Biofuels Compatibility Resources

January 2013

Below are organizations with Web-based information, which can help UST stakeholders determine whether equipment and components installed in UST systems are compatible with biofuels. The UST equipment and components listed in the attached table generally follow what is listed in EPA's June 2011 *Guidance On Compatibility Of UST Systems With Ethanol Blends Greater Than 10 Percent And Biodiesel Blends Greater Than 20 Percent*. This table compiles currently available resources. We intend to add more resources and listings as available. For more information, contact Michael Pomes at pomes.michael@epa.gov.

California State Water Resources Control Board (CA SWRCB) UST Program

The CA SWRBC provides affirmative statements of biofuels compatibility for those manufacturers who have volunteered to participate. Manufacturer listings consist of PDF forms that include information on the types and models of UST equipment or components; UL listing; how long the component or equipment was manufactured; sizes; any unique identifiers to aid identification in the field; biofuels blend concentrations; and whether supporting documentation accompanies each form. You need the name of the manufacturer and model information to obtain biofuels compatibility information about a manufacturer's UST equipment and components.

Petroleum Equipment Institute (PEI)

To use PEI's UST Component Compatibility Library, you need the manufacturer name to obtain biofuels compatibility information about the types of UST equipment and components listed in EPA's June 2011 guidance on compatibility. PEI's library contains hyperlinks to statements of compatibility, written as business letters, from UST equipment and components manufacturers who have volunteered to have their statements posted on PEI's website. Each letter contains model and biofuels blend information for the UST equipment or component listed by the manufacturer. Manufacturers who would like their components included in PEI's UST Component Compatibility Library should email compatibility statements to compliance@pei.org; the preferred format for statements is PDF. See PEI's detailed instructions about submitting compatibility statements.

PEI also posts UL listings for UST pipe manufacturers who hold UL 971 certifications for their products; see Current UL 971 Listings on PEI's State Survey On UL 971. UL 971 includes consideration of compatibility of ethanol blends with the pipes being certified.

Steel Tank Institute (STI)

STI's Tank Manufacturer Statements of Compatibility website lists biofuels compatibility information. You need the name of the UST tank manufacturer to obtain biofuels compatibility information. This page contains hyperlinks to statements, written in the form of business letters, from UST equipment and components manufacturers who have volunteered to have their statements posted on STI's website. Each letter contains model and biofuels blend information for the types of tanks made by the manufacturer.

Underwriters Laboratories, Inc. (UL)

UL is a nationally recognized, independent testing laboratory, which publishes standards that are accepted as codes of practice in the UST industry. UL also certifies the safety of much of the equipment and many of the components used in UST systems. Part of the certification process includes consideration of whether UST equipment and components are compatible with biofuels. UL allows users to search for certifications on its Online Certifications Directory. You need the manufacturer's name to obtain biofuels compatibility information. You can also search with UL file numbers corresponding to the actual certifications, if you are able to find file numbers while reviewing the CA SWRCB listings or manufacturer websites.

√ -- Web sites for the organizations shown above have listings for one or more manufacturers of the UST component(s) or equipment listed for compatibility with biofuels.

UST Components and Equipment		CA SWRCB	PEI	STI	UL
Tanks (includes single-wall, double-wall, or triple-wall)	steel (includes sti-P3, composite, and jacketed USTs)	√	√	√	√
	fiberglass	√	√		√
Internal tank lining	lining applied as coating on inside of UST shell that contains product		√		
	fiberglass secondary tank installed inside primary tank	√	√		√
Piping (includes single-wall or double-wall and associated couplings, fittings, gaskets, and O-rings)	metallic (steel)	√	√		√
	fiberglass	√	√		√
	flexible nonmetallic	√	√		√
Flexible connectors (includes fittings and O-rings)		√	√		√
Drop tube		√	√		√
Spill prevention equipment (spill buckets)		√	√		√
Overfill prevention equipment (check release detection floats for overfill alarms)	ball float valves		√		
	automatic shutoff devices	√			√
Submersible turbine pump and components (includes bushings, gaskets, and O-rings)					√
Sealants	adhesive/glue (join fiberglass couplings, fittings, and pipes)		√		
	pipe dope (joins fiberglass to non-fiberglass couplings/fittings)				
	thread sealant*				

*Thread sealant is used for non-gasketed threaded joints that join metallic components or transition to steel from fiberglass pipe.

√ -- Web sites for the organizations shown above have listings for one or more manufacturers of the UST component(s) or equipment listed for compatibility with biofuels.					
UST Components and Equipment (Continued)		CA SWRCB	PEI	STI	UL
Secondary containment sump penetrations (includes boots [test and entry], couplings, fittings, gaskets, and O-rings)		√	√		√
Containment sumps (includes single-wall and double-wall)	submersible turbine sumps	√	√		√
	transition/intermediate sumps	√	√		√
	under dispenser containment	√	√		√
Release detection equipment	Floats				
	Line leak detectors		√		√
	Probes				
	Sensors				
Caps	Fill (includes gaskets and O-rings)	√	√		
	Riser (includes gaskets and O-rings)		√		
Product shear valves		√			√