INSTRUCTIONS FOR SERVICE PROVIDERS UNDERGROUND STORAGE TANK SYSTEM RESTART AFTER FLOODING

This sheet should be given to your certified UST Inspector before restarting a UST system that has been affected by a flood.

UST Inspectors can contact DEC UST Unit staff with any questions.

TECHNICAL PROTOCOL FOR UST INSPECTORS

These protocols should be followed to return UST systems affected by a flooding back into service:

- Return power to the UST system and inspect for proper operation.
  - Check all UST system electrical equipment for proper operation.
  - Ensure that leak detection equipment is operational as soon as practically possible; however, certain leak detection methods may not be viable.
  - Contact DEC if the leak detection system is not working properly or found to be inoperable.
- Inspect vent lines for movement and cracking. Ensure that the vent is working properly.
- The interstitial spaces of tanks and piping of double walled UST systems, if flood impacted, will need to be drained and flushed where possible. Blockage of interstitial spaces will impact leak detection. Depending on the level of residual contamination at the facility, certain leak detection methods may no longer be viable. Tanks with brine or vacuum interstitial sensors may be returned to service if brine or vacuum levels are normal.
- Clean and empty all spill buckets, under dispenser containment, and containment sumps.
  - Test and replace all damaged or inoperable spill buckets and sumps.
- Flooded or water-impacted tanks and piping may need to be drained of water and debris and cleaned as conditions warrant.
  - Check tank bottoms for water and debris. Remove and dispose as appropriate.
  - Liquids removed must be properly handled and disposed of. Documentation of disposal receipts must be provided upon request to DEC.
- Be alert for unusual operating conditions such as slow dispensing of fuel, frequent alarms, customer complaints, or equipment shutdowns.
  - If product loss has occurred, immediately notify DEC.
- Check the deflection of fiberglass tanks. If deflection is greater than the tank manufacturer's specification, contact the manufacturer for additional instruction.
- If tanks have shifted and problems are found, repair or replace them according to manufacturer's instructions and appropriate industry standards and Alaska regulations. These UST systems should be shut down and should not receive fuel until they are deemed suitable for continued use (tightness tested).

- Check critical safety devices (e.g., emergency power shut off controls, line leak detectors, shear valves, leak detection sensors, isolation relays on dispensers, etc.). Shear valves may be reused if they can demonstrate proper operation. Clean and lubricate shear valves before resetting them. Equipment may need be replaced if unable to demonstrate proper functionality.

- In-tank pumps, Automatic Tank Gauge (ATG) probes, overfill devices, automatic line leak detectors, fill and vapor caps, etc. should be assessed. Assess their condition after cleaning and replace as necessary.

- ATG consoles and any associated electronics that are not submerged, must be checked for operability, and testing performed by a certified UST worker after emergency conditions cease.

- Submerged dispensers may need to be repaired or replaced as necessary. This includes the hanging hardware. Any suction system dispensers will probably have flood impacted motors and pumps and may need to be replaced.

- After emergency conditions cease, submerged Corrosion Protection (CP) rectifiers and associated aboveground equipment protecting tanks or lines may have to be repaired or replaced. A National Association of Corrosion Engineers (NACE) certified professional shall perform an operability check of the CP equipment.
  Inspect CP lines for damage and replace as necessary. If CP systems are out of service for an extended period of time, perform integrity assessment of affected component before placing CP system back into service. A NACE certified professional will be helpful assessing the CP system.

- Document all inspection, assessment, and repair activities at each UST system site. Provide this information to DEC within 30 days of satisfactory operations inspection and no later than 10 days if the UST system is found to be not in compliance.

POST START-UP PROTOCOL FOR UST INSPECTORS

This protocol should be followed once flood-impacted tanks have been placed back into service and emergency response and restoration actions have been completed:

1. Precision tightness test tanks, piping, and interstitial spaces.
2. Assess interstitial spaces for blockages, especially if used for leak detection.
3. Cathodic protection systems should be checked to make sure they are connected and operational.

Decisions regarding replacement of tanks and lines should be made based on outcome of these tests. DEC UST Unit staff should be consulted on these decisions whenever possible.