

E15's Compatibility With UST Systems

The environmentally safe growth of fuel containing 15 percent ethanol (E15) markets depends on E15 being stored and dispensed from underground storage tank (UST) systems that are compatible with E15. Storing and dispensing E15 at gas stations with equipment that is not compatible with higher blends of ethanol fuel can result in leaks and releases that contaminate land and groundwater. Most older and even some newer existing UST systems (which includes but is not limited to tanks, pumps, ancillary equipment, lines, gaskets, and sealants) are not fully compatible with E15 and require modification before storing E15. For example, the actual tank is often compatible with E15, but some of the connectors and pump components may not be. That can lead to leaks. Dispensers are not part of the UST system, by definition, but face the same compatibility concerns and are a critical part of the fueling system for our constituents.

In June 2019, EPA issued [Modifications to Fuel Regulations to Provide Flexibility for E15; Modifications to RFS RIN Market Regulations](#), which removes barriers to E15 year-round use. This final rule means more people might choose to offer E15 at gas stations and other fueling facilities.

Since 1988, EPA's UST regulations require fuel to be stored in systems that are compatible with the type of fuel being stored. Limited use of ethanol started in some parts of the United States in the late 1970s, with nationwide ethanol use beginning in the mid-2000s. Decades ago organizations, such as Underwriters Laboratories (UL), first designed and tested some UST system components—such as tanks and piping—to be compatible with E10. Most tanks and piping are now only available in 100 percent ethanol compatible options. But most other equipment was not tested for E15 or higher blends. Increasing the amount of ethanol from 10 percent to 15 percent in fuel can make a significant difference in materials' compatibility with many UST system components over the life of the UST system.

EPA's UST program provides helpful information about E15 and other emerging fuels on our website at www.epa.gov/ust. We continue to work cooperatively with states, industry, equipment manufacturers, and service providers on research about compatibility, corrosion and degradation concerns, and potential solutions. EPA will also continue our partnership with industry, states, and tribes to facilitate information sharing, guidance, and compliance with E15 compatibility requirements.