Owners and operators of regulated underground storage tanks (USTs) on tribal lands must comply with the federal UST regulation.

This compliance assistance brochure highlights tips for overfill prevention.

Note: This document is a resource to promote compliance and does not replace the federal UST regulation.

This brochure is one in a series of EPA compliance assistance brochures designed to help owners and operators in Indian country comply with the federal UST regulation.

Other brochures focus on implementation, compatibility spill buckets, recordkeeping and notification, financial responsibility, insurance, tank release detection, and piping release detection.

www.epa.gov/ust/publications-related-underground-storage-tanks
OVERFILL PREVENTION

Overfill prevention is required for every underground storage tank (UST) filled with more than 25 gallons of product at one time. It is installed inside your tank to stop product flow, reduce product flow, or alert the delivery person during delivery before the tank becomes full.

There are three common types of overfill protection, as shown below:

- Overfill alarm
- Automatic shutoff device (flapper valve)
- Flow restrictor (ball float valve)

If a tank is overfilled, product could be forced through the vent line and other loose tank fittings, potentially resulting in a release into the environment. Properly functioning overfill prevention will significantly reduce the chance of an overfill release.

**Inspect your overfill prevention equipment every three years to ensure it will function properly to prevent overfills.**

What can you do to prevent an overfill?

**Repair or replace improperly functioning overfill alarms**

- Alarms alert the delivery person that product is reaching a certain level in the tank. They also give the delivery person enough time to shut off product flow to avoid a potential release.
- Alarms must be located where the delivery person can easily see or hear them.
- If you hear the alarm, ensure the delivery person has stopped the flow of fuel to the tank.

**Repair or replace improperly functioning automatic shutoff devices**

- Automatic shutoff devices stop the flow of product when the product reaches a certain level in the tank during delivery.

**Replace improperly functioning ball float valves**

- Ball float valves slow product flow by preventing vapors from leaving the tank when product reaches a certain level in the tank. This alerts the driver to stop the delivery. The top of the tank must be tight during deliveries so that vapors cannot escape.
- A qualified UST contractor can check to make sure the ball float operates properly and moves freely, the cage is intact, and the ball float air hole is not plugged.

**Order the appropriate amount of product**

- Order only the quantity of product that will fill 90 percent of the tank.

The formula for determining the maximum amount of gasoline to order is:

\[(\text{Tank capacity in gallons} \times 0.90) - \text{volume of product currently in tank} = \text{maximum amount of fuel to order}\]

Example:  
\[(10,000 \text{ gallons} \times 0.9) - 2,000 \text{ gallons} = 7,000 \text{ gallon maximum amount to order}\]

For recommended inspection guidelines, checklists, and tips for managing your UST system overfill prevention, see EPA’s Operating And Maintaining Underground Storage Tank Systems : Practical Help And Checklists or order free copies by calling (800) 490-9198.