pass	Fail	Not Tested	
IBC 1-2	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
IBC 2-3	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
IBC 3-4	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
IBC 4-5	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
IBC 5-6	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
IBC 6-7	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
IBC 7-8	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
IBC 8-9	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
IBC 9-0	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

If hydraulic testing was performed, describe what was done with the water after completion of test:  
**Left onsite in drums.**

**CERTIFICATION OF TECHNICIAN RESPONSIBLE FOR CONDUCTING THIS TESTING**  
 To the best of my knowledge, the facts stated in this document are accurate and in full compliance with legal requirements.  
 Technician's Signature: **Jeffery Shankle** Date: **01/21/2009**

SWRCB, January 2002  
Page 2.

**7. UNDER-DISPENSER CONTAINMENT (UDC) TESTING**

Test Method Developed By:  UDC Manufacturer  Industry Standard  Professional Engineer  
 Other (Specify):  
 Test Method Used:  Pressure  Vacuum  Hydraulic  
 Other (Specify):

Test Equipment Used: **INCON TS-07S** Equipment Resolution:

	UDC# 1-2	UDC# 1-2	UDC# 3-4	UDC# 3-4
UDC Manufacturer:	Gilbarco	Gilbarco	Gilbarco	Gilbarco
UDC Material:	PPF	PPF	PPF	PPF
UDC Depth:	14"	14"	14"	14"
Height from UDC Top to Top of Highest Piping Penetration:	4"	4"	4"	4"
Height from UDC Top to Lowest Electrical Penetration:	4"	4"	4"	4"
Condition of UDC prior to testing:	OK	OK	OK	OK
Portion of UDC Tank: <sup>1</sup>	11"	11"	11"	11"
Does indicator shut down when empty sensor detects liquid (both product and water)?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA
Turn-on minimum response time:				
Is system programmed for fail-safe shut-down?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA
Was fail-safe verified to be operational?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA
Wait time between applying pressure/vacuum/water and starting test:	15 Min:s	15 Min:s	15 Min:s	15 Min:s
Test Start Time:	07:58 AM	08:15 AM	07:58 AM	08:15 AM
Initial Reading (R <sub>1</sub> ):	4.2843	4.2034	5.9418	5.9423
Test End Time:	08:13 AM	08:19 AM	08:13 AM	08:19 AM
Final Reading (R <sub>2</sub> ):	6.2835	6.2833	5.9418	5.9423
Test Duration:	15 Min:s	15 Min:s	15 Min:s	15 Min:s
Change in Reading (R <sub>2</sub> - R <sub>1</sub> ):	-0.005	-0.001	-0.002	-0.003
Pass/Fail Threshold or Criteria:	-0.020	-0.020	-0.020	-0.020

Test Results:  Pass  Fail  Pass  Fail  Pass  Fail  Pass  Fail

Was sensor recovered for testing?  Yes  No  NA  Yes  No  NA  Yes  No  NA

Was sensor properly rephased and verified functional after testing?  Yes  No  NA  Yes  No  NA  Yes  No  NA

**COMMENTS - (include information on repairs made prior to testing, and recommended follow-up for failed tests)**

SWRCB, January 2002  
Page 3.

**7. UNDER-DISPENSER CONTAINMENT (UDC) TESTING**

Test Method Developed By:  UDC Manufacturer  Industry Standard  Professional Engineer  
 Other (Specify):  
 Test Method Used:  Pressure  Vacuum  Hydraulic  
 Other (Specify):

Test Equipment Used: **INCON TS-07S** Equipment Resolution:

	UDC# 5-6	UDC# 5-6	UDC# 7-8	UDC# 7-8
UDC Manufacturer:	Gilbarco	Gilbarco	Gilbarco	Gilbarco
UDC Material:	PPF	PPF	PPF	PPF
UDC Depth:	14"	14"	14"	14"
Height from UDC Top to Top of Highest Piping Penetration:	4"	4"	4"	4"
Height from UDC Top to Lowest Electrical Penetration:	4"	4"	4"	4"
Condition of UDC prior to testing:	OK	OK	OK	OK
Portion of UDC Tank: <sup>1</sup>	11"	11"	11"	11"
Does indicator shut down when empty sensor detects liquid (both product and water)?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA
Turn-on minimum response time:				
Is system programmed for fail-safe shut-down?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA
Was fail-safe verified to be operational?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA
Wait time between applying pressure/vacuum/water and starting test:	15 Min:s	15 Min:s	15 Min:s	15 Min:s
Test Start Time:	07:58 AM	08:15 AM	07:58 AM	08:15 AM
Initial Reading (R <sub>1</sub> ):	4.2787	4.2787	5.9819	5.9812
Test End Time:	08:13 AM	08:19 AM	08:13 AM	08:19 AM
Final Reading (R <sub>2</sub> ):	4.2786	4.2786	5.9812	5.9810
Test Duration:	15 Min:s	15 Min:s	15 Min:s	15 Min:s
Change in Reading (R <sub>2</sub> - R <sub>1</sub> ):	-0.004	-0.001	-0.007	-0.002
Pass/Fail Threshold or Criteria:	-0.020	-0.020	-0.020	-0.020

Test Results:  Pass  Fail  Pass  Fail  Pass  Fail  Pass  Fail

Was sensor recovered for testing?  Yes  No  NA  Yes  No  NA  Yes  No  NA

Was sensor properly rephased and verified functional after testing?  Yes  No  NA  Yes  No  NA  Yes  No  NA

**COMMENTS - (include information on repairs made prior to testing, and recommended follow-up for failed tests)**

<sup>1</sup> If the entire depth of the UDC is not tested, specify how much was tested. If the answer is "agg" of the questions indicated with an asterisk (\*) is "PSF" or "VA", the entire UDC must be tested. (See SWRCB LGS-100)

<sup>1</sup> If the entire depth of the UDC is not tested, specify how much was tested. If the answer is "agg" of the questions indicated with an asterisk (\*) is "PSF" or "VA", the entire UDC must be tested. (See SWRCB LGS-100)



# Testing Requirements UST's

## Other Testing

- ❖ Any special test or tests required by your local agency or stipulated in your permit to operate.
  - Examples:
    - Enhanced Leak Detection(ELD)
    - .2GPH ATG Testing for Tank Probes in SW Tanks (Some Counties Require)
    - Vapor Recovery Spill Bucket Testing(Some Counties Require)



# Testing Requirements AST's

- ❖ Owner/Operator must maintain on site the most current copies of all testing, certifications, plans and permits. The minimum records required during annual AST inspections is the SPCC Plan spelling out the form of Integrity testing to be followed.

Remember.....One NOV from an Inspector could mean several return visits. You are now under a **Microscope** of continued compliance. Not to mention, the Penalty.



# Testing Requirements AST's

## Monitor Certification/LD Test

◆ This certification must have been performed during the last 12 month period. (Note: This only has to be done if regulated by the UST division and/or 10% or more of the product is underground.)



### MONITORING SYSTEM CERTIFICATION

For Use by All Jurisdictions Within the State of California  
 Authority: Civil Code, Chapter 47, Health and Safety Code, Chapter 16, Division 7 Title 23, California Code of Regulations

This form must be used to document testing and servicing of monitoring equipment. It must show one monitoring system control panel is installed at the facility, a separate application/monitor/alarms and/or detection system installed by the technician who performs the work. A copy of this form must be provided to the tank system manufacturer. The manufacturer must submit a copy of this form to the local agency regulating UST systems within 30 days of test date.

**A. General Information**  
 Facility Name: SAMEY CLUB # 482 City: MURRIETTA CA ZIP: 92569  
 Site Address: 45492 MURRIETTA HQT SPRINGS Contact Phone No: 896-4500  
 Date of Testing/Service: 10/09/2008

Facility Contact Person: MHAGGE  
 Make/Model of Monitoring System: TLS350T Work Order Number: 316287

**B. Inventory of Equipment Tested Certified**  
 Check the appropriate boxes to indicate specific equipment inspected/serviced.

Form ID	AST NO/TA	Model	Model	Tank ID	AST NO/TA	Model	Model
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	In-Tank Gauging Probe	Model: MAG 2	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	In-Tank Gauging Probe	Model: MAG 2
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Annular Space or Vault Sensor	Model: 303	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Annular Space or Vault Sensor	Model: 303
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Filling Spout/Trench Sensor(s)	Model: 306	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Filling Spout/Trench Sensor(s)	Model: 306
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Fill Spang Sensor(s)	Model: 308	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Fill Spang Sensor(s)	Model: 308
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Mechanical Line Leak Detector	Model: XTIV	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Mechanical Line Leak Detector	Model: XTIV
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Electronic Line Leak Detector	Model: XXX	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Electronic Line Leak Detector	Model: XXX
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Tank Overfill/High Level Sensor	Model: EXTERNAL ALARM	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Tank Overfill/High Level Sensor	Model: EXTERNAL ALARM
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Other specific equipment type and model in Section C on page 2.		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Other specific equipment type and model in Section C on page 2.	
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	In-Tank Gauging Probe	Model: MAG 2	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	In-Tank Gauging Probe	Model: MAG 2
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Annular Space or Vault Sensor	Model: 303	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Annular Space or Vault Sensor	Model: 303
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Filling Spout/Trench Sensor(s)	Model: 306	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Filling Spout/Trench Sensor(s)	Model: 306
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Fill Spang Sensor(s)	Model: 308	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Fill Spang Sensor(s)	Model: 308
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Mechanical Line Leak Detector	Model: XTIV	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Mechanical Line Leak Detector	Model: XTIV
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Electronic Line Leak Detector	Model: XXX	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Electronic Line Leak Detector	Model: XXX
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Tank Overfill/High Level Sensor	Model: EXTERNAL ALARM	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Tank Overfill/High Level Sensor	Model: EXTERNAL ALARM
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Other specific equipment type and model in Section C on page 2.		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Other specific equipment type and model in Section C on page 2.	

Dispenser ID: 1-12  
 Dispenser Containment Sensor(s) Model: 209  
 Shear Valve(s)  
 Dispenser Containment Floated and Chained.  
 Dispenser ID: \_\_\_\_\_  
 Dispenser Containment Sensor(s) Model: \_\_\_\_\_  
 Shear Valve(s)  
 Dispenser Containment Floated and Chained.  
 Dispenser ID: \_\_\_\_\_  
 Dispenser Containment Sensor(s) Model: \_\_\_\_\_  
 Shear Valve(s)  
 Dispenser Containment Floated and Chained.  
 Dispenser ID: \_\_\_\_\_  
 Dispenser Containment Sensor(s) Model: \_\_\_\_\_  
 Shear Valve(s)  
 Dispenser Containment Floated and Chained.

\* If the facility contains more tanks or dispensers, copy this form. Include information for every tank and dispenser at the facility.

**C. Certification**  
 I certify that the equipment identified in this document was inspected/serviced in accordance with the manufacturer's guidelines. Attached to this certification is information (e.g. manufacturer's checklists) necessary to verify that this information is correct and is a true and showing the original equipment. For any equipment operated or generating toxic vapors, I have also attached a copy of the (check all that apply):  System set up  Alarm history report

Technician Name (print): WILLIAM ROGERS Signature: *William Rogers*  
 Certification No.: 225964 License No.: 20130 (Class B General Engineers/Contractor License)  
 Testing Company Name: Territology Phone No.: (951) 951-8999  
 Site Address: 11000 N. Mojave Expressway, suite 500, Austin, TX 78789 Date of Testing/Servicing: 10/09/2008

### Monitoring System Certification

Site Address: 45492 MURRIETTA HQT SPRINGS Date of Testing/Service: 10/09/2008

**D. Results of Testing/Servicing**  
 Software version installed: \_\_\_\_\_

Complete the following checks:

<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	Is the audible alarm operational?
<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	Is the visual alarm operational?
<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	Were all sensors visually inspected, functionally tested, and confirmed operational?
<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	Were all sensors installed at correct point or secondary containment and protected to that other equipment was not interfere with their proper operation?
<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	Are alarms are tested to a remote monitoring station, to all communications equipment (e.g. modem) operational?
<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	For pressurized storage systems, does the turbine automatically shut down if the press secondary containment monitoring system detects a leak, fails to operate, or is incorrectly disconnected? If yes, when sensors indicate positive shut-off (check all that apply) <input type="checkbox"/> Fill Spang/Trench Sensors <input type="checkbox"/> Dispenser Containment Sensors
<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	Do you confirm positive shut-down due to leak gas sensor failure/disconnection? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	For tank systems that utilize the monitoring system as the primary leak overfill warning device (i.e. the mechanical overfill prevention valve is installed), is the on-site warning alarm visible and audible at the tank fill point(s) and operating properly? If so, what percent of tank capacity does the alarm trigger? <input type="checkbox"/> 0-5%
<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	Was any monitoring equipment replaced? If yes, identify specific sensor, probe, or other equipment replaced and list the manufacturer name and model for all replacement parts in Section E, below.
<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	Was liquid found inside any secondary containment system designed as dry systems? (check all that apply) <input type="checkbox"/> Product <input type="checkbox"/> Water. If yes, describe causes in Section E, below.
<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	Was monitoring system set-up reviewed to ensure proper settings? Attach set-up reports, if applicable.
<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	Is all monitoring equipment operational per manufacturer's specifications?

In Section E below, describe how and when these deficiencies were or will be corrected.

**E. Comments:**

---



---



---



---



---



---



---



---



---



---



---



---

### Monitoring System Certification

Site Address: 45492 MURRIETTA HQT SPRINGS Date of Testing/Service: 10/09/2008

**F. In-Tank Gauging / SIR Equipment**

Check this box if no tank gauging or SIR equipment is installed.  
 Check this box if no tank gauging or SIR equipment is installed.

Complete the following checks:

<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	Has all input wiring been inspected for proper entry and termination, including testing for ground faults?
<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	Were all tank gauging probes visually inspected for damage and residue buildup?
<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	Was accuracy of system ground level readings tested?
<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	Was accuracy of system water level readings tested?
<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	Were all probes resealed properly?
<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	Were all items on the equipment manufacturer's maintenance checklist completed?

\* In the Section H, below, describe how and when these deficiencies were or will be corrected.

**G. Line Leak Detectors (LLD) :**  Check this box if LLDs are not installed.

Complete the following checks:

<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	For equipment start-up or annual equipment certification, was a leak simulated to verify LLD performance? (check all that apply) <input type="checkbox"/> Simulated leak rate: <input type="checkbox"/> 0.2 gpm <input type="checkbox"/> 0.5 gpm <input type="checkbox"/> 1.0 gpm
<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	Were all LLDs confirmed operational and accurate within regulatory requirements?
<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	Was the testing apparatus properly calibrated?
<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	For mechanical LLDs, does the LLD resist product flow if it detects a leak?
<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	For electronic LLDs, does the turbine automatically shut off if any portion of the monitoring system is disabled or disconnected?
<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	For electronic LLDs, does the turbine automatically shut off if any portion of the monitoring system malfunctions or fails a test?
<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	For electronic LLDs, does the turbine automatically shut off if any portion of the monitoring system malfunctions or fails a test?
<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	For electronic LLDs, have all accessible wiring connections been visually inspected?
<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	Were all items on the equipment manufacturer's maintenance checklist completed?

\* In the Section H, below, describe how and when these deficiencies were or will be corrected.

**H. Comments:**

---



---



---



---



---



---



# Testing Requirements AST's

- ❖ Aboveground Petroleum Storage Act (APSA)..Businesses that store 1,320 gallons or more of petroleum products (new or used) **in aboveground tanks and/or containers of 55 gallons or more** are required to develop and implement a Spill Prevention, Control, and Countermeasure (SPCC) Plan. The SPCC Plan is required to be certified by a professional engineer unless site qualifies for a Tier I or Tier II Facility.

(Tier I- Facility has < 10,000 gallons total AST storage)

(Tier II- Facility has >5,000 gallon individual AST tank)

- ❖ Spill Prevention, Control and Countermeasure (SPCC Required by EPA, Title 40, Part 112) must be in place specifying the type of Integrity Testing to be used ((STI)SP001 Recommended Standards).

- APSA ...SPCC Plan should include the following:
  1. Professional Engineer Certification if applicable
  2. Plan must be the sequence of 40 CFR 112.7
  3. Facility Diagram
  4. Spill Predictions
  5. Facility Drainage



# Testing Requirements AST's

- APSA ...SPCC Plan should include the following continued:
  6. **Facility Inspections/Integrity Testing**
  7. Site Security
  8. Five Year Plan Review
  9. Management Approval
  10. Appropriate secondary containment or diversionary structures.
  11. Loading/unloading requirements and procedures involving tank trucks.
  12. Personnel Training and oil discharge prevention briefings.
  13. Brittle fracture evaluations(Field Constructed Tanks)
  14. Bulk storage container compliance
  15. Transfer procedures and equipment (including piping)

Helpful Materials to use when preparing to complete an SPCC Plan:

[spcc\\_101\\_prod.pdf](#)

[Ca APSA SPCC FAQ.pdf](#)

See attached templates below for use when completing an SPCC plan:

[For all AST.form\\_tank\\_statement.pdf](#)

[SPCC form\\_tier I template.pdf](#)

[SPCC form\\_tier II template.pdf](#)



# Testing Requirements AST's

## ❖ Facility Inspections/Integrity Testing

- Monthly Inspections
  - Visual Inspection (Done by onsite personnel)
  - [Monthly Inspection checklists.pdf](#)
- Annual Inspections
  - Detailed Visual Inspection (Done by onsite personnel)
  - [Annual Inspection checklists.pdf](#)
- Formal External Inspections
  - Radio Graphic Testing
  - Ultrasonic Metal Thickness Testing
- Formal Internal Inspections/Leak Test
  - Pressure Test (1.5 PSI to 3 PSI)
  - Hydrostatic Testing
  - Acoustic Emissions Testing (Fiberglass and Steel)
  - Other Non-Destructive Testing





# Testing Requirements AST's



## Inspection Schedule

Tank Category:		Type of Inspection:
Category 1:		P- Periodic Owner's Inspection
	Secondary Containment(Double Wall Tank)	E- Formal External Inspection
	Continuous Release Detection Method (CRDM)	I- Formal Internal Inspection
Category 2:		L- Leak Test
	Secondary Containment(Earthen Dike to Prevent Catastrophic Leak)	
Category 3:		
	No Secondary Containment	
	No Prevention Barrier (RPB)	



More Risk ↓	More Risk----->			
	Size, Gallons	Category 1	Category 2	Category 3
Shop	0-1100	P	P	P, E & L (10)
	1101-5,000	P	P, E & L (10)	[P,E & L (5), I (10)] or [P,E (5) and L (2)]
Built Tank	5,001 - 30,000	P, E (20)	[P,E (10) and I (20)] or [P,E & L (5) and L (10)]	[P,E & L (5), I (10)] or [P,E (5) and L (1)]
	30,001 - 50,000	P,E (20)	P,E & L (5), I (15)	P,E & L (5), I (10)
	Field Erect Tank	P, E (5), I (20)	P, E (5), I (20)	P, E (5), I (20)
	Portable Containers	P	P	P

# Testing Requirements AST's

## ❖ Air Quality Standing Loss Control(SLC), Stage I and II testing for Gasoline tanks.

- VR-301E (Existing AST-SLC)

- ✓ PV Vent Valve Needed
- ✓ High Performance White Paint (Listed in EO)
- ✓ Protected Approved AST Vaulted Tanks(Listed in EO)
- ✓ [eo301e\\_final.pdf](#)



- VR-302E (New AST-SLC)

- ✓ PV Vent Valve Needed
- ✓ Protected Approved AST Vaulted Tanks(Listed in EO)
- ✓ [eo302e\\_final.pdf](#)



- CP- 206 (Annually for GDF w/SLC)

- ✓ Minimum Annual Test
  - Pressure Decay Test TP-206.3
  - PV Vent Valve Test TP-201.1E
  - Drop Tube Test TP-201.1D
  - Other Test as required by Permit to Operate (PTO)
  - [cp-206.pdf](#)



# Testing Requirements for UST's and AST's

## Every Presentation Needs A Happy Ending-Questions?

