

Visual Inspection of Thermoplastic Flexible Piping Systems

Visible evidence that might indicate the integrity of thermoplastic flexible piping system is compromised includes:

- Connections, riser pipes and flex connectors found within the sumps where the piping is terminated may be twisted, over-stressed or pushed out of normal alignment.
- The piping may be over bent within the piping sump or folded over itself (kinked).
- The outer jacket of double-walled (coaxial) piping may extend over the metallic ferrule of the pipe coupling.
- The outer jacket of double-walled (coaxial) piping may split as it attempts to grow over the metallic coupling.
- The piping may be swollen and appear to be bulging or “ballooned”.
- The piping may be wrinkling or it may be sticky/spongy and softer than it was originally.
- The outer walls of the primary piping and/or the secondary containment may be cracking.
- The rubber boots that are installed in the walls of the containment sumps may be stretched or torn.
- The “donuts” that make up part of the boot of some piping systems may be dislodged or the clamps may not be in place.
- The rubber “test” boots that are installed at piping terminations of some coaxial pipe systems may appear to be compressed or distorted.
- The metallic connectors that are part of some piping system couplings may be cracked.

NOTE: Photographs that illustrate these points are available at:

www.dep.state.fl.us/waste/quick_topics/publications/pss/tanks/FlexPipe/MSshow.pdf

UST owners or operators with site-specific concerns regarding their facility should contact their local agency. A comprehensive list of UST local agencies can be found at www.waterboards.ca.gov. Additionally, UST owners or operators may want to contact the piping manufacturer or the piping installation contractor to discuss specific piping concerns. A website directory of the Petroleum Equipment Institute’s member companies can be found at www.pei.org.