



COMPLIANCE ADVISORY

Underground Storage Tank Regulation

June 2019

EPA regulates underground storage tanks to protect human health and the environment from petroleum releases. Because of EPA's recent approval of sales of E15 gasoline year-round, more people might choose to offer E15 at gas stations and other fueling facilities. If you are now, or thinking of in the future, storing E15 in a federally regulated underground storage tank, you must prove that your equipment is compatible. These requirements apply if you are storing any regulated substances that contain more than 10 percent ethanol or more than 20 percent biodiesel.

This compliance advisory is for facilities that are required to comply with EPA's underground storage tank (UST) regulation. EPA, states, territories, the District of Columbia¹, and tribes regularly conduct compliance inspections to identify potential compliance violations and releases. Facilities that are not complying with the UST regulation are required to address their non-compliance issues.

As of March 2019, approximately 550,000 underground storage tanks nationwide store petroleum or hazardous substances. The greatest potential threat from a leaking UST is contamination of groundwater, the source of drinking water for nearly half of all Americans. EPA, states, and tribes work in partnership with industry to protect the environment and human health from potential releases.

What Requirements Does This Advisory Highlight?

This advisory alerts owners and operators to the compatibility requirements in [40 CFR 280.32—Compatibility](#).

Section 280.32 states that UST owners and operators must use an UST system made of or lined with materials that are compatible with the substance stored in the UST system. Additionally, owners or operators who store regulated substances that contain more than 20 percent biodiesel or more than 10 percent ethanol, such as 15 percent ethanol or E15, must notify their

¹ States, territories, and the District of Columbia are hereafter referred to as states.

implementing agency 30 days before storing the fuel. Owners and operators must also keep records demonstrating that their UST system is compatible with the substance stored. Ensuring compatibility of UST systems with these fuels—knowing the materials that make up the UST system will maintain their respective chemical and physical properties when in contact with the substance stored—is essential. Storing a fuel that is not compatible with the UST system may jeopardize the integrity of the UST system and cause a release to the environment.

Demonstrating compatibility of an UST system means identifying what equipment is installed as part of your UST system. You must show that a component is approved by either the manufacturer of the component or by a nationally-recognized independent testing laboratory, such as Underwriters Laboratory (UL), for use with the fuel to be stored. See details about these requirements in [40 CFR 280.32](#). Please note that compatibility extends beyond the fuel tank. Owners and operators must demonstrate compatibility for the components below to store substances containing more than 10 percent ethanol or more than 20 percent biodiesel.

- Tank
- Piping carrying product from the tank
- Piping containment sumps entered by the piping
- Pumping equipment, including the submersible pump or suction pump, depending on the type of system
- Release detection equipment, including automatic tank gauging (ATG) probes, sump sensors, and line leak detectors
- Spill equipment, such as spill buckets, for the tank
- Overfill equipment, including ball float valves or flapper valves

The federal UST regulation does not require owners and operators to demonstrate the compatibility of dispensers or associated aboveground equipment. However, compatibility requirements for these components may exist in other local regulations, such as the fire code. Owners and operators should check for these requirements with their implementing agency.

To learn more about compatibility compliance requirements, see EPA’s website:

- 2015 UST regulation www.epa.gov/ust/revising-underground-storage-tank-regulation-revisions-existing-requirements-and-new
- Plain language booklet about compatibility www.epa.gov/ust/ust-system-compatibility-biofuels
- Questions and answers about compatibility and pipe dope and sealants www.epa.gov/ust/underground-storage-tank-ust-technical-compendium-about-2015-ust-regulation#compatibility
- Emerging fuels and USTs www.epa.gov/ust/emerging-fuels-and-underground-storage-tanks-usts

What Are The Compliance Concerns?

Compliance concerns include those related to the compatible storage of ethanol-biofuel blends containing more than 10 percent ethanol in UST systems.

Disclaimer

This compliance advisory addresses select provisions of EPA regulatory requirements using plain language. Nothing in this compliance advisory is meant to replace or revise any EPA regulatory provisions or any other part of the *Code of Federal Regulations*, the *Federal Register*, or the Solid Waste Disposal Act. For more information on underground storage tanks, see EPA's website www.epa.gov/ust. For more information on enforcement, see EPA's website www.epa.gov/enforcement.