

## Back-Up Power has Become a Necessity



### Resources

- *SP001 Standard for the Inspection of Aboveground Storage Tanks, 5th Edition*, [www.steeltank.com/Publications](http://www.steeltank.com/Publications)
- *R111 Recommended Practice for Storage Tank Maintenance*, May 2016, Steel Tank Institute, [www.steeltank.com/Publications](http://www.steeltank.com/Publications)
- *D6469-14 Standard Guide for Microbial Contamination in Fuels and Fuel Systems*, American Society for Testing and Materials (ASTM), [www.astm.org](http://www.astm.org)
- *NFPA 30, Flammable and Combustible Liquids Code*, 2015 Edition, National Fire Protection Association, [nfpa.org](http://nfpa.org)
- *NFPA 110 Standard for Emergency and Standby Power Systems*, [nfpa.org](http://nfpa.org)
- *NFPA 37 Standard for the Installation and Use of Stationary Combustible Engines and Gas Turbines*, [nfpa.org](http://nfpa.org)
- *RP1400 Recommended Practices for the Design and Installation of Fueling Systems for Emergency Generators, Stationary Diesel Engines and Oil Burner Systems*, Petroleum Equipment Institute, [pei.org](http://pei.org)

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Money-saving information  
about your storage tank system

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**Fuel Storage  
Tank Owners/Operators:  
INSPECT your tanks  
MAINTAIN your tanks  
REDUCE your risk**

**Inspect and maintain  
your fuel storage system**

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Tank  
Institute

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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 storage and dispensing system equipment. And these risks can affect your profits.

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

Today's fuels are more susceptible to moisture separation and accumulation. Also, removing lead from gasoline and sulfur from diesel has had the side effect of allowing microbial growth to occur more readily, uninhibited by lead and sulfur.

Ethanol and biodiesel are important in today's fueling network. However, both are "hygroscopic," meaning they attract water. That's why tank owners and operators must be even more diligent in monitoring for and removing water from fuels and storage and dispensing systems.

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

### Free Resource

STI's *R111, Recommended Practice for Storage Tank Maintenance*, is available for free download at [www.steeltank.com](http://www.steeltank.com).



## ASTM and CRC Fuel Quality Standards

ASTM D6469 Microbial Contamination in Fuels

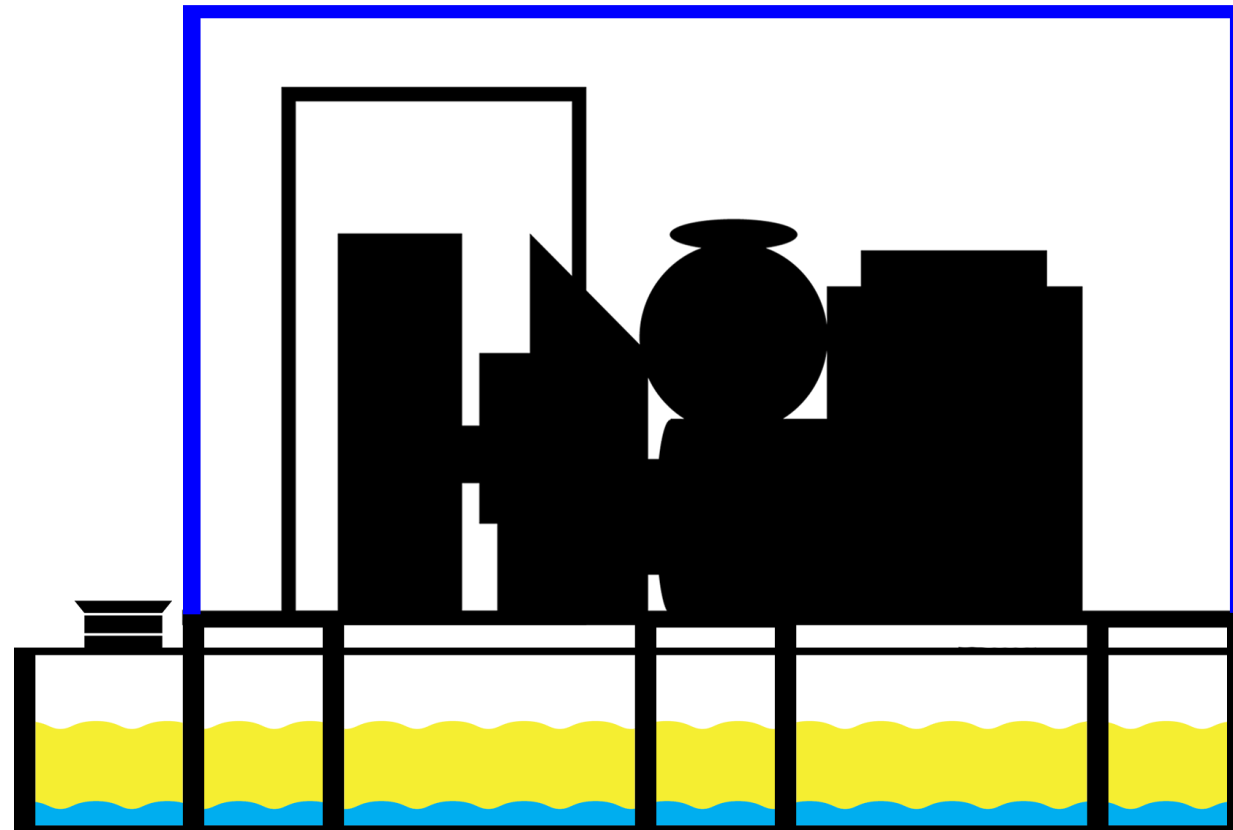
ASTM D2709 Water and Sediment/Particulation in Fuel

ASTM D7371 Biodiesel (Fatty Acid Methyl Esters) Concentration in Diesel

ASTM D7545 Oxidation Stability

ASTM D975 Specification for Diesel Fuel Oil

CRC Report No. 667 Diesel Fuel Storage and Handling Guide



## Reduce business risk Protect your fuel product

- Inspect your storage tank system frequently.
- Check for water with automatic or manual tank gauging.
- Investigate the source of any water found. Review the resource materials listed in this brochure.
- Remove and properly dispose of any water found or take other corrective action, in accordance with industry recommended practices.
- Consider alternative methods to control water in fuel and storage system, such as biocides, fuel "polishers," or corrosion inhibitors.
- Audit the fuel or product delivery process and the water content.
- Use water-sensitive filters and watch for slowed-down fueling or dispensing.
- 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.