

January 4, 2011

Tennessee Department of Environment and Conservation
Division of Underground Storage Tanks
Attention: Rhonda Key
4th Floor L&C Tower
401 Church Street
Nashville, Tennessee 37243

RE: Underground Storage Tank Program
Rule Number 1200-01-15-.17
Rule Title: Motor Fuels Containing Greater Than 10% Ethanol

Dear Ms. Key:

Steel tanks can store any ethanol fuel blend, including E15, safely. Steel Tanks installed prior to 2007, whether single wall or double wall, can safely store E15 fuel blends because ethanol is compatible with carbon steel. Steel Tank Institute does not believe that it is necessary to replace a single wall tank with a secondary containment tank to store E15.

Steel Tank Institute is part of a trade association, STI/SPFA, representing over a hundred fabricators of underground and aboveground storage tanks. Since 1969, STI has developed various tank technologies for fabricators involving corrosion control, secondary containment, and fire protection. Over 400,000 tanks have been built to STI specifications. Through our programs, STI validates the performance of the steel tank for all types of fuels.

Steel tanks are compatible with ethanol fuel blends. Gasoline blended with 10% ethanol constitutes over 70% of today's gasoline and is sold coast to coast. In some parts of the country, E10 has been an available fuel for over 25 years. Gasoline blended with 85% ethanol is dispensed at over 2000 locations. A majority of these ethanol blended fuels have been stored in steel tanks and without consequence.

A third party insurance company, STICO Mutual, offers environmental impairment insurance and warranty insurance on STI labeled tanks to steel tank fabricators. STICO Mutual has not handled any environmental incidents from a breach in the steel tank caused by storage of ethanol.

A recent set of tests performed by a global research laboratory, DNV (Det Norske Veritas), found zero detectable corrosion in steel samples exposed for two months to high percentage fuel grade ethanol blends.

(<http://www.steeltank.com/Publications/NewsUpdates/Details/tabid/368/ArticleId/6/Ethanol-Test-Results.aspx>)

The pipeline industry has also tested fuel grade ethanol to enable it to begin transporting ethanol fuel in the same manner it transports hydrocarbon based fuels, via pipeline.

Steel Tank Institute has posted to its website that ethanol fuel blends are compatible with steel tanks, and recently responded to the California regulatory community that E15 is compatible with steel.

(<http://www.steeltank.com/Publications/NewsUpdates/Details/tabid/368/ArticleId/9/California-Ethanol-Compatibility-Chart.aspx>)

Steel tanks have been constructed with the same material since Underwriters Laboratories first published standards for the storage of flammable liquid storage tanks over 80 years ago. UL offers a general listing on steel tanks that store flammable liquids, such as E85.

<http://www.steeltank.com/Publications/NewsUpdates/Details/tabid/368/ArticleId/18/UL-certification-for-E85.aspx>

Mechanical properties of steel tanks, such as tensile strength and yield strength, do not change when exposed to ethanol fuel blends. Steel will not soften in the presence of ethanol, nor can ethanol permeate through the steel material.

STI does recommend that existing steel tanks storing gasoline be cleaned before the introduction of ethanol. The ethanol will actually clean any residue and sludge that may have accumulated from years of operation on the tank bottom.

As with all fuels, STI recommends that water be kept out of the tank and existing water bottoms be removed from the storage tank so that no separation of the ethanol from the gasoline will take place.

Very truly yours,

Wayne Geyer
Executive Vice-President

