



## FLOODING: EVALUATING YOUR UNDER-GROUND STORAGE TANK SYSTEM BEFORE RETURNING TO SERVICE

If your Underground Storage Tank (UST) system may have been affected by flooding, the Alaska Department of Environmental Conservation (DEC) has certain steps that you must take when restarting your UST system. These steps help prevent accidental releases, ensure your safety, and protect human health and the environment. Please contact DEC if you have questions or need technical assistance.

### HOW CAN FLOODING DAMAGE MY UST SYSTEM?

UST systems can be damaged in several ways:

- Empty or partially full tanks can become buoyant in flood waters causing damage to the UST system.
- Water can get inside tanks and displace the contents of the UST.
- Groundwater pressure can put stress on the UST and underground piping, causing the UST system to leak.
- Water and debris can damage electrical systems.
- Floodwaters over the top of the vent lines can fill the UST with water.
- Loose fill/vapor caps can allow water entry into the tank.

It is important to assess the impact of flood damage before putting your UST system back into service. Our mission is to protect human health and the environment.

### WHAT SHOULD I DO TO PREPARE MY UST SYSTEM BEFORE A FLOOD?

UST owners and operators can take several actions to minimize the impacts of flooding to their UST System.

- Conduct an inspection of the UST system to determine areas susceptible to flooding.
- Inspect fill, vent, and probe caps and gaskets to ensure a good seal, if the seal is worn replace.
- Take photos of the tank pad, sumps, and risers of the UST system. This will help identify any changes that have occurred due to the flooding.
- Take an inventory printout to document the current fuel and water levels of the tank(s).
- Place sandbags on top of sumps lids and risers to minimize the chance of water entering those locations.
- Turn off power to the turbine and dispensers to avoid damage to the electrical systems. Try to keep the release detection system on as long as power is available.

### WHAT DO I NEED TO DO BEFORE RESTARTING MY UST SYSTEM?

If the UST system was impacted by the flood, UST owners and operators are responsible for having their UST systems (tanks, piping, and electrical systems) evaluated by a certified UST inspector. The UST inspector will determine if the UST system is operationally sound and able to return to service.

Things owners/operators can do before bringing an UST system back into service:

- Make sure the power is off.
- Remove all debris and water from the concrete pad.
- Inspect the concrete pad for any indication of tank movement or shifting.
  - If the pad has been damaged, have a certified UST inspector evaluate the entire UST system to determine its suitability to receive product.
- Inspect UST system components, such as secondary and under-dispenser containment and sumps for leaks and verify that all dry secondary containment areas are still dry.
- Ensure that sump penetrations and boots are working properly. Loose or defective penetrations and boots may allow water seepage into the piping and secondary containment areas.
- Measure the product and water levels in each tank.
  - If there is a discrepancy in pre and post flood levels, contact DEC.
- Remove any debris from each tank.
- Make sure that the remaining product is suitable for use.

#### WHAT DOES MY SERVICE PROVIDER NEED TO KNOW?

These instructions include how to properly inspect your UST system and get it back into service. See also the Flood Guidance UST Service Provider Fact Sheet about the requirements to inspect the UST system before it is returned to service.

#### WHAT SHOULD I DO WITH CONTAMINATED WATER?

You will need to properly store and dispose of any petroleum contaminated water. This water should not be discharged to surface, streets, storm drains, sumps, ditches, or any areas not permitted to receive these liquids. Contact a hazardous waste contractor for more information about proper disposal.

#### WHAT DO I NEED TO DO **AFTER** I RESTART MY UST SYSTEM?

Once your UST system is back in service, you will need to regularly check for leaks. Depending on the level of residual contamination, certain leak detection methods may not work. You should use the following methods to ensure that no product is being released:

- Use careful daily inventory control and strict record keeping. The U.S. Environmental Protection Agency has inventory control guidance at <http://www.epa.gov/OUST/pubs/inventry.pdf>.
- Do daily checks for water with water-finding paste for several days, until you can determine that the system is tight.

If daily water checks show excessive water or the daily inventory control shows a loss of product, **immediately stop using the tanks and properly empty the tank of all remaining product.** [DEC UST Unit](#) should be notified within 24 hours.