

What can you do to reduce your risk?

Take the protective measures described in this brochure to monitor and inspect your fuel storage system.

Learn how to inspect your system:

- *Alternative Fuels and Underground Storage Tanks (USTs)*, US EPA Office of Underground Storage Tanks, www.epa.gov/ust.
- *Keeping Water Out of Your Storage System*, Steel Tank Institute, www.steeltank.com/Publications.
- *Petroleum Storage Tank Maintenance*, recorded webinar, www.steeltank.com/Education.
- *Tank Integrity Management (TIM)* online certificate course, www.steeltank.com/Education.
- *Guidance for Underground Storage Tank Management at ULSD Dispensing Facilities*, Clean Diesel Fuel Alliance, www.cleandiesel.org.
- *Diesel Fuel Storage and Handling Guide*, Coordinating Research Council, Inc., www.crao.org.

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Relevant resources

- *RP 900 Recommended Practices for Inspection and Maintenance of USTs*, Petroleum Equipment Institute (PEI), www.pei.org.
- *RP 111 Storage Tank Maintenance Standard*, Steel Tank Institute (STI), www.steeltank.com/Publications.
- *SP131 Standard for Inspection & Repair Underground Steel Tanks*, Steel Tank Institute (STI), www.steeltank.com/Publications.
- *RP 1621 Bulk Liquid Stock Control at Retail Outlets, Appendix D Water Gauging Procedure*, American Petroleum Institute (API), www.pei.org.
- *D6469-14 Standard Guide for Microbial Contamination in Fuels and Fuel Systems*, American Society for Testing and Materials (ASTM), www.astm.org.
- *D975 Standard Specification for Diesel Fuel Oils*, American Society for Testing and Materials (ASTM), www.astm.org.
- *R912 Installation Instructions for Shop Fabricated Aboveground Storage Tanks for Flammable, Combustible Liquids*, Steel Tank Institute (STI), www.steeltank.com/Publications.

Money-saving information
about your storage tank system

944 Donata Court
Lake Zurich IL 60047

STI
Steel Tank Institute

**Fuel Storage
Tank Owners/Operators:**

PROTECT your tanks
REDUCE your downtime
REDUCE your risk

**Inspect and maintain
your fuel storage system**

STI Steel Tank Institute

944 Donata Court
Lake Zurich IL 60047
847-438-8265
info@steeltank.com
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Is your storage tank system at risk?

Poor operations and maintenance procedures for monitoring and removing water from storage tank systems can lead to a number of risks, from fuel quality degradation and resulting poor vehicle performance, to microbial contamination and damage to the entire storage system.

All storage tank systems, both underground and aboveground, constructed of any material, and storing nearly any product—gasoline, diesel, residential and commercial heating oils, aviation jet fuel, and others—may be affected.

The potential for damage applies not only to the tank, but also to the entire storage system. And these risks can affect your profits.

Today's fuels are more susceptible to moisture separation and accumulation. Also, removing lead from gasoline and sulfur from diesel has



Consistent maintenance is more important than ever

had the side effect of allowing microbial growth to occur more readily, since lead and sulfur inhibit microbial activity.

Ethanol and biodiesel are important in today's fueling network. But allowing water to remain in these storage systems can cause fuel

Protect your business

separation, fuel degradation, and non-metallic equipment compatibility concerns.

For all these reasons, it's more important than ever to conduct regular inspection and maintenance of your entire UST or AST fuel storage system.

Reduce business risk Protect your fuel product

- Engine manufacturers have zero tolerance for water in fuel.
- Inspect your storage tank system frequently.
- Check for water with automatic and manual tank gauging.
- Remove and properly dispose of any water found in accordance with industry recommended practices.
- Investigate the source of any water found. Reference the body of resource materials listed in this brochure.
- Audit the fuel or product delivery process and the water content.
- Use water-sensitive filters and watch for slowed-down fueling or dispensing.
- Hire a professional to treat storage tanks with biocide on a regular basis if microbial activity is evident or suspected.
- Employ a qualified professional to periodically examine the inside of the tank.
- Remove water and sludge and periodically clean the tank, in accordance with industry-recommended practices.

Water entry points in your fuel storage tank system

