

**Pennsylvania Department of Environmental Protection
Division of Storage Tanks**

January 5, 2016

IMPORTANT NOTICE

UL-142 Closed-top Dike Aboveground Storage Tanks Inspections

The Department of Environmental Protection (Department) has recently been in discussions with the Steel Tank Institute (STI) regarding the inspection requirements for Underwriters Laboratories, Inc. (UL)-142 listed closed-top dike aboveground storage tanks (ASTs). STI is a Nationally-recognized association that trains and certifies individuals to inspect ASTs to the STI's Standard for the Inspection of Aboveground Storage Tanks (SP001). The Department acknowledges this AST inspector certification as one of the acceptable pre-requisites in order to become a Department-certified aboveground manufactured storage tank inspector.

STI's SP001 Inspection Standard does not specifically describe AST inspection methodology for tanks constructed to the UL-142 closed top dike standard. Rain shields, which are welded from the upper portion of the shell of the AST to the steel containment box, limit access to the lower portions (approximately two-thirds) of the tank shell, making ultrasonic thickness measurements and visual inspections of the enclosed portion of the tank shell difficult.

The Department has taken the position that inspectors may use the following criteria to evaluate UL-142 closed-top dike tank system (must be labeled and come from manufacturer with welded rain shields in place) integrity and suitability for service during AST in-service integrity inspections:

1. Visual inspection shall be conducted through an access port to yield enough information about the condition inside the closed top dike area and to determine if liquid is present.
2. If water has entered the space or conditions indicate corrosion could be causing a problem, further evaluation may be needed. AST modifications may be needed in order to provide access for additional assessment.
3. Ultrasonic thickness measurements shall be taken on the tank shell wherever accessible, such as above the rain shields.
4. Ensure tank systems are operated with spill and overfill protection controls. (spill bucket, overfill protection, block valves on product lines, anti-siphon/solenoid valves)
5. Ensure an emergency vent is present and functions for the closed-top containment structure.

If you have questions or desire clarification of the above, please contact the Division of Storage Tanks at (717) 772-5599.