



CONTRACTOR'S SELF-INSPECTION CHECKLIST for UST

INSTALLATION ◊ REPLACEMENT ◊ UPGRADE ◊ RETROFIT ◊ REPAIR

As part of our inter-local contract with the Nevada Division of Environmental Protection, SNHD - Environmental Health UST Program requires this document be signed by Nevada Certified UST Handler and be submitted to us during our final inspection for compliance with U.S. EPA Federal Code 40 CFR §280 - TECHNICAL STANDARDS AND CORRECTIVE ACTION FOR OWNERS AND OPERATORS OF UNDERGROUND STORAGE TANKS (USTs). This checklist does not preclude any testing requirements set up by other regulatory agencies (e.g., Air Quality, Fire Department, etc.), nationally recognized codes (e.g., PEI, API, NACE, etc.) or the component manufacturers (e.g., Veeder-Root, FE Petro, etc.).

Facility Name: \_\_\_\_\_ PH: \_\_\_\_\_

Facility Address: \_\_\_\_\_ (include City, State & Zip)

Owner Name: \_\_\_\_\_ PH: \_\_\_\_\_

Owner Mailing Address: \_\_\_\_\_ (include City, State & Zip)

Contractor Name: \_\_\_\_\_ PH: \_\_\_\_\_

Contractor Mailing Address: \_\_\_\_\_ (include City, State & Zip)

UST Handler Name: \_\_\_\_\_ PH: \_\_\_\_\_

UST Handler Address: \_\_\_\_\_ (include City, State & Zip)

Tank Tester Name: \_\_\_\_\_ PH: \_\_\_\_\_

Certification Number: \_\_\_\_\_ Expiration Date: \_\_\_\_\_

Tank Tester Address \_\_\_\_\_ (include City, State & Zip)

PLEASE CHECK THE FOLLOWING THAT APPLY:

New UST Installation \_\_\_\_\_ Number of Tanks \_\_\_\_\_

Tank Replacement \_\_\_\_\_ Number of Tanks \_\_\_\_\_

Piping Replacement

Dispenser Replacement

Leak Containment Sump install @ Dispensers

Leak Containment Sump install @ Turbines

Tank Gauge & Monitor Replacement

UST System Upgrade (for US EPA 1998 requirements for Corrosion, Spill, Overfill, Leak Detection)

Summarize work to be done: \_\_\_\_\_

\_\_\_\_\_

UST Equipment Retrofit

Summarize work to be done: \_\_\_\_\_

\_\_\_\_\_

UST System Repair

Summarize work to be done: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**CERTIFICATION STATEMENT**

*I certify that all work performed on this UST system meets manufacturer's specifications and all devices installed meet federal performance requirements. I further agree to hold the District harmless from all claims, defense and legal cost, judgments for damages, or other relief against the District as a result of acts of omissions, by me or my representatives, in the performance of any activities permitted hereunder, whether the condition giving rise to the claim or judgment was created in whole, or in part, by me or my representative.*

*The foregoing statement is true to the best of my knowledge.*

(		
(	_____	_____
(	(SIGNATURE: UST Handler)	(Certification No./Exp. Date)
(		_____
(		DATE
(	_____	_____
(	(Please Print Name)	(Company Name)

\*\*\*\*\*

**PETROLEUM ENVIRONMENTAL CONTAMINATION STATEMENT**

*I certify that during the construction, upgrade, retro-fit or repair of this UST system that:*  
(Please check the appropriate statement)

- No petroleum environmental contamination was encountered; or
- Petroleum environmental contamination less than the Nevada Reportable Quantities and less than the UST "Soil Action Level" was encountered and effectively remediated; or
- Petroleum environmental contamination above the Nevada Reportable Quantities and/or the UST Action Level," was encountered and appropriately reported to the Nevada Division of Environmental Protection and Southern Nevada Health District - Environmental Health - UST Program. Corrective Action is in progress or completed.

(		
(	_____	_____
(	(SIGNATURE: UST Handler/CEM)	(Nevada Certification No.)
(		_____
(		DATE
(	_____	_____
(	(Please Print Name)	(Expiration Date)

Nevada Division of Environmental Protection (NDEP) Water Pollution Control has regulations (NAC 445A.347 and 40 CFR §302) for reporting spills of certain substances once the quantity has exceeded certain limits. For Petroleum, the "reportable quantity" is greater than 25 gallons or three cubic yards of petroleum contaminated soil. 40 CFR §280 Subpart E - **Release Reporting, Investigation, and Confirmation** requires that spills less than 25 gallons be clean-up within 24 hours or otherwise be reported to the implementing agency. For petroleum spills greater than 25 gallons, the code requires reporting within 24 hours and corrective action in accordance with 40 CFR §280-Subpart F - **Release Response and Corrective Action for UST Systems...** (NAC 459.993 - Compliance with Federal Regulations mandates that UST owners and operators comply with the requirements of 40 CFR §280 Subpart E and F).

The NDEP Underground Storage Tank Regulations (NAC 459.9973) identifies the presence of petroleum in soil in excess of 100 milligrams per kilogram (measured by using laboratory analytical method 8015 modified for petroleum hydrocarbons) as the "soil action level." If the soil exceeds the "soil action level," NDEP may require the UST owner or operator to take corrective action. SNHD does not oversee leaking UST corrective action and defers all decisions for corrective action to NDEP. SNHD does send a letter to inform the UST owner/operator to follow the requirements of 40 CFR §280 Subpart E and F and contact NDEP for further guidance when petroleum contamination in soil has exceeded the "soil action level." If petroleum or petroleum additives are suspected to have contaminated ground water, the UST owner or operator shall install at least one monitoring well (NAC 459.9975).

## NEW UST INSTALLATION CHECKLIST – Page 1

U.S. EPA Form 7530-1, Notification of Underground Storage Tanks, must be submitted to SNHD (759-0603) within 30 days of bringing the UST into use. This form, in turn will be forwarded to the Nevada Division of Environmental Protection - UST Petroleum Claims Office as application for the Nevada Petroleum Fund - Spill/Release Clean-up Reimbursement Insurance. UST owners and operators must comply with the Financial Responsibility requirements of the U.S. EPA UST Code 40 CFR §280 - Subpart H for cleaning up spills and leaks and for compensating third party injury and property damage.

All tanks and piping must be properly installed in accordance with a code of practice developed by a nationally recognized association (e.g., American Petroleum Institute, Petroleum Equipment Institute, etc.); independent laboratory (e.g., Underwriter Laboratories); or the manufacturer's instructions (e.g., XERXES). Please identify Code: \_\_\_\_\_, Laboratory: \_\_\_\_\_, or Manufacturer's Name: \_\_\_\_\_ used for this UST System installation.

*Please complete all of the "NEW UST INSTALLATION CHECKLIST" by circling YES or NO as appropriate.  
Please fill in all "blanks" with the requested information.*

### PEI/RP 100-2000 Recommended Practices for Installation of Underground Liquid Storage Systems

Introduction - Chapter 1	Section reviewed & followed	YES/NO
Material Handling - Chapter 2	Section reviewed & followed	YES/NO
Excavating - Chapter 3	Section reviewed & followed	YES/NO
Backfilling - Chapter 4	Section reviewed & followed	YES/NO
Supports & Anchorage - Chapter 5	Section reviewed & followed	YES/NO
Spill Containment & Overfill Prevention - Chapter 6	Section reviewed & followed	YES/NO
Secondary Containment - Chapter 7	Section reviewed & followed	YES/NO
Release Detection - Chapter 8	Section reviewed & followed	YES/NO
Piping, Valves & Fittings - Chapter 9	Section reviewed & followed	YES/NO
Cathodic Protection Systems - Chapter 10	Section reviewed & followed	YES/NO
Electrical Installation - Chapter 11	Section reviewed & followed	YES/NO
Testing - Chapter 12	Section reviewed & followed	YES/NO
Documentation & Training - Chapter 13	Section reviewed & followed	YES/NO
Float-out & Anchorage Calculation - Appendix A	Section reviewed & followed	YES/NO
Background: Cathodic Protection - Appendix B	Section reviewed & followed	YES/NO

### SAFETY

Site Safety Plan available	YES/NO	Site personnel reviewed plan	YES/NO
Potential Hazards Identified	YES/NO	Potential Hazards Abated	YES/NO
Personal Protective Equipment Available	YES/NO	Fire Extinguishers available	YES/NO
Spill Kit available	YES/NO	Absorbent material available	YES/NO
Combustible gas meter available	YES/NO	Oxygen deficiency meter available	YES/NO
Personnel OSHA trained	YES/NO		

### TANKS(U.S. EPA Code Corrosion Control requirements)

Tank Manufacturer: \_\_\_\_\_

Number of tanks being installed: \_\_\_\_\_

Single walled YES/NO Tank # _____	Identify all tanks that are manifolded together
Tank #1 _____ gallons _____ product	Double walled YES/NO Tank # _____
Tank #3 _____ gallons _____ product	Tank#2 _____ gallons _____ product
Tank #5 _____ gallons _____ product	Tank#4 _____ gallons _____ product
Tank #7 _____ gallons _____ product	Tank#6 _____ gallons _____ product
	Tank#8 _____ gallons _____ product

### Corrosion Protection (check all that apply):

_____ Tanks made of a non-corrosive material (e.g., fiberglass)	Tank # _____
_____ Steel tank coated with (or enclosed in) non-corrosive material (e.g., epoxy)	_____
_____ Steel tanks coated with non-corrosive material & has cathodic protection (e.g., STI/P3)	_____
_____ Un-coated steel tanks with cathodic protection (e.g., impressed current)	_____
_____ Un-coated steel tanks with interior lined with non-corrosive material	_____
_____ Un-coated steel tanks with interior lining & cathodic protection	_____

# NEW UST INSTALLATION CHECKLIST - Page 2

## PIPING(U.S. EPA Code Corrosion Control requirements)

Piping Manufacturer: \_\_\_\_\_

Single walled **YES/NO** Tank # \_\_\_\_\_ Double walled **YES/NO** Tank # \_\_\_\_\_  
 Pressurized **YES/NO** Tank # \_\_\_\_\_ Suction **YES/NO** Tank # \_\_\_\_\_

Corrosion Protection (Check all that apply)

- Piping made of non-corrosive material \_\_\_\_\_
- Un-coated metal piping & flex lines not in direct contact with soil \_\_\_\_\_
- Booting for un-coated metal piping & flex lines (taping is unacceptable) \_\_\_\_\_
- Impressed Current Cathodic Protection for un-coated metal piping \_\_\_\_\_
- Galvanic (sacrificial anode) protection for un-coated metal piping \_\_\_\_\_

If Impressed Current or galvanic corrosion systems are used, the following is required:

1. Diagram of system with equipment list (e.g., rectifier, anodes, packing, wiring, test stations, etc.)
2. Corrosion survey/site assessment results
3. Name of nationally recognized code or independent laboratory used for design
4. Name of designer (corrosion expert), credentials, company, address & phone
5. Name of system tester, credentials, company, address & phone

If interior lining is provided, the following is required:

1. Name of nationally recognized code or independent laboratory used for design
2. Name of designer (coatings expert), credentials, company, address & phone
3. Interior inspection/survey results

## TANK LEAK DETECTION SYSTEM

- Automatic Tank Gauge Manufacturer \_\_\_\_\_  
 (Circle leak check method) **0.2 gph** **CSLD** **Annular** **SIR** **Inv Ctr** **Manual Gauging**  
 Monitor accessible & protected from damage **YES/NO** Printer OK **YES/NO**  
 Manifolder Tank **YES/NO** Tank capacity < 15,000 gal **YES/NO**
- Double-walled tank monitoring (a.k.a. interstitial or annular)  
 Sensors properly installed **YES/NO** Portal is leak tight **YES/NO**  
 Sensor Type \_\_\_\_\_ Manufacturer: \_\_\_\_\_  
 Sensor is compatible with Tank Monitor **YES/NO** Audible & Visual Alarm **YES/NO**  
 Monitor is accessible & protected form damage **YES/NO** Alarm in close proximity **YES/NO**
- Groundwater or Soil Vapor monitoring installed **YES/NO** Manufacturer: \_\_\_\_\_  
 Site assessment conducted **YES/NO** 40 CFR §280.43(e)&(f) criteria met **YES/NO**

## PIPING LEAK DETECTION

- Product piping runs less than 75 ft. **YES/NO** Proper Slope **YES/NO**  
 Large elevation changes (e.g. Marinas, Building, etc) **YES/NO** Solenoids **YES/NO**  
 Major topographical changes **YES/NO**
- Single wall piping  
 Tightness Test conducted **YES/NO** Nevada Certified Tank Tester used **YES/NO**  
 Pressurized piping **YES/NO** Line Leak Detector **YES/NO** **Mechanical** or **Electric**  
 Electric LLD **Vapor** or **Pressure** Auto Shut-off @ 3gph **YES/NO**  
 Test results @ monitor available **YES/NO** (Circle tests conducted) **0.1gph** **0.2gph** **3gph**  
 Suction piping **YES/NO** Proper Slope **YES/N** Check Valve @Disp **YES/NO**  
 All metal components corrosion resistant or adequately protected **YES/NO**  
 Was Cathodic Protection system used **YES/NO** Operational survey report rec'd **YES/NO**  
 Class I (Ignitable Gases & Vapors) National Electrical Code requirements followed **YES/NO**

Electrician's Name: \_\_\_\_\_ Credentials: \_\_\_\_\_

Company: \_\_\_\_\_ PH: \_\_\_\_\_

Address: \_\_\_\_\_

# NEW UST INSTALLATION CHECKLIST - Page 3

## PIPING LEAK DETECTION (continued)

Double-walled piping

Continuously leak monitored	<b>YES/NO</b>	Initial & Annual tightness test required	<b>YES/NO</b>
Tightness Test conducted	<b>YES/NO</b>	Nevada Certified Tank Tester used	<b>YES/NO</b>
Leak Containment @ Turbine	<b>YES/NO</b>	Leak tested sump	<b>YES/NO</b> Method: _____
Sumps are protected from outside rain or wash water	<b>YES/NO</b>	Water Tight Riser Lid	<b>YES/NO</b>
Water tight sump cover (@ surface)	<b>YES/NO</b>		
Leak Containment @ Dispenser	<b>YES/NO</b>	Leak Tested Sump	<b>YES/NO</b> Method: _____
Sumps are protected from outside rain or wash water	<b>YES/NO</b>	Curbs or dikes provided	<b>YES/NO</b>
Leak Sensor @ Turbine Sump	<b>YES/NO</b>	Leak Sensor @ Disp. Sump	<b>YES/NO</b>
Leak Sensor Type: _____		Manufacturer: _____	
Sensor Tested	<b>YES/NO</b>	Audible & Visual Alarm	<b>YES/NO</b>
Piping slopes to turbine sump	<b>YES/NO</b>	Piping drains to turbine leak sensor	<b>YES/NO</b>
Pressurized Piping	<b>YES/NO</b>		
Line leak detector	<b>YES/NO</b>	<b>Electric or Mechanical</b> (mechanical receives annual test)	
Electric LLD <b>Vapor or Pressure</b>		Auto Shut-off @ 3gph	<b>YES/NO</b>
Test results @ monitor available	<b>YES/NO</b>	Circle tests conducted	<b>0.1gph 0.2gph 3gph</b>
Suction piping	<b>YES/NO</b>	Proper Slope	<b>YES/NO</b> Check Valve @Disp <b>YES/NO</b>
All components corrosion resistant or adequately protected			
Was Cathodic Protection system used	<b>YES/NO</b>	Operational survey report received	<b>YES/NO</b>
Class I (Ignitable Gases & Vapors) National Electrical Code requirements followed			

Electrician's Name: \_\_\_\_\_ Credentials: \_\_\_\_\_

Company: \_\_\_\_\_ PH: \_\_\_\_\_

Address: \_\_\_\_\_

## FILL TUBE SPILL CATCHMENT BASIN (SPILL BUCKET) - Installed into riser sump from tank **YES/NO**

Fill Tube Catchment Basin capacity \_\_\_\_\_ gallons Manufacturer: \_\_\_\_\_

Leak tested basin **YES/NO** Method: \_\_\_\_\_

Sumps are protected from outside rain or wash water	<b>YES/NO</b>	Water Tight Lid	<b>YES/NO</b>
Raised concrete, curbing or diking	<b>YES/NO</b>	Basin sealed to grade	<b>YES/NO</b> Flexible assembly <b>YES/NO</b>
Drain or Pump Installed	<b>YES/NO</b>	Operational	<b>YES/NO</b> Overfill will not contaminate soil <b>YES/NO</b>
Labeled to alert fuel delivery of overfill device	<b>YES/NO</b>	Fill tube locked	<b>YES/NO</b>

## OVERFILL PREVENTION DEVICE (ref. 40 CFR §280.20(c)) *Check all that are installed & operational*

Auto Shut Off Device **YES/NO** Type (e.g., flapper): \_\_\_\_\_

Manufacturer: \_\_\_\_\_ Manufacturer's instructions followed **YES/NO**

Appropriate chart used for distance below tank top **YES/NO** @ \_\_\_\_\_ inches Tank Diameter \_\_\_\_\_ inches

Gravity fill **YES/NO** Float operates properly **YES/NO** No obstructions in fill tube **YES/NO**

Operationally tested **YES/NO** Shuts off @95% capacity **YES/NO**

Signs or labels posted to notify delivery person **YES/NO** Air tight fill connection **YES/NO**

Ball Float with vapor recovery system **YES/NO** Extractable for maintenance **YES/NO**

Manufacturer: \_\_\_\_\_ Manufacturer's instructions followed **YES/NO**

Appropriate chart used for distance below tank top **YES/NO** @ \_\_\_\_\_ inches Tank Diameter \_\_\_\_\_ inches

Operationally tested **YES/NO** Air escapes from other opening of tank(e.g. tank gauge) **YES/NO**

Ball cage intact **YES/NO** Ball moves freely **YES/NO**

Ball seals tightly to air opening **YES/NO** Air hole open **YES/NO**

Restricts flow @ 90% capacity **YES/NO** or Restricts flow 30 minutes before overfill **YES/NO**

Suction Piping (or other air eliminators installed) **YES/NO** Pressurized Delivery **YES/NO**

Coaxial Stage 1 Vapor Recovery **YES/NO** Remote fill **YES/NO** Gauge openings **YES/NO**

Emergency Power Generator UST **YES/NO** Air tight fill connection **YES/NO**

Signs or labels posted to notify delivery person of the type of overfill device

Overfill Alarm Manufacturer \_\_\_\_\_ Manufacturer's instructions followed **YES/NO**

Operationally tested **YES/NO**

Alerts at 90% capacity **YES/NO** or 1 minute before overfill **YES/NO**

Alarm can be heard and seen by delivery person **YES/NO** "Tank Overfill Alarm" sign posted **YES/NO**

Fill tube labeled to notify delivery person of the type of overfill device **YES/NO**

**NEW UST INSTALLATION CHECKLIST - Page 4**

**BOOTING** installed on flex lines Manufacturer: \_\_\_\_\_  
 @ turbines **YES/NO** off turbine sump **YES/NO** @dispensers **YES/NO**  
 under dispenser pans **YES/NO** water tight **YES/NO** clamped/sealed @ both ends **YES/NO**

**CATHODIC PROTECTION - (ref. 40 CFR §280.20 ,.21 & .30)**

**Sacrificial (galvanic) anodes** On Tanks **YES/NO** On Piping **YES/NO**  
 Anode Manufacturer: \_\_\_\_\_  
 Material \_\_\_\_\_ Size \_\_\_\_\_ lbs. Est. life \_\_\_\_\_ yrs.  
 No. of Anodes \_\_\_\_\_ Packaging Removed **YES/NO** Anodes Wetted **YES/NO**  
 Adequate accessory materials (e.g. wire) **YES/NO** Wire gauge \_\_\_\_\_  
 Adequate electrical welds or connections **YES/NO** Type of weld or connector \_\_\_\_\_  
 Adequate installation **YES/NO** Test Stations installed **YES/NO**  
 Materials protected are electrically isolated from pump, vent, fill, conduit, etc. **YES/NO**  
 As-built diagram provided **YES/NO** Nat'l Code followed or Third Party Eval **YES/NO**  
 Identify Design Code or Third Party \_\_\_\_\_  
 Designer: \_\_\_\_\_ Credentials: \_\_\_\_\_  
 Initial Operational Survey Conducted **YES/NO** Nat'l Code Test followed \_\_\_\_\_  
 Qualified Tester Name: \_\_\_\_\_ Credentials: \_\_\_\_\_  
 Operational Survey Report provided **YES/NO** Laboratory or Code Criteria Met **YES/NO**

**Impressed Current** For Tanks **YES/NO** For piping **YES/NO** Both tank & piping **YES/NO**  
 Rectifier Manufacturer: \_\_\_\_\_ Accessible & Protected **YES/NO**  
 Amp/Volt Meter on Rectifier **YES/NO** Amp/Volt Meter readings satisfactory **YES/NO**  
 Anode Manufacturer: \_\_\_\_\_ Material \_\_\_\_\_  
 Anode Packing Material \_\_\_\_\_ Depth of Anode \_\_\_\_\_ ft. No. of Anodes Installed \_\_\_\_\_  
 As-built diagram provided **YES/NO** Nat'l Code followed or Third Party Eval **YES/NO**  
 Identify Design Code or Third Party \_\_\_\_\_  
 Designer: \_\_\_\_\_ Credentials: \_\_\_\_\_  
 Initial Operational Survey Conducted **YES/NO** Laboratory or Nat'l Code Test followed \_\_\_\_\_  
 Qualified Tester: \_\_\_\_\_ Credentials: \_\_\_\_\_  
 Operational survey report provided **YES/NO** Laboratory or Code Criteria Met **YES/NO**

**TANK LINING (ref. 40 CFR §280.21)**

No. of Tanks Lined \_\_\_\_\_ Contents \_\_\_\_\_  
 Rec'd Design Specifications **YES/NO** Lining Material \_\_\_\_\_  
 Designer: \_\_\_\_\_ Credentials: \_\_\_\_\_  
 Lining material compatible with gasoline **YES/NO** compatible w/ additives **YES/NO**  
 Internal coating inspected **YES/NO** Inspection Report Rec'd **YES/NO**  
 Inspection Criteria Used \_\_\_\_\_ Passed Criteria **YES/NO**  
 Coating Inspector: \_\_\_\_\_ Credentials: \_\_\_\_\_

**TANK REPAIRS (ref. 40 CFR §280.33)**

Tank repaired **YES/NO** Tank Manufacturer: \_\_\_\_\_  
 Tank # \_\_\_\_\_ Material \_\_\_\_\_ Size \_\_\_\_\_ gal. Contents \_\_\_\_\_  
 Tank # \_\_\_\_\_ Material \_\_\_\_\_ Size \_\_\_\_\_ gal. Contents \_\_\_\_\_  
 Tank # \_\_\_\_\_ Material \_\_\_\_\_ Size \_\_\_\_\_ gal. Contents \_\_\_\_\_  
 Tightness Test Required **YES/NO** Conducted **YES/NO** Report Received  
 Monthly Tank Monitoring Method \_\_\_\_\_  
 Internal Inspection Required **YES/NO** Conducted **YES/NO** Report Received  
 Inspector: \_\_\_\_\_ Credentials: \_\_\_\_\_

*Repairs conducted in accordance with:*

1. Nationally Recognized Code **YES/NO** Code Name: \_\_\_\_\_
2. Independent Testing Laboratory **YES/NO** Name: \_\_\_\_\_  
 Address \_\_\_\_\_  
 Contact: \_\_\_\_\_ PH: \_\_\_\_\_
3. Manufacturer's Representative **YES/NO**  
 Name: \_\_\_\_\_  
 Address: \_\_\_\_\_ PH: \_\_\_\_\_

**EXISTING UST SYSTEM UPGRADE, RETROFIT, REPAIR, or REPLACEMENT - Page 1**

U.S. EPA Form 7530-1, Notification of Underground Storage Tanks (UST), must be submitted to SNHD (759-0603) whenever construction, retrofit, replacement (or address; or ownership), etc. effects a change in the original data maintained by the Nevada Division of Environmental Protection (NDEP) - Petroleum Claims office. UST owners and operators must comply with the Financial Responsibility requirements of the U.S. EPA Code 40 CFR §280 - Subpart H for cleaning up spills and leaks and for compensating third party injury and damage.

All tanks and piping must be properly installed in accordance with a code of practice developed by a nationally recognized association (e.g., American Petroleum Institute, Petroleum Equipment Institute, etc.); independent laboratory (e.g., Underwriter Laboratories); or the manufacturer's instructions (e.g., XERXES). Please identify Code: \_\_\_\_\_, Laboratory: \_\_\_\_\_, or Manufacturer's Name: \_\_\_\_\_ used for this UST construction project.

**PEI/RP 100-2000 Recommended Practices for Installation of Underground Liquid Storage System**

Check appropriate PEI/RP sections used for this UST construction project and circle YES for verification:

<input type="checkbox"/> Introduction - Chapter 1	Section reviewed & followed	YES/NO
<input type="checkbox"/> Material Handling - Chapter 2	Section reviewed & followed	YES/NO
<input type="checkbox"/> Excavating - Chapter 3	Section reviewed & followed	YES/NO
<input type="checkbox"/> Backfilling - Chapter 4	Section reviewed & followed	YES/NO
<input type="checkbox"/> Supports & Anchorage - Chapter 5	Section reviewed & followed	YES/NO
<input type="checkbox"/> Spill Containment & Overfill Prevention - Chapter 6	Section reviewed & followed	YES/NO
<input type="checkbox"/> Secondary Containment - Chapter 7	Section reviewed & followed	YES/NO
<input type="checkbox"/> Release Detection - Chapter 8	Section reviewed & followed	YES/NO
<input type="checkbox"/> Piping, Valves & Fittings - Chapter 9	Section reviewed & followed	YES/NO
<input type="checkbox"/> Cathodic Protection Systems - Chapter 10	Section reviewed & followed	YES/NO
<input type="checkbox"/> Electrical Installation - Chapter 11	Section reviewed & followed	YES/NO
<input type="checkbox"/> Testing - Chapter 12	Section reviewed & followed	YES/NO
<input type="checkbox"/> Documentation & Training - Chapter 13	Section reviewed & followed	YES/NO
<input type="checkbox"/> Float-out & Anchorage Calculation - Appendix A	Section reviewed & followed	YES/NO
<input type="checkbox"/> Background: Cathodic Protection - Appendix B	Section reviewed & followed	YES/NO

Please complete applicable checklist(s) by circling YES or NO as appropriate and provide information as requested.

<input type="checkbox"/> <b>SAFETY</b>			
Site Safety Plan available	YES/NO	Site personnel reviewed plan	YES/NO
Potential Hazards Identified			YES/NO
Personal Protective Equipment Available	YES/NO	Fire Extinguishers available	YES/NO
Spill Kit available	YES/NO	Absorbent material available	YES/NO
Combustible gas meter available			YES/NO
Oxygen deficiency meter available			
Personnel OSHA trained	YES/NO		

<input type="checkbox"/> <b>TANK REPAIRS</b> (ref. 40 CFR §280.33)					
Tank Manufacturer: _____					
Tank # _____	Material _____	Size _____	gal.	Contents _____	
Tank # _____	Material _____	Size _____	gal.	Contents _____	
Tank # _____	Material _____	Size _____	gal.	Contents _____	
Tightness Test Required	YES/NO	Conducted	YES/NO	Report Received	YES/NO
Monthly Tank Monitoring Method	_____				
Internal Inspection Required	YES/NO	Conducted	YES/NO	Report Received	YES/NO
Inspector: _____	Credentials: _____				

Repairs conducted in accordance with:

1. Nationally Recognized Code YES/NO Code Name: \_\_\_\_\_
2. Independent Testing Laboratory YES/NO Name: \_\_\_\_\_  
Address \_\_\_\_\_  
Contact: \_\_\_\_\_ PH: \_\_\_\_\_
3. Manufacturer's Representative YES/NO Name: \_\_\_\_\_  
Address \_\_\_\_\_ PH: \_\_\_\_\_

**EXISTING UST SYSTEM UPGRADE, RETROFIT, REPAIR, or REPLACEMENT - Page 2**

**TANK LINING** (ref. 40 CFR §280.21)

**Tank Manufacturer:**

Tank # \_\_\_\_\_ Material \_\_\_\_\_ Size \_\_\_\_\_ gal. Contents \_\_\_\_\_  
 Tank # \_\_\_\_\_ Material \_\_\_\_\_ Size \_\_\_\_\_ gal. Contents \_\_\_\_\_  
 Tank # \_\_\_\_\_ Material \_\_\_\_\_ Size \_\_\_\_\_ gal. Contents \_\_\_\_\_  
 Tank internally pre-inspected **YES/NO** Pre-inspection Report Received **YES/NO**  
 Received Design Specifications **YES/NO** Lining Material \_\_\_\_\_  
 Designer: \_\_\_\_\_ Credentials: \_\_\_\_\_  
 Lining material compatible w/ gasoline **YES/NO** w/ additives **YES/NO**  
 Internal coating inspected **YES/NO** Inspection Report Received **YES/NO**  
 Inspection Criteria Used \_\_\_\_\_ Passed Criteria **YES/NO**  
 Coating Inspector: \_\_\_\_\_ Credentials: \_\_\_\_\_

**CATHODIC PROTECTION - (ref. 40 CFR §280.20 ,.21 & .30)**

**Sacrificial (galvanic) anodes** On Tanks **YES/NO** On Piping **YES/NO** Both tanks and piping **YES/NO**

Anode Manufacturer: \_\_\_\_\_  
 Material \_\_\_\_\_ Size \_\_\_\_\_ lbs. Est. life \_\_\_\_\_ yrs.  
 No. of Anodes \_\_\_\_\_ Packaging Removed **YES/NO** Anodes Wetted **YES/NO**  
 Adequate accessory materials (e.g. wire) **YES/NO** Wire gauge \_\_\_\_\_  
 Adequate electrical welds or connections **YES/NO** Type of weld or connector \_\_\_\_\_  
 Adequate installation **YES/NO** Test Stations installed **YES/NO**  
 Materials protected are electrically isolated from pump, vent, fill, conduit, etc.  
 As-built diagram provided **YES/NO** Nat'l Code followed or Third Party Eval **YES/NO**  
 Identify Design Code or Third Party \_\_\_\_\_

Designer: \_\_\_\_\_ Credentials: \_\_\_\_\_  
 Initial Operational Survey Conducted **YES/NO** Nat'l Code Test followed \_\_\_\_\_  
 Qualified Tester: \_\_\_\_\_ Credentials: \_\_\_\_\_  
 Operational Survey Report provided **YES/NO** Laboratory or Code Criteria Met **YES/NO**

**Impressed Current** For Tanks **YES/NO** For piping **YES/NO** Both tank & piping **YES/NO**

Tank Assessment Required **YES/NO** Received **YES/NO** Passed laboratory or code criteria **YES/NO**  
 Laboratory or code criteria used for assessment \_\_\_\_\_

Tank Inspector: \_\_\_\_\_ Credentials: \_\_\_\_\_  
 Rectifier Manufacturer: \_\_\_\_\_ Accessible & Protected **YES/NO**  
 Amp/Volt Meter on Rectifier **YES/NO** Amp/Volt Meter readings satisfactory **YES/NO**  
 Anode Manufacturer: \_\_\_\_\_ Material \_\_\_\_\_  
 Anode Packing Material \_\_\_\_\_ Depth of Anode \_\_\_\_\_ ft. No. of Anodes Installed \_\_\_\_\_  
 As-built diagram provided **YES/NO**  
 Identify Design Code or Third Party \_\_\_\_\_

Designer: \_\_\_\_\_ Credentials: \_\_\_\_\_  
 Initial Operational Survey Conducted **YES/NO** Laboratory or Nat'l Code Test followed \_\_\_\_\_  
 Qualified Tester: \_\_\_\_\_ Credentials: \_\_\_\_\_  
 Operational survey report provided **YES/NO** Laboratory or Code Criteria Met **YES/NO**

**TANK LEAK DETECTION SYSTEM**

**Automatic Tank Gauge installed/replaced-Manufacturer:**

(Circle leak check method) **0.2 gp** **CSLD** **Annular** **SIR** **Inv Ctr** **Manual Gauging**  
 Monitor accessible & protected from damage **YES/NO** Printer OK **YES/NO**  
 Manifolder Tanks **YES/NO** Tank capacity < 15,000 gal **YES/NO**

**Double walled tank monitoring (a.k.a. interstitial or annular)**

Sensors properly installed **YES/NO** Portal is leak tight **YES/NO**  
 Sensor Type \_\_\_\_\_ Manufacturer \_\_\_\_\_  
 Sensor is compatible with Tank Monitor **YES/NO** Audible & Visual Alarm **YES/NO**  
 Monitor is accessible & protected form damage **YES/NO** Alarm in close proximity **YES/NO**

**Groundwater or Soil Vapor monitoring installed** **YES/NO** Manufacturer: \_\_\_\_\_

**Site assessment conducted** **YES/NO** 40 CFR §280.43(e)&(f) criteria met **YES/NO**



**EXISTING UST SYSTEM UPGRADE, RETROFIT, REPAIR, or REPLACEMENT - Page 3**

**PIPING REPLACEMENT**

Product piping runs less than 75 ft. **YES/NO** Proper Slope **YES/NO**  
 Large elevation changes (e.g. Marinas, Building, etc) **YES/NO** Solenoids **YES/NO**  
 Major topographical changes **YES/NO**

**Single wall piping**

Tightness Test conducted **YES/NO** Nevada Certified Tank Tester used **YES/NO**  
 Pressurized piping **YES/NO** Line Leak Detector **YES/NO** **Mechanical or Electric**  
 Electric LD. **Vapor or Pressure** Auto Shut-off @ 3gph **YES/NO**  
 Test results @ monitor available **YES/NO** (Circle tests conducted) **0.1gph 0.2gph 3gph**  
 Suction **YES/NO** Proper Slope **YES/NO** Check Valve @Disp **YES/NO**  
 All metal components corrosion resistant or adequately protected **YES/NO**  
 Was Cathodic Protection system used **YES/NO** Operational survey report received **YES/NO**  
 Class I (Ignitable Gases & Vapors) National Electrical Code requirements followed **YES/NO**

**Double walled piping**

Continuously leak monitored **YES/NO** or Initial & Annual tightness test required **YES/NO**  
 Tightness Test conducted **YES/NO** Nevada Certified Tank Tester used **YES/NO**  
 Leak Containment @ Turbine **YES/NO** Leak tested sump **YES/NO** Method \_\_\_\_\_  
 Sumps are protected from outside rain or wash water **YES/NO** Water Tight Riser Lid **YES/NO**  
 Water tight sump cover (@ surface) **YES/NO**  
 Leak Containment @ Dispenser **YES/NO** Leak tested sump **YES/NO** Method \_\_\_\_\_  
 Sumps are protected from outside rain or wash water **YES/NO** Curbs or dikes provided **YES/NO**  
 Leak Sensor @ Turbine Sump **YES/NO** Leak Sensor @ Disp. Sump **YES/NO**  
 Leak Sensor Type \_\_\_\_\_ Manufacturer \_\_\_\_\_  
 Sensor Tested **YES/NO** Audible & Visual Alarm **YES/NO**  
 Piping slopes to turbine sump **YES/NO** Piping drains to turbine leak sensor **YES/NO**  
 Pressurized Piping **YES/NO**  
 Line leak detector **YES/NO** **Electric or Mechanical** (mechanical receives annual test)  
 Electric LD. **Vapor or Pressure** Auto Shut-off @ 3gph **YES/NO**  
 Test results @ monitor available **YES/NO** (Circle tests conducted) **0.1gph 0.2gph 3gph**  
 Suction **YES/NO** Proper Slope **YES/NO** Check Valve @Disp **YES/NO**  
 All components corrosion resistant or adequately protected **YES/NO**  
 Was Cathodic Protection system used **YES/NO** Operational survey report received **YES/NO**  
 Class I (Ignitable Gases & Vapors) National Electrical Code requirements followed

Electrician's Name: \_\_\_\_\_ Credentials: \_\_\_\_\_

Company: \_\_\_\_\_ PH: \_\_\_\_\_

Address: \_\_\_\_\_

**FILL TUBE SPILL CATCHMENT BASIN (SPILL BUCKET)**

Fill Tube Catchment Basin capacity \_\_\_\_\_ gallons Manufacturer: \_\_\_\_\_  
 Leak tested basin **YES/NO** Method \_\_\_\_\_  
 Sumps are protected from outside rain or wash water **YES/NO** Water Tight Lid **YES/NO**  
 Raised concrete, curbing or diking **YES/NO** Basin sealed to grade **YES/NO** Flexible assembly **YES/NO**  
 Drain or Pump Installed **YES/NO** Operational **YES/NO** Overfill will not contaminate soil **YES/NO**  
 Labeled to alert fuel delivery of overfill device **YES/NO**  
 Installed into riser sump on tank **YES/NO**

**OVERFILL PREVENTION DEVICE (ref. 40 CFR §280.20(c))** *Check all that are installed and operational*

**Auto Shut Off Device**

Type(e.g. flapper)

Manufacturer: \_\_\_\_\_ Mnfctr's instructions followed **YES/NO**  
 Appropriate chart used for distance below tank top **YES/NO** @ \_\_\_\_\_ inches Tank Diameter \_\_\_\_\_ inches  
 Gravity fill **YES/NO** Float operates properly **YES/NO** No obstructions in fill tube **YES/NO**  
 Operationally tested **YES/NO** Shuts off @95% capacity **YES/NO**  
 Signs or labels posted to notify delivery perso **YES/NO** Air tight fill connection **YES/NO**

**EXISTING UST SYSTEM UPGRADE, RETROFIT, REPAIR, or REPLACEMENT - Page 4**

**OVERFILL PREVENTION DEVICE (continued)**

**Ball Float with vapor recovery system** YES/NO

Manufacturer: \_\_\_\_\_ Extractable for maintenance YES/NO

Appropriate chart used for distance below tank top \_\_\_\_\_ Mnfctr's instructions followed YES/NO

Operationally tested YES/NO YES/NO @ \_\_\_\_\_ inches Tank Diameter \_\_\_\_\_ inches

Ball cage intact YES/NO Air escapes from other opening of tank(e.g. tank gauge) YES/NO

Ball seals tightly to air opening Ball moves freely YES/NO

Restricts flow @ 90% capacity YES/NO or Restricts flow 30 minutes before overfill YES/NO

Suction Piping (or other air eliminators installed) YES/NO Pressurized Delivery YES/NO

Coaxial Stage 1 Vapor Recovery YES/NO Remote fill YES/NO Gauge openings YES/NO

Emergency Power Generator UST YES/NO Air tight fill connection YES/NO

Signs or labels posted to notify delivery person of the type of overfill device YES/NO

**Overfill Alarm** Manufacturer: \_\_\_\_\_ Mnfctr's instructions followed YES/NO

Operationally tested YES/NO Probe operating properly YES/NO

Alerts at 90% capacity YES/NO or 1 minute before overfill YES/NO

Alarm can be heard and seen by delivery person YES/NO "Tank Overfill Alarm" sign posted YES/NO

Fill tube labeled to notify delivery person of the type of overfill device YES/NO

**BOOTING** installed on flex lines Manufacturer: \_\_\_\_\_

@ turbines YES/NO off turbine sump YES/NO @dispensers YES/NO under dispenser pans YES/NO

water tight YES/NO Clamped/sealed @ both ends YES/NO

**LEAK CONTAINMENT SUMP INSTALLATION**

**Turbine Sump** Manufacturer: \_\_\_\_\_

Leak tested sump YES/NO Leak test method \_\_\_\_\_

Sumps are protected from outside rain or wash water YES/NO Tight Lid YES/NO

Single walled piping YES/NO Double-walled piping YES/NO

Piping Tightness Test Required YES/NO Piping tightness test received YES/NO

Nevada Certified Tank Tester YES/NO Name: \_\_\_\_\_

Piping continuously leak monitored YES/NO Leak sensors in sump YES/NO

Leak Sensor Type \_\_\_\_\_ Manufacturer: \_\_\_\_\_

Sensor Tested YES/NO/NA Audible & Visual Alarm YES/NO/NA

Piping slopes to turbine sump YES/NO Piping drains to leak sensor YES/NO/NA

All components corrosion resistant or adequately protected YES/NO

Was Cathodic Protection system effected YES/NO Re-survey report received YES/NO

Qualified Cathodic Tester used \_\_\_\_\_

Line leak detector YES/NO Mechanical or Electric (mechanical receives annual test)

Electric LD. Vapor or Pressure Prints results @ monitor YES/NO Auto Shut off YES/NO

Class I (Ignitable Gases & Vapors) National Electrical Code requirements followed YES/NO

Electrician's Name: \_\_\_\_\_ Credentials: \_\_\_\_\_

Address: \_\_\_\_\_

**Dispenser Sump Manufacturer:** \_\_\_\_\_

Leak tested sump YES/NO Leak test method \_\_\_\_\_

Leak Sensor YES/NO Type \_\_\_\_\_ Manufacturer: \_\_\_\_\_

Sensor Tested YES/NO/NA Audible & Visual Alarm YES/NO/NA

Sump drains to double wall piping YES/NO Dispensers on Curbs YES/NO

All components corrosion resistant or adequately protected YES/NO

Was Cathodic Protection system effected YES/NO Re-survey report received YES/NO

Qualified Cathodic Tester used \_\_\_\_\_ YES/NO

Class I (Ignitable Gases & Vapors) National Electrical Code requirements followed YES/NO

Electrician's Name: \_\_\_\_\_ Credentials: \_\_\_\_\_

Address: \_\_\_\_\_