Summary of Recent DOT / HazMat Issues – 4/06/08

As a follow-up to the talk I gave at the March 11th meeting, I thought it would be good to summarize what has happened in the tank Industry this spring.

Over the past month, the entire US pressure tank industry has come under the scrutiny of the US Department of Transportation (DOT). Many of the domestic tank manufacturers were visited by a DOT compliance agent and, since then, have had to modify how tanks are transported. These DOT regulations have been on the books for over 35 years and are subject to interpretation. The DOT recently informed all of the manufacturers how they interpret these Regulations and this has created new challenges for our marketplace. As you are all familiar with the DOT and the upcoming permitting issues, the tank market also has our challenges.

DOT regulations

The industry has long been aware of DOT regulations covering the shipment of Hazardous Materials (Title 49 CFR 100-185) via motor vehicle, rail freight and cargo vessel. These regulations define a hazardous material and dictate shipping papers (bills of lading), marking of cartons, labeling of product, and vehicle placarding of shipments containing hazardous materials under Section 172. *According to the DOT, compressed air in a pressure tank at a pressure greater than 40.6 PSIA (25.9 PSIG) is considered Hazardous Material.*

There are, however, exceptions to these requirements. Specifically, Section 173.306(g), "Limited quantities of compressed gases", covers pressurized well tanks. This exception allows the shipment of water pump system tanks under a very limited set of conditions that includes, among other things:

that tanks be of steel construction,
that charge pressure not be over 40 PSIG,
that tank volumes not be over 120 gallons,
that tank diameters not be over 24", and
that every tank be pneumatically tested to 100 PSIG.

The exceptions permitted under 172.306(g) relate to *labeling of product and placarding of shipments. They do NOT apply to shipping papers and marking and do nothing to alleviate the classification of "Limited quantities of compressed gases" as Hazardous Material.* Consequently, all steel pressure tanks shipped at 40 PSIG, pre-charge, must be marked as Hazardous Material, according to the DOT.

What does this mean?

Basically, what you will see is the following:

Most Steel well tanks will continue to be shipped with pre-charge of 40 PSI
All Steel well tanks will have to be pneumatically tested to a minimum of 100 PSI in order to be shipped at 40 PSIG.
Composite tanks will be shipped with pre-charge below 25.9 PSI
Boxes will be marked with a label identifying the hazardous material as compressed air.

ANSI/ WSC 2000 2005 certification

Water Systems Council has established a minimum tank standard, the ANSI/WSC PST 2000 - 2005 Pressurized Water Storage Tank Standard. This standard was developed and approved unanimously by the Tank Committee of the Water Systems Council to "define and promote, through voluntary written standards, minimum performance and construction requirements for pressurized water storage tanks for service in water well systems". The standard covers materials, design, construction, testing and marking of water well tanks. The standard was approved by the American National Standards Institute (ANSI) in 2005. Tanks which meet this standard can be found on the website, http://www.watersystemscouncil.org/standards/listing.cfm?std=PST2000.