

APPENDIX A-3: SAMPLE FORM FOR ANNUAL UNDERGROUND STORAGE SYSTEM INSPECTION CHECKLIST – Page 1

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ANNUAL UST SYSTEM INSPECTION CHECKLIST							
Facility ID#	Facility Name/Address	Qualified Technician Signature	Date				
If any problem is found, contact:		Contact information:					
Category	Description	PEI/RP900	N/A	Tank 1	Tank 2	Tank 3	Tank 4
Monthly Inspections	Complete monthly checklist and compare to previously completed monthly checklists	8.4.1					
	Monthly inspections reviewed and found adequate	8.4.2					
ATG Manhole	Cap in good condition, seals tightly, hole sealed where probe wire goes through	8.8					
	Wire splices sealed and wire in good condition	8.8.1					
	Junction box has cover, not corroded; intrinsically safe wiring in good condition	8.8.2					
	No exposed wires	8.8.3					
ATG Manhole	Probe and floats in good condition, both floats present and move freely (mag probe)	8.8.4					
	Verify functionality of ATG probe	TEST DATE:					
	Manhole cover in good condition	8.8.5					
	Adequate clearance between ATG grade-level cover and below-grade components	8.8.6					
Fill Area		8.8.7					
		8.8.8					
Drop Tube	Drop tube extends to within 6 inches of the tank bottom (if no flow diffuser present)	8.9					
Vapor Recovery Adaptor	Poppet of Stage 1 vapor recovery adaptor (also known as a "dry break") moves freely, seals tightly	8.9.1					
Single-Walled Spill Containment Manhole	Single-walled spill containment manhole tightness tested within last 3 years	8.9.2					
	TEST DATE:	8.9.3					
Double-Walled Spill Containment Manhole	Double-walled spill containment manhole tightness tested within last 3 years OR inspected monthly	8.9.4					
	TEST DATE:	8.9.4					
Overfill Prevention							
Drop Tube Shutoff (Flapper Valve)	Drop tube shutoff valve passes inspection	8.10					
	EVALUATION DATE:	8.10.1.1					
	For drop tube shutoff valves in diesel tanks, excessive corrosion not present	8.10.1.2					

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Category	Description	PEI/RP900	N/A	Tank 1	Tank 2	Tank 3	Tank 4
Ball Float Valve	Ball float can be removed and inspected	8.10.2.1					
	Ball float valve passes inspection	8.10.2.2	EVALUATION DATE:				
	For ball float valves in diesel tanks, excessive corrosion not present	8.10.2.3					
Overflow Alarm	Overflow alarm passes inspection	8.10.3.1					
Leak Detection		8.11					
ATG Console	ATG passes annual inspection	8.11.1.1	EVALUATION DATE:				
	Console has no active warnings or alarms	8.11.1.2					
	Alarm history shows no recurring leak alarms	8.11.1.3					
	Verify in-tank leak detection tests are being completed (if used for leak detection)	8.11.1.4					
	Verify correct set-up parameters for electronic line leak detector (if present)	8.11.1.5	VERIFICATION DATE:				
	Verify piping leak detection tests are being completed (if used for leak detection)	8.11.1.6					
Electronic Leak Detection Monitor	Leak monitoring console is operational and has no active warnings or alarms	8.11.2.1					
Line Tightness Testing	If pressurized piping has been tested in the last year, review the results and verify that the test passed	8.11.3.1	TEST DATE:				
	If suction piping has been tested within the last 3 years, review the results and verify that the test passed	8.11.3.2	TEST DATE:				
	ELLD has conducted a 0.1 gph test in the last year	8.11.3.3	TEST DATE:				
Under Pump Check Valve (Suction Pump)	Below-grade piping operates at less than atmospheric pressure	8.11.4.1					
	Below-grade piping slopes continuously back to the tank	8.11.4.2					
	There is only one check valve, and it is located as close as practicable to the suction pump	8.11.4.3					
Tank Tightness Testing	Tank is 10 years old or less	8.11.5.1					
	If a tank test has been conducted within the last 5 years, review the results and verify that the test passed	8.11.5.2	TEST DATE:				
Statistical Inventory Reconciliation (SIR)	SIR results for the previous 12 months are "pass"	8.11.6.1					

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Category	Description	PEI/RP900	N/A	Tank 1	Tank 2	Tank 3	Tank 4
Continuous Soil Vapor Monitoring	Sensing device tested	8.11.7.1					
Continuous Ground-water Monitoring	Sensing device tested	8.11.8.1					
Corrosion Protection		8.12					
Galvanic Cathodic Protection	Verify that cathodic protection testing of all metallic components in contact with soil or water has been conducted within the past 3 years and the test passed	8.12.1.1					
Impressed Current Cathodic Protection	Verify that cathodic protection testing has been conducted within the past 3 years and the test passed	8.12.2.1					
Tank Lining	No exposed wires	8.12.2.2					
	Lining inspected as required and in good condition	8.12.3.1					
Miscellaneous Inspection Items		8.13					
Tank Pad & Pavement	Concrete or asphalt over or near tanks is level, no significant cracks	8.13.1.1					
Stage II Liquid Collection Points	Cap in good condition, fits tightly, little or no liquid in bottom	8.13.2.1					
Stage I Testing	Verify that Stage I testing has been conducted and test results are passing	8.13.3.1					
Stage II Testing	Verify that Stage II testing has been conducted and test results are passing	8.13.4.1					
Site Diagram	Site diagram accurately reflects the site conditions	8.13.5.1					

DESCRIBE ANY DEFICIENCIES HERE:

Instructions: Mark each tank where no problem is observed with a checkmark: ✓ If certain equipment is not required and / or not present, mark checklist in the N/A column. If a defect is found, mark the checklist with an "X," describe the problem in the "DEFICIENCIES" section, and notify the appropriate person. Refer to the section listed in the "PEI/RP900" column for additional information. Refer to PEI RP500, *Recommended Practices for Inspection and Maintenance of Motor Fuel Dispensing Equipment*, for inspection procedures that apply to fuel dispensing equipment.

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ID#:	ANNUAL STP INSPECTION CHECKLIST				Date:			
Category	Description	PEI/RP900	N/A	Tank 1	Tank 2	Tank 3	Tank 4	
Submersible Turbine Pump (STP)	Visible piping and fittings show no signs of leaking	8.6.1						
	Piping in good condition	8.6.2						
	Excessive corrosion not present	8.6.3						
	Sump free of trash and debris	8.6.5						
	Junction box(es) have covers, not corroded; conduit and intrinsically safe wiring in good condition	8.6.8						
	Flexible connectors not frayed, twisted, kinked or bent beyond manufacturer specifications	8.6.9						
	Mechanical line leak detector properly vented, vent tube not kinked or twisted, vent tube fittings intact and tightened	8.6.10						
	Mechanical line leak detector passes 3.0 gallons per hour (gph) test	TEST DATE:	8.6.11					
	Electronic line leak detector (ELLD) passes 3.0 gph test	TEST DATE:	8.6.12					
	ELLD passes 0.2 gph test	TEST DATE:	8.6.13					
ELLD passes 0.1 gph test	TEST DATE:	8.6.14						
STP: No Containment Sump	Manhole cover at grade in good condition, does not touch sump cover, all bolts present, handles and lift mechanism in good condition (as applicable)	8.6.24						
	Submersible pump head, flex connector(s) and other metallic product piping are not in contact with soil or water or are cathodically protected	8.6.17						
STP: In Containment Sump	Any water or product removed and disposed of properly	8.6.4						
	Sump is free of cracks, holes, bulges or other defects	8.6.6						
	Penetration fittings intact and secured	8.6.7						
	Piping interstitial space open to the STP sump (open double-walled piping system only)	8.6.20						
STP: In Single-Walled Containment Sump	Piping interstitial space closed to the STP sump (closed double-walled piping system only)	8.6.22						
	Sump lid, gasket and seals present and in good condition	8.6.23						
	Single-walled sump tested for integrity every 3 years	TEST DATE:	8.6.18					

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Category	Description	PEI/RP900	N/A	Tank 1	Tank 2	Tank 3	Tank 4
STP: In Double-Walled Containment Sump	If not continuously monitored or inspected annually, double-walled sump tightness tested every 3 years	8.6.19					
DESCRIBE ANY DEFICIENCIES HERE:							

APPENDIX A-3: SAMPLE FORM FOR ANNUAL DISPENSER INSPECTION CHECKLIST

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ID#:	ANNUAL DISPENSER INSPECTION CHECKLIST				Date:			
Category	Description	PEI/RP900	N/A	Disp 1	Disp 2	Disp 3	Disp 4	
Initial Fuel Dispenser Inspection		8.5						
All Dispensers	All dispenser components are clean and dry	8.5.1						
	If dispenser sump is present, sump is dry	8.5.2						
Fuel Dispenser Inspection		8.6						
All Dispensers	Visible piping and fittings show no signs of leaking	8.6.1						
	Piping in good condition	8.6.2						
	Dispenser containment sump free of trash and debris	8.6.5						
	Junction box(es) have covers, not corroded; conduit and intrinsically safe wiring in good condition	8.6.8						
	Flexible connectors not frayed, twisted, kinked or bent beyond manufacturer specifications	8.6.9						
Dispensers Without Sumps	Shear valves operate freely and close completely	8.6.15						
	Stage II piping functional or else capped and sealed at an elevation lower than the fuel dispenser island	8.6.16						
	Flex connectors and other metallic product piping are not in contact with soil or water or are cathodically protected	8.6.17						
	Any water or product removed and disposed of properly	8.6.4						
Dispensers With Sumps	Sump free of cracks, holes, bulges, or other defects	8.6.6						
	Penetration fittings intact and secured	8.6.7						
	Piping interstitial space open to the dispenser sump or dispenser pan (open double-walled piping system only)	8.6.21						
Dispensers With Single-Walled Sumps	Piping interstitial space closed to the dispenser sump (closed double-walled piping system only)	8.6.22						
	Single-walled sump tested for integrity every 3 years	8.6.18						
Dispensers With Double-Walled Sumps	If not continuously monitored or inspected annually, double-walled sump tightness tested every 3 years	8.6.19						
	DESCRIBE ANY DEFICIENCIES HERE:							

APPENDIX A-3: SAMPLE FORM FOR ANNUAL LEAK DEVICE INSPECTION CHECKLIST

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ID#:	ANNUAL LEAK DETECTION DEVICE INSPECTION CHECKLIST					Date:				
Category	Description	PEI/RP900	N/A	Tank 1	Tank 2	Tank 3	Tank 4			
Leak Detection Device. Describe location (e.g., interstitial, STP, fill, dispenser) on this row:										
Liquid Sensor	Sensor tested and functional	8.7								
	Sensor properly mounted at the bottom of the containment sump or pan (containment sump or pan sensor only)	8.7.1								
	TEST DATE:									
Discriminating Sensor	Sensor properly mounted at the bottom of the containment sump or pan (containment sump or pan sensor only)	8.7.3								
	Sensor properly mounted at the bottom of double-walled tank (double-walled tank sensor only)	8.7.4								
	TEST DATE:									
Hydrostatic Sensor	Sensor tested and functional	8.7.1								
	Sensor properly mounted at the bottom of the containment sump or pan (containment sump or pan sensor only)	8.7.3								
	Sensor properly mounted at the bottom of double-walled tank (double-walled tank sensor only)	8.7.4								
	TEST DATE:									
Vacuum/Pressure Sensor	Sensor tested and functional	8.7.1								
	Hydrostatic sensor properly positioned	8.7.5								
	Sensor tested and functional	8.7.1								
	Alarm sounds when pressure or vacuum is released	8.7.2								
	TEST DATE:									
	Entire interstitial space under pressure or vacuum (closed double-walled piping system only)	8.7.7								
	TEST DATE:									
Visually Monitored Double-Walled Sump	Leak detection device is within recommended limits	8.7.6								
Dispenser Pan Float Mechanism	Sensor tested and functional	8.7.1								
	Dispenser pan float mechanism free to move and properly adjusted	8.7.8								
	TEST DATE:									
DESCRIBE ANY DEFICIENCIES HERE:										

APPENDIX A-3: SAMPLE FORM FOR ANNUAL FILL CONTAINMENT SUMP INSPECTION CHECKLIST

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ID#:	ANNUAL FILL CONTAINMENT SUMP INSPECTION CHECKLIST				Date:			
Category	Description	PEI/RP900	N/A	Tank 1	Tank 2	Tank 3	Tank 4	
Fill Sump		8.6						
	Any water or product removed and disposed of properly	8.6.4						
	Visible piping and fittings show no signs of leaking	8.6.1						
	Piping in good condition	8.6.2						
	Excessive corrosion not present	8.6.3						
	Sump free of trash and debris	8.6.5						
	Sump is free of cracks, holes, bulges or other defects	8.6.6						
	Penetration fittings intact and secured	8.6.7						
	Junction box(es) have covers, not corroded; conduit and intrinsically safe wiring in good condition	8.6.8						
	Flexible connectors not frayed, twisted, kinked or bent beyond manufacturer specifications	8.6.9						
	Piping interstitial space open to the fill sump (open double-walled piping system only)	8.6.20						
	Piping interstitial space closed to the fill sump (closed double-walled piping system only)	8.6.22						
	Sump lid, gasket and seals present and in good condition	8.6.23						
	Manhole cover at grade in good condition, does not touch sump cover, all bolts present, handles and lift mechanism in good condition (as applicable)	8.6.24						
Single-Walled Fill Sump	Single-walled sump tested for integrity every 3 years	8.6.18						
Double-Walled Fill Sump	If not continuously monitored or inspected annually, double-walled sump tightness tested every 3 years	8.6.19						
DESCRIBE ANY DEFICIENCIES HERE:								

APPENDIX A-3: SAMPLE FORM FOR ANNUAL TRANSITION SUMP INSPECTION CHECKLIST

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ID#:	ANNUAL TRANSITION SUMP INSPECTION CHECKLIST				Date:			
Category	Description	PEI/RP900	N/A	Tank 1	Tank 2	Tank 3	Tank 4	
Transition Sump	Any water or product removed and disposed of properly	8.6						
	Visible piping and fittings show no signs of leaking	8.6.4						
	Piping in good condition	8.6.1						
	Sump free of trash and debris	8.6.2						
	Sump is free of cracks, holes, bulges, or other defects	8.6.5						
	Penetration fittings intact and secured	8.6.6						
	Junction box(es) have covers, not corroded; conduit and intrinsically safe wiring in good condition	8.6.7						
Transition Sump	Flexible connectors not frayed, twisted, kinked or bent beyond manufacturer specifications	8.6.8						
	Piping interstitial space open to the transition sump (open double-walled piping system only)	8.6.9						
	Piping interstitial space closed to the transition sump (closed double-walled piping system only)	8.6.20						
	Sump lid, gasket and seals present and in good condition	8.6.22						
	Manhole cover at grade in good condition, does not touch sump cover, all bolts present, handles and lift mechanism in good condition (as applicable)	8.6.23						
Single-Walled Transition Sump	Single-walled sump tested for integrity every 3 years	8.6.24						
Double-Walled Transition Sump	TEST DATE:							
	If not continuously monitored or inspected annually, double-walled sump tightness tested every 3 years	8.6.18						
	TEST DATE:							
DESCRIBE ANY DEFICIENCIES HERE:								

APPENDIX A-3: SAMPLE FORM "OTHER" SUMP INSPECTION CHECKLIST

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ID#:	ANNUAL "OTHER" SUMP INSPECTION CHECKLIST				Date:			
Category	Description	PEI/RP900	N/A	Tank 1	Tank 2	Tank 3	Tank 4	
Other Sump.	Describe location or function (e.g., suction piping, tank manhole) on this row:	8.6						
	Any water or product removed and disposed of properly	8.6.4						
	Visible piping and fittings show no signs of leaking	8.6.1						
	Piping in good condition	8.6.2						
	Sump free of trash and debris	8.6.5						
	Sump is free of cracks, holes, bulges, or other defects	8.6.6						
	Penetration fittings intact and secured	8.6.7						
Other Sump	Junction box(es) have covers, not corroded; conduit and intrinsically safe wiring in good condition	8.6.8						
	Flexible connectors not frayed, twisted, kinked or bent beyond manufacturer specifications	8.6.9						
	Piping interstitial space open to the sump (open double-walled piping system only)	8.6.20						
	Piping interstitial space closed to the sump (closed double-walled piping system only)	8.6.22						
	Sump lid, gasket and seals present and in good condition	8.6.23						
	Manhole cover at grade in good condition, does not touch sump cover, all bolts present, handles and lift mechanism in good condition (as applicable)	8.6.24						
Single-Walled Other Sump	Single-walled sump tested for integrity every 3 years	8.6.18						
Double-Walled Other Sump	If not continuously monitored or inspected annually, double-walled sump tightness tested every 3 years	8.6.19						
DESCRIBE ANY DEFICIENCIES HERE:								