



# advisor

Volume 21 Number 1

## Testing Spill Buckets

Last September at the National Tanks Conference in Boston, MA, spill buckets remained as a hot topic for a contamination source. Multiple surveys show that spill buckets only last five to seven years, much less than the 20 years that they are purported to last. A sampling of findings of different states included:

1. South Carolina reported that 71% of the site contamination comes from spill buckets.
2. Florida found 43% of the spill buckets are leaking.
3. Utah had 59% of the spill buckets failing.

Findings such as these have prompted the US EPA to propose a rule change that would have spill buckets tested annually for leakage.

Poor design, improper materials used for a product that is designed to hold fuel, lack of maintenance, and abuse from fuel haulers and snow plows all contribute to broken spill buckets.

Dan Crawford, P.G., with Murphy USA, Inc. and Kenneth Earnest, P.G., with Kadence Consultants, Inc. included a demonstration on how to hydrostatic test a spill bucket in the seminar they presented.

Following are instructions so you can conduct your own hydrostatic test:

1. Clean the spill bucket; remove all dirt, sand, trash, water and fuel.
2. If bucket has a drain make sure it is closed.
3. Fill each bucket with water 1-2 inches below the top of the fill pipe.
4. Record the beginning measurement. Wait 15 minutes then measure again. If there is no depth drop or less than 1/8 inch depth drop measure every 15 minutes for one hour. Record the final measurement and subtract from the beginning measurement.
5. An initial depth drop of 1/8 inch or a final depth drop of 1/8 inch or more indicates that your spill bucket needs to be replaced.

1<sup>st</sup> Quarter 2011

For a Spill Bucket Hydrostatic Test Form visit our web site [tankmgmt.net/spillbucket](http://tankmgmt.net/spillbucket).

## Is Ultra Low Sulfur Diesel Causing Corrosion?

Some pump and tank contractors and maintenance technicians have experienced rusting and corrosion of submersible extractors and pump castings. In addition, they state they are experiencing STP check valve and dispenser shear valve seating problems due to the corrosion and impact to other materials. Pumping systems are losing pressure and thus causing slow pumping. All the above are believed to be the results of **Ultra Low Sulfur Diesel (ULSD)**.

These instances prompted the Petroleum Equipment Institute (PEI) and the Steel Tank Institute (STI) to take a survey. Results showed these problems are being reported all over the country.

Conclusions of the survey were:

- It's not one refinery.
- It's not one pipeline.
- It's not one brand of fuel.
- Problem is not related to age of equipment.
- Corrosion appears same in liquid and vapor areas.

Not enough data was collected to know if there is a relationship between:

- Tank volume
- Throughput of the system
- Tank maintenance

American Petroleum Institute (API) began a study into the ULSD issues in October, 2010. This study is expected to be completed by July 2011.

Two ways to see if you may have issues with ULSD:

- Check fills ports on tanks that contain ULSD for rust in the drop tubes.
- When you change your fuel filters pour product through a strainer and check for rust particles.

If you find rust in either place you may have the mechanical or electronic line leak detector checked to make sure it is not full of rust.

## E 15 for Model Year 2001 or Newer

The U.S. Environmental Protection Agency (EPA) waived a limitation on selling gasoline that contains more than 10 percent ethanol for model year (MY) 2001 through 2006 passenger vehicles, including cars, SUVs and light pickup trucks. The waiver applies to fuel that contains up to 15 percent ethanol or E15. EPA Administrator Lisa Jackson made the decision after a review of the Department of Energy's thorough testing and other available data on E15's effect on emissions from MY 2001 through 2006 cars and light trucks.

"Recently completed testing and data analysis show that E15 does not harm emissions control equipment in newer cars and light trucks," said Jackson in an agency press release. "Wherever sound science and the law support steps to allow more home-grown fuels in America's vehicles, this administration takes those steps."

Last October, EPA approved a waiver allowing the use of E15 for MY 2007 and newer cars and light trucks. At that time, EPA denied a request to allow the use of E15 for MY 2000 and older vehicles and postponed its decision on the use of E15 in MY 2001 to 2006 cars and light trucks until DOE completed additional testing for those model years.

Gasoline station owners have expressed concerns over E15 because not all of the existing infrastructure is certified by the Underwriters Laboratories for the fuel. "The bigger issue is the pipes from the tanks to the dispensers and the materials used to connect them, the gaskets, glues and seals," said John Eichberger, vice president of government relations for NACS. To replace underground storage tanks, "you would have to crack concrete to get to them."

The agency also announced that no waiver is being granted this year for E15 use in any motorcycles, heavy-duty vehicles, or non-road engines because current testing data does not support such a waiver. These waivers represent one of a number of actions that are needed from federal, state and industry to commercialize E15 gasoline blends.

EPA is developing requirements to ensure that E15 is properly labeled at the gas pump. The label will be designed to prevent refueling into vehicles, engines, and equipment not currently approved for the higher ethanol blend. EPA granted the waiver after considering the E15 petition submitted by Growth Energy and 54 ethanol manufacturers in March 2009. In April 2009, EPA sought public comment on the petition and received about 78,000 comments.

## Operator Training

Don't forget to register for operator training. Now is the time with plenty of classes available. To register go to our website [tankmgmt.net](http://tankmgmt.net). Click on Operator Training. Below are the dates and locations of the upcoming classes.

March 1<sup>st</sup>. Topeka Shawnee County Library  
1515 SW 10<sup>th</sup> Avenue  
Marvin Auditorium 101B  
Topeka, Kansas

March 2<sup>nd</sup>. Doubletree Hotel  
10100 College Boulevard  
Kansas City Theatre Room  
Overland Park, Kansas

March 10<sup>th</sup>. Fort Hays State University  
Memorial Union  
600 Park Street  
Trails Room  
Hays, Kansas

April 5<sup>th</sup>. House of Schwan  
3636 North Comotara  
Meeting Room  
Wichita, Kansas

April 6<sup>th</sup>. Doubletree Hotel  
10100 College Boulevard  
Kansas City Theatre Room  
Overland Park, Kansas

**Note:** Kansas UST reports for UST permits for KDHE are due February 28<sup>th</sup>.

### WHAT IS TANK MANAGEMENT SERVICES?

TMS provides loss control and risk management assistance to UST owners who have third party liability insurance through Great American Custom as part of the Kansas Underground Storage Tank Liability Plan.

TMS can provide you with information on USTs –leak detection methods, and Federal and State regulations. Call TMS toll free at 800-530-5683 during normal Central Time Zone office hours (8-5). In the Topeka area, please call 233-1414. On the web go to [tankmgmt.net](http://tankmgmt.net). David Engelken is available to answer your questions. *This Service is free.*

To have the advisor E-mailed to you go to [tankmgmt.net](http://tankmgmt.net) click on Advisor.

Tank Management Services, inc. (TMS) has provided the written information in this newsletter for educational purposes to assist UST owners and operators in complying with current UST regulations and to assist them in reducing losses associated with releases from UST's. The information is an outline and may not be complete. Owners and operators are responsible to insure that they are in compliance with all applicable laws. The Kansas Department of Health and Environment can provide detailed information on compliance. The application or use of the information provided is the responsibility of the individual user.