PEI RP900 STORAGE SYSTEM INSPECTION SUMMARY TABLE			
Tank System Component	**Daily**	**Monthly**	**Annual**
Complete daily checklist and compare to previously completed daily checklists		X	
Complete monthly checklist and compare to previously completed monthly checklists			X
Automatic Tank Gauge	X	X	X
Check for Water in Tank		X	
Tank Top and Fuel Dispenser Sumps			X
Fuel dispensers			X
Drop Tube		X	X
Electronic Leak Detector		X	X
Fill Cover	X		
Fill Pipe	X	X	
Electronic Leak Detector (piping)		X	X
Galvanic Corrosion Protection			X
Tank Gauge Stick		X	
Grade Level Covers		X	
Groundwater/Soil Vapor Monitoring		X	X
Impressed Current Corrosion Protection		X	X
Inventory Control / Inventory Verification	X	X	
Leak Detection Monitor	X	X	X
Manual Interstitial Monitoring		X	
Mechanical Leak Detector (piping)	X		X
Observation Wells		X	X
Overfill Prevention			X
Piping Condition			X
Piping Leak Test		X	
Piping Tightness Test			X
Site Diagram			X
Spill Containment Manhole	X	X	
Stage I Vapor Recovery		X	X
Stage II Vapor Recovery			X
Statistical Inventory Reconciliation		X	
Submersible Turbine Pump			X
Tank Lining			X
Tank Pad and Pavement			X
Tank Tightness Test			X
Tank Vents		X	

TABLE B-1. *This table lists alphabetically the components that are included in the daily described in this recommended practice and the frequency of inspection for each of these components. Refer to the checklists in Appendix A and Chapters 6*

The PEI RP 500 & 900 Standards have numerous illustrations and detailed inspection guidance information. The standards can be orders at:
http://pei.org/portal/members/createorder.asp?action=catalog&catalog=RP&af=PEI

Comm 10 Code
Flammable, Combustible and Hazardous Liquids

Summary of
New Code Revision Requirements and Time-lines
For Motor Vehicle Fueling Facilities and Bulk Plants
Effective February 1, 2009

Periodic Inspection

❑ Motor Vehicle Fueling Facilities

Comm 10 has adopted PEI RP500 Recommended Practices for Inspection and Maintenance of Motor Fuel Dispensing Equipment, and PEI RP900 Recommended Practices for the Inspection and Maintenance of UST Systems

What this means to you
You must implement an inspection program and record keeping program for daily, monthly and annual inspections. The inspections address responding to alarms, checking functionality of equipment components and cleaning sumps and spill buckets of water, product or debris. This corresponds with the August 2012 implementation of the federal and state mandated operator training. A summary of the inspection components is on the last page of this brochure.

If you have electronic sump sensors installed that detect both product and water you have to check the sumps every 6 months, rather than monthly.

❑ Aboveground Storage Tanks

Comm 10 has adopted STI SP001 Standard for the Inspection of Aboveground Storage Tanks, which requires monthly and periodic external and internal inspections depending upon the type of tank and containment.

What this means to you
You must implement an inspection program and record keeping program for monthly and periodic inspections in accordance with STI SP001.

❑ **Overfill Prevention**

All motor vehicle fueling USTs and double-wall ASTs with a tight fill connection must have a device to alert the delivery driver when the product level is at 90% of tank capacity and automatically shut-off the flow into the tank at 95% of tank capacity.

What this means to you
You must have your tank equipped with an automatic 95% shut-off unless you have deliveries via a hand-held nozzle without a latch open mechanism. The most common device is a drop tube with a flapper valve that activates at 90% to alert the driver and shuts off flow at 95%. The ball float in most situations will have to be removed. The deadline for auto shut-off installation is Jan 31, 2011.

❑ **Pipe Connection Containment**

Tank top and dispenser pipe connections are required to have a liquid tight sump to contain leaks. Existing systems that currently do not have adequate containment must be upgraded with a liquid tight sump and an electronic sensor that detects both water and product no later than Dec 31, 2014.

What this means to you
You have three options to retrofit existing dispensers: 1) form-in-place via an approved material, 2) installation of a dispenser pan, or 3) installation of a dispenser sump.

If you have a dispenser connected to an AST and under the dispenser there is contamination, the contamination must be addressed and the dispenser must have containment within one year.

You have two options to retrofit existing tank top connections: 1) form-in-place via an approved material, or 2) installation of a tank top sump. The tank top connections are not required if you have a safe-suction system.

While the form-in-place method is the cheapest method, it is also the most susceptible to poor installation practices and materials. It is advisable to have the dispensers removed to accommodate the technician's access to all components of the sump and the sump walls and components cleaned of residue prior to coating.

Contamination of soil must be addressed prior to any of the methods being installed.

❑ **Annual Equipment Testing**

Comm 10 has codified testing that originate in various manufacturer's and national standards documents. All of the tests must be performed and documented by a qualified person who understands the functionality and tolerances of the specific model of equipment. In some situations, such as leak detection equipment, a qualified person is a technician certified by the manufacturer. While most of the individual test requirements are not new, the documentation requirements are now more specific.

What this means to you
Annual test required for:

- Electrical continuity of gasoline / E85 dispenser
- Dispenser impact valves (fire valves)
- Sump sensors
- Overfill alarms
- Leak detector calibration verification
- Line leak detectors/flow restrictors
- ATG probes
- Impressed current corrosion protection
- Sacrificial anode corrosion protection if tank is 10 or more years of age.

You must maintain a record of the testing on site. The department has created a forms available to contractors for documentation of the respective tests.

❑ **Monthly Leak Detection via Inventory Control and Tightness Testing**

Prior to this code revision the monthly reconciliation of the daily inventory control was based upon a threshold of 1% of throughput plus 130 gallons. This code revision has changed the threshold to 0.5% of throughput.

What this means to you
You do not have to change how you collect the daily inventory, but the threshold changes to 0.5% of throughput for the reconciliation component of inventory control. The department has templates that you can download at the following web site: commerce.wi.gov/ER/ER-BST-InventoryControlRecordTemplates.html

❑ **Inventory Verification**

Inventory verification is a inventory record that all retail facilities have been required to maintain. It was formerly referred to as "Inventory Control." Because this recordkeeping practice is not a method of leak detection the name was changed to "inventory verification (IV). The purpose of inventory verification is to provide a record of product input and output that will assist in complaint or product loss investigations and follow-up.

What this means to you
If your monthly leak detection method is via Inventory Control and Tightness Testing or Statistical Inventory Reconciliation (SIR) you have the necessary records to comply with inventory verification. If your monthly leak detection methodology is via an ATG you must maintain a daily inventory log. The department has templates that you can download at the following web site: commerce.wi.gov/ER/ER-BST-InventoryControlRecordTemplates.html

❑ **Fire Extinguishers**

The national standard NFPA 30A that applies to motor vehicle fueling has increased the required capacity of fire extinguishers for outside motor fuel dispensing areas from a 40 B:C to 80 B:C.

What this means to you
If you add a new fire extinguisher or replace an existing extinguisher it must have an 80 B:C rating and travel distance no more than 100 feet. Existing 40 B:C extinguishers may continue to be used, serviced and repaired.

❑ **Transfer Containment**

The code began requiring containment at bulk loading/unloading points in 2002. The code requires bulk plants and facilities that process, refine, manufacture or distribute liquids to have containment or remote impounding for catastrophic releases at the transfer area associated with tanks ≥ 5,000 gal.

What this means to you
You must provide a means to contain a spill or release in the transfer area at a capacity as great as the largest compartment of transports loading / unloading. A pending code revision has a timeline of compliance by December 31, 2011. Plan submittal and approval is required.

❑ **Aboveground Tank Hazard Marking**

All aboveground tanks storing Comm 10 regulated products must maintain the NFPA 704 labeling.

What this means to you
Specific placement on the tank or posted near the tank must be in coordination with the local fire department. The size of the label must be no smaller than the requirements in the tank label table in Comm 10.400(7). Check with your petroleum equipment contractor or on the Internet at JJkeller.com

Resources and References:

Comm 10 Code
http://www.legis.state.wi.us/rsb/code/comm/comm010.pdf or ordered from document sales at:

WI Department of Administration
Document Sales and Distribution Section
202 S. Thornton Avenue
PO Box 7840
Madison WI 53707-7840

Item Code #: FL Stock #: 134
Cost: $15.83 (includes tax)

Comm 10 Code Compendium
Internet document only
http://commerce.wi.gov/ERpdf/bst/CommCodes10_5_2_48/ER-BST-Comm10CodeCompendium.pdf