

**Qs&As For  
Compatibility Of Underground Storage Tank Systems With Biofuel Blends  
November 9, 2010**

**Why is EPA taking this action?**

Federal underground storage tank (UST) regulations require that owners and operators use an UST system that is made of or lined with materials that are compatible with the fuel stored. The unique chemical and physical properties of ethanol and biodiesel can cause degradation of certain UST system materials; therefore, it is important to ensure that all UST system components are compatible with biofuel blends stored in UST systems. Also, recent federal and state laws are encouraging increased use of biofuels, which means a greater number of UST systems will store biofuels in the future. This also means a greater number of UST systems will store fuel blends that contain higher percentages of biofuels.

**Is the compatibility requirement new for tank owners?**

No. EPA's current UST regulations require that UST systems be made of or lined with materials that are compatible with the substance stored. EPA instituted these requirements in 1988.

**Do all tank owners have to ensure their systems are compatible with higher blends of ethanol and biodiesel?**

No, only those tank owners who choose to store higher blends of ethanol and biodiesel must ensure their UST systems are compatible with the fuel stored.

**Is this issue related to the Underwriters Laboratories testing for dispenser compatibility?**

No. Dispensers are not considered part of an UST system – they are regulated by OSHA and Authorities Having Jurisdiction (AHJs), typically local Fire Marshals. Therefore, EPA does not have jurisdiction to require compatibility with dispensers. However, the results of dispenser testing may be informative, since materials used in dispensers can be similar to materials used in UST systems.

**How many UST systems will be able to demonstrate compatibility?**

EPA does not have sufficient information to determine how many UST systems will be able to demonstrate compatibility with higher blends of ethanol and biodiesel. In the *Federal Register* notice, EPA is soliciting comment on this question.

**What can tank owners do if they can't demonstrate compatibility with higher blends of ethanol and biodiesel?**

If tank owners can't demonstrate compatibility, they can choose to upgrade the necessary components in their system. Alternatively, they can choose to continue storing traditional blends of fuel. EPA does not require tank owners to store higher blends of ethanol or biodiesel.

**What is the cost of upgrading an UST system, if a tank owner chooses to do so?**

The cost of upgrading depends on a number of factors. The primary factor is what components of the system a tank owner decides to upgrade. Some components are relatively inexpensive to

replace. However, if a tank owner chooses to replace an entire system, the cost of a full system replacement can be over \$100,000.

**What will happen if a tank owner stores fluid in an UST system that is not compatible with that fluid?**

Storing incompatible substances compromises the integrity of an UST system and can lead to a release of stored substances into the soil or groundwater. Releases from USTs constitute one of the biggest threats to groundwater, the source of drinking water for almost half of Americans. Moreover, this is a violation of federal regulations, and the UST system owner/operator may be subject to enforcement and penalties for noncompliance.

**How is EPA addressing the compatibility of underground storage tank systems with biofuel blends, such as ethanol and biodiesel?**

EPA developed draft guidance to assist tank owners in complying with EPA's requirement that UST systems be compatible with the substance they store. Via a *Federal Register* notice, EPA is requesting comments on the draft guidance.

**When will EPA issue the UST system compatibility final guidance?**

Pending resolution of public comments, EPA plans to publish final guidance in early 2011.

**In the UST system compatibility draft guidance, EPA is requesting comments on which issues?**

As stated in the *Federal Register* notice, EPA is requesting comments on:

- UST components that may be affected by biofuel blends (see question immediately below for proposed list of components)
- Methods to demonstrate compatibility (see question below for proposed list of methods)
- Criteria for equipment manufacturer approval as a compatibility method
- Applicability to biodiesel blends
- Ability to demonstrate compatibility using the proposed guidance
- Other options that would sufficiently protect human health and the environment

**Which UST components does EPA believe may be affected by biofuel blends?**

In the *Federal Register* notice, EPA indicates these UST system components may be affected by biofuel blends and is requesting comments on the list:

- Tank or internal tank lining
- Piping
- Pipe adhesives and glues
- Line leak detectors
- Flexible connectors

- Fill pipe
- Spill and overfill prevention equipment
- Submersible turbine pump and components
- Fittings, gaskets, bushings, couplings, and boots
- Containment sumps (including submersible turbine sumps and under dispenser containment)
- Release detection floats, sensors, and probes

**What methods does EPA currently consider acceptable for demonstrating compatibility?**

In the *Federal Register* notice, EPA indicates they believe the most effective options for UST owners and operators to ensure compatibility when storing ethanol-blended fuels greater than 10 percent ethanol and biodiesel-blended fuels are:

- Certification or listing by an independent test laboratory
- Equipment manufacturer approval
- Another method deemed appropriate by the implementing agency

EPA is requesting comments on these methods.

**Where can I get more information?**

See *Federal Register* notice – add specifics regarding date published, etc.