

Leak Detection Inspection

I. Ownership of Tank(s)		II. Location of Tank(s)			
Owner Name (Corporation, Individual, Public Agency or other entity): _____ Street Address _____ City _____ State _____ Zip Code _____ Area Code _____ Phone Number _____ Contact Person At UST Location _____		Facility Name or Company Site Identifier, <u>if different from left</u> _____ Street Address or State Road, as applicable _____ City (nearest) _____ State _____ Zip Code _____ Area Code _____ Phone Number _____ Number of Tanks at This Location: _____			
III. Tank Information Complete for each tank. If facility has more than 4 tanks, photocopy page and complete information for additional tanks.					
Tank presently in use (circle)	Tank 1	Tank 2	Tank 3	Tank 4	
If not, date last used					
If emptied, verify 1" or less of product in tank					
Month and Year Tank Installed					
Material of Construction					
Capacity of Tank (in gallons)					
Substance Stored					
IV.A. Release Detection For Tanks Check the release detection method(s) used for each tank or N/A if none required.					
Manual Tank Gauging (tanks under 1,000 gal.)					
Manual Tank Gauging and Tank Tightness Testing (tanks under 2,000 gal.)					
Tank Tightness Testing and Inventory Control					
Automatic Tank Gauging					
Vapor, Groundwater or Interstitial Monitoring					
Other approved method					
IV.B. Release Detection For Piping Check the release detection method(s) used for piping.					
Check Pressurized (P) or Suction (S) Piping for each tank					
Automatic Line Leak Detectors, <u>and</u> check one					
Vapor or Groundwater Monitoring					
Secondary Containment with Monitoring					
Line Tightness Testing					

I _____ certify that I have inspected the above facility on _____

Inspector's Signature: _____ Date: _____

V. Financial Assurance

Does the facility have a financial assurance mechanism? Yes___ No___ (provide comments as to compliance status for 40 C.F.R. Part 280 Subpart H.)

VI. Spill/Overfill Prevention

	Tank 1	Tank 2	Tank 3	Tank 4
Are all tank transfers less than 25 gallons?	Yes No	Yes No	Yes No	Yes No
Spill Prevention				
Is there a spill bucket or another device that will prevent release of product to the environment (such as a dry disconnect coupling)?	Yes No	Yes No	Yes No	Yes No
Overfill Prevention				
What device is used to prevent tank from being overfilled?				
Ball float valve	Yes No	Yes No	Yes No	Yes No
Butterfly valve (in fill pipe)	Yes No	Yes No	Yes No	Yes No
Automatic alarm monitoring is used	Yes No	Yes No	Yes No	Yes No
Other alarm system	Yes No	Yes No	Yes No	Yes No

VII. Cathodic Protection

	Tank 1	Tank 2	Tank 3	Tank 4
Sacrificial Anode System				
Test results show a negative voltage of at least 0.85 Volts (using the tank and a copper/copper sulfate cell)?	Yes No	Yes No	Yes No	Yes No
The last two test results are available. (Tests are required every three years.)	Yes No	Yes No	Yes No	Yes No
Impressed Current				
Rectifier is on 24 hours a day?	Yes No	Yes No	Yes No	Yes No
The last two test results are available? (Tests are required every 60 days.)	Yes No	Yes No	Yes No	Yes No
Test results show a negative voltage of at least 0.85 Volts (using the tank and a copper/copper sulfate cell)?	Yes No	Yes No	Yes No	Yes No

Comments: _____

Inspector's Signature: _____ Date: _____

Leak Detection for Piping

Pressurized Piping

A method must be selected from each set. Where applicable indicate date of last test. If this facility has more than 4 tanks, please photocopy this page and complete information for all additional piping.

Set 1	Tank 1	Tank 2	Tank 3	Tank 4
Automatic Flow Restrictor				
Automatic Shut-off Device				
Continuous Alarm System				
and				
Set 2				
Annual Line Tightness Testing				
Interstitial Monitoring				
If Interstitial Monitoring, documentation of monthly monitoring is available				
Ground-Water or Vapor Monitoring				
If Ground-Water or Vapor Monitoring, documentation of monthly monitoring is available				
Other Approved Method (specify in comments section)				

Suction Piping.

Indicate date of most recent test.

Line Tightness Testing (required every 3 years)				
Secondary Containment with Interstitial Monitoring				
Ground-Water or Vapor Monitoring				
Other Approved Method (specify in comments section)				
No Leak Detection Required (must answer yes to all of the following questions)				
Operates at less than atmospheric pressure				
Has only one check valve, which is located directly under pump				
Slope of piping allows product to drain back into tank when suction released				
All above information on suction piping is verifiable				

On the back of this sheet, please sketch the site, noting all piping runs, tanks (including size and substances stored) and location of wells and their distance from tanks and piping.

Comments: _____

Inspector's Signature: _____ Date: _____

Vapor Monitoring

Name of monitoring device: _____

Date system installed _____ Number of monitoring wells _____

Distance of monitoring well(s) from tank(s) (1) _____ (2) _____ (3) _____
(4) _____

Site assessment was conducted by: _____

Location of site assessment documentation: _____

Please indicate yes or no for each tank Please complete all information for each tank. If facility has more than 4 tanks, please photocopy this page and complete the information for additional tanks.

	Tank 1	Tank 2	Tank 3	Tank 4
Well is clearly marked and secured.				
Well caps are tight.				
Well is constructed so that monitoring device is not rendered inoperative by moisture or other interferences.				
Well is free of debris or has other indications that it has been recently checked.				

Please answer yes or no for each question

UST excavation zone was assessed prior to vapor monitoring system installation.	Yes	No	
One or more USTs is/are included in system.	Yes	No	

If the system is automatic, check the following:

Power box is accessible and power light is on.	Yes	No	
Documentation of monthly readings is available for last 12 months.	Yes	No	
Equipment used to take readings is accessible and functional.	Yes	No	
Vapor monitoring equipment has been calibrated within the last year.	Yes	No	

If the system is manual, check the following:

Documentation of monthly readings is available for last 12 months.	Yes	No	
Equipment used to take readings is accessible and functional.	Yes	No	
Vapor monitoring equipment has been calibrated within the last year.	Yes	No	
Porous material was used for backfill.	Yes	No	
Wells are placed within the excavation zone.	Yes	No	
Level of background contamination is known. If so -- what is level? _____	Yes	No	

On the back of this sheet, please sketch the site, noting all piping runs, tanks (including size and substances stored) and location of wells and their distance from tanks and piping.

Comments: _____

Inspector's Signature: _____ Date: _____

Manual Tank Gauging

Manual tank gauging may be used as the sole method of leak detection only for tanks of 1,000 gal. or fewer or in combination with tank tightness testing for tanks of up to 2,000 gal.

Please indicate the number of the tank or tanks for which manual tank gauging is used as the main leak detection method (e.g., tanks 1 & 4): _____

Please answer yes or no for each question

Records show liquid level measurements are taken at beginning and end of period of at least ([Circle one] 36, 44, 58) hours during which no liquid is added to or removed from the tank.

Yes

No

Level measurements are based on average of two consecutive stick readings at both beginning and end of period.

Yes

No

Monthly average of variation between beginning and end measurements is less than standard shown below for corresponding size and dimensions of tank and waiting time.

Yes

No

Gauge stick is long enough to reach bottom of the tank. Ends of gauge stick are flat and not worn down.

Yes

No

Gauge stick is marked legibly and product level can be determined to the nearest one-eighth of an inch.

Yes

No

MTG is used as sole method of leak detection for tank.

Yes

No

MTG is used in conjunction with tank tightness testing.

Yes

No

Are all tanks for which MTG is used under 2,000 gallons in capacity?

Yes

No

Are monitoring records available for the last 12 month period?

Yes

No

Check One:	Nominal Tank Capacity (in gallons)	Tank Dimensions	Monthly Standard (in gallons)	Minimum Test Duration
()	550	N/A	5	36 hours
()	551 - 1,000	N/A	7	36 hours
()	1,000	64" diameter x 73" length	4	44 hours
()	1,000	48" diameter x 128" length	6	58 hours
()	1,001 - 2,000*	N/A	13	36 hours

* Manual tank gauging must be used in combination with tank tightness testing for tanks over 1,000 gal. and less than 2,000 gal.

Comments: _____

Inspector's Signature: _____ Date: _____

Ground Water Monitoring

Date System Installed: _____

Distance of well from tank(s) (1) _____ (2) _____ (3) _____ (4) _____

Distance of well from piping (1) _____ (2) _____ (3) _____ (4) _____

Site assessment was conducted by: _____

Location of site assessment documentation: _____

Please answer each question of each well

If there are more than 4 wells, please photocopy this page and complete the information for all additional wells.

	Well 1	Well 2	Well 3	Well 4
Well is clearly marked and secured to avoid unauthorized access or tampering.				
Well was opened and presence of water was observed in well at depth of _____ ft.				

Please answer yes or no for each question

Wells are used to monitor piping.	Yes	No
Site assessment was performed prior to installation of wells.	Yes	No
Documentation of monthly readings is available.	Yes	No
Specific gravity of product is less than one.	Yes	No
Hydraulic conductivity of soil between UST system and monitoring wells is not less than 0.01 cm/sec. According to: _____	Yes	No
Groundwater is not more than 20 feet from ground surface.	Yes	No
Wells are sealed from the ground surface to top of filter pack.	Yes	No
Continuous monitoring device or manual bailing method used can detect the presence of at least one-eighth of an inch of the product on top of groundwater in well.	Yes	No
Groundwater is monitored: () Manually on a monthly basis. () Automatically (continuously or monthly basis [Circle one]).		
Check the following if groundwater is monitored <u>manually</u> : Bailer used is accessible and functional.	Yes	No
Check the following if groundwater is monitored <u>automatically</u> : Monitoring box is operational.	Yes	No
Checked for presence of sensor in monitoring well.	Yes	No

On the back of this sheet, please sketch the site, noting all piping runs, tanks (including size and substances stored) and location of wells and their distance from tanks and piping.

Comments: _____

Inspector's Signature: _____ Date: _____

Inventory Control & Tank Tightness Testing

Method of tank tightness testing: _____

Name and address of tank tightness tester: _____

Please complete all information for each tank

If this facility has more than 4 tanks make extra copies of this page.

	Tank 1	Tank 2	Tank 3	Tank 4
Date of last tank tightness test.				
Did tank pass test? Indicate yes or no. If no, specify in comments section below the status of the tank or what actions have been taken (e.g., has state been notified?)				
Documentation of deliveries and sales balances with daily measurements of liquid volume in tank are maintained and available.				
Overages or shortages are less than 1% + 130 gals of tank's flow through volume.				
If no, which months were not?				

Please answer yes or no for each question

Owner/operator can explain inventory control methods and figures used and recorded.	Yes	No
Records include monthly water monitoring.	Yes	No
Tank inventory reconciled before and after fuel delivery.	Yes	No
Books are reconciled monthly.	Yes	No
Appropriate calibration chart is used for calculating volume.	Yes	No
Dispenser pumps are calibrated to within 6 cubic inches per five gallons.	Yes	No
The drop tube in the fill pipe extends to within one foot of tank bottom.	Yes	No
Owner can demonstrate consistency in dipsticking techniques.	Yes	No
The dipstick is long enough to reach the bottom of the tank.	Yes	No
The ends of the gauge stick are flat and not worn down.	Yes	No
The dipstick is marked legibly and product level can be determined to the nearest 1/8 inch.	Yes	No
The tank has been tested within one year and has passed the tightness test (if necessary).	Yes	No
A third party certification of the tank tightness test method is available.	Yes	No
Tank tester complied with all certification requirements.	Yes	No
Monitoring and testing are maintained and available for the past 12 months.	Yes	No

Comments: _____

Inspector's Signature: _____ Date: _____

Interstitial Monitoring

Manufacturer and name of system:

Date system installed:

Materials used for secondary barrier:

Materials used for internal lining:

Interstitial space is monitored (Circle one): automatically, continuously, monthly basis.

Please answer yes or no for each question

All tanks in system are fitted with secondary containment and interstitial monitoring.	Yes	No	N/A
System is designed to detect release from any portion of UST system that routinely contains product.	Yes	No	N/A
Monitoring method is documented as capable of detecting a leak as small as .1 gal./hr. with at least a 95% probability of detection and a probability of false alarm of no more than 5%.	Yes	No	N/A
Documentation of monthly readings is available for last 12 months.	Yes	No	N/A
Maintenance and calibration documents and records are available and indicate appropriate maintenance procedures for system have been implemented.	Yes	No	N/A
Monitoring box, if present, is operational.	Yes	No	N/A
If monitoring wells are part of leak detection system, monitoring wells are clearly marked and secured to avoid unauthorized access and tampering.	Yes	No	N/A
Interstitial space is monitored manually on monthly basis (answer the following question).	Yes	No	N/A
Equipment used to take readings is accessible and functional.	Yes	No	N/A
Tank is double-walled	Yes	No	N/A
Tank is fitted with internal bladder to achieve secondary containment (answer the following question).	Yes	No	N/A
Bladder is compatible with substance stored and will not deteriorate in the presence of that substance.	Yes	No	N/A
Excavation is lined with impervious artificial material to achieve secondary containment (answer the following questions).	Yes	No	N/A
Secondary barrier is always above groundwater.	Yes	No	N/A
If secondary barrier is not always above groundwater, secondary barrier and monitoring designs are for use under such conditions.	Yes	No	N/A
Secondary barrier is constructed from artificially constructed material, with permeability to substance < 10 ⁶ cm/sec.	Yes	No	N/A
Secondary barrier is compatible with the regulated substances stored and will not deteriorate in presence of that substance.	Yes	No	N/A
Secondary barrier does not interfere with operation of cathodic protection system.	Yes	No	N/A

Comments: _____

Inspector's Signature: _____ Date: _____

Automatic Tank Gauging

Manufacturer, name and model number of system: _____

Please answer yes or no for each question

Device documentation is available at site (e.g., manufacturer's brochures, owner's manual).	Yes	No
Device can measure height of product to nearest one-eighth of an inch.	Yes	No
Documentation shows that water in bottom of tank is checked monthly to nearest one-eighth of an inch.	Yes	No
Documentation is available that the ATG was in test mode a minimum of once a month.	Yes	No
Checked for presence of gauge in tanks.	Yes	No
Checked for presence of monitoring box and evidence that device is working (i.e., device is equipped with roll of paper for results documentation).	Yes	No
Owner/operator has documentation on file verifying method meets minimum performance standards of .20 gph with probability of detection of 95% and probability of false alarm of 5% for automatic tank gauging (e.g., results sheets under EPA's "Standard Test Procedures for Evaluating Leak Detection Methods")	Yes	No
Checked documentation that system was installed, calibrated, and maintained according to manufacturer's instructions.	Yes	No
Maintenance records are available upon request.	Yes	No
Monthly testing records are available for the past 12 months.	Yes	No
Daily monitoring records are available for the past 12 months (if applicable).	Yes	No

Comments: _____

Inspector's Signature: _____ Date: _____

Statistical Inventory Reconciliation

Please complete all information for each tank

If this facility has more than 4 tanks, please photocopy this page and complete the information for all additional tanks.

Documentation of deliveries and sales balances with daily measurements of liquid volume in tank are maintained and available.

Please answer yes or no for each question

Records include monthly water monitoring.

Yes

No

Tank inventory reconciled before and after fuel delivery.

Yes

No

Appropriate calibration chart is used for calculating volume.

Yes

No

Dispenser pumps are calibrated to within 6 cubic inches per five gallons.

Yes

No

The drop tube in the fill pipe extends to within one foot of tank bottom.

Yes

No

Answer one of the following three:

1) Owner can demonstrate consistency in dipsticking techniques.

Yes

No

a) The dipstick is long enough to reach the bottom of the tank.

Yes

No

b) The end of the gauge stick is flat and not worn down.

Yes

No

c) The dipstick is legible & the product level can be determined to the nearest 1/8th inch.

Yes

No

OR

2) Automatic tank gauge is used for readings.

Yes

No

OR

3) Other method is used for readings (explain in comment section below).

Yes

No

A third-party certification of the SIR method is available.

Yes

No

Monitoring and testing records are maintained and available for the past 12 months.

Yes

No

Comments: _____

Inspector's Signature: _____

Date: _____

Permanent Tank Closure

Facility/Tank Information

Facility Name: _____

Street Address: _____

City: _____ State: _____ Zip Code: _____

Name of Contact: _____

Current Owner of Facility: _____

Tank Closure Questions (§280.71 - §280.74)

Number of Tanks Closed: ____ Description of Tanks: _____

Date of Closure: _____ Owner at Closure: _____

Method of Closure (Circle one) Filled with Inert Material Removal Other

If Other, Describe: _____

Was State and/or EPA Notified of Tank(s) Closure? Yes No

Does the facility have a tank closure report?
(if yes, inspector should review for details) Yes No

Was Tank(s) Emptied and Cleaned Before Closure? Yes No

If yes, describe method: _____

Was Tank Tightness Test Performed Before Closure? Yes No
If yes, are records available? Yes No
If yes, did tank pass or fail test? _____

Was a Site Assessment performed? (Note: internal LD method, site assessment needed; external LD method with no releases indicated for at least one year, no site assessment needed) Yes No

Did O/O measure for the presence of a release where contamination is most likely to exist before closure? Yes No

If yes, do the data indicate contaminated soils and/or groundwater (obtain copy of the data)? Yes No

If yes: (1) Was the tank closed because it was leaking? Yes No

If yes, what is the LUST number _____

(2) Describe extent and magnitude of contamination _____

(3) Does it appear, based on analytical data, that all contamination was effectively removed? Yes No

Does the facility maintain all records that are capable of demonstrating compliance with closure requirements for at least 3 years after completion of permanent closure? Yes No

Comments: _____

Inspector's Signature: _____ Date: _____
