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

This compliance assistance brochure highlights best management practices for overfill prevention.

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

EPA developed this brochure to help UST owners and operators in Indian country comply with the federal UST regulations.

This brochure is one in a series of EPA compliance assistance brochures designed to help owners and operators comply with UST regulations.

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

www.epa.gov/oust/pubs

Effective through October 12, 2018
Visit https://www.epa.gov/ust/managing-your-usts-indian-country

Office of Underground Storage Tanks
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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 damaging and costly release into the environment. Properly functioning overfill prevention will significantly reduce the chance of an overfill release.

What can you do to prevent an overfill?

Repair or replace improperly functioning overfill alarms

- Alarms alert the delivery driver that product is reaching a certain level in the tank. They also give the delivery driver enough time to shut off product flow to avoid a potential release.

- Alarms must be located where the delivery driver can see or hear them easily.
- If you hear the alarm, ensure the delivery person has stopped the flow of fuel to the tank.

Replacing 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.

- The automatic shutoff device is located in the drop tube within the fill pipe riser.

- A qualified UST contractor can check to make sure that all float components are functioning properly, and the float arm is not obstructed and can move freely.

- Keep the automatic shutoff valve free and unobstructed. A disabled automatic shutoff prevents the valve from closing to prevent an overfill.

- Periodically inspect the automatic shutoff device to make sure it has not been tampered with, disabled, or removed from the fill pipe and there are no obstructions in the drop tube that will prevent the device from operating.

Monitor product deliveries and transfers

- Pay close attention before, during, and after product delivery to help the delivery person avoid overfilling your UST.
- Immediately report spills to your implementing agency.

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:

\[
\text{(Tank capacity in gallons} \times 90\%) - \text{volume of product currently in tank} = \text{maximum amount of fuel to order}
\]

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 best management practices for your UST system overfill prevention, see EPA’s Operating and Maintaining Underground Storage Tank Systems at [www.epa.gov/oust/pubs/ommanual.htm](http://www.epa.gov/oust/pubs/ommanual.htm) or order a free copy by calling (800) 490-9198.