

UL 971 Frequently Asked Questions: State Water Resources Control Board Staff Responses

The purpose of this document is to answer some common questions that have arisen to date about the transition to the revised requirements of Underwriters Laboratories (UL) Standard for Nonmetallic Underground Piping for Flammable Liquids (UL 971).

Does pre-July 1, 2005 UL 971 piping maintain its listing?

As of July 1, 2005, newly-manufactured piping must meet the revised UL 971 standard. The standard does not affect the listing of piping manufactured prior to July 1, 2005. Therefore, UL 971-listed piping manufactured prior to July 1, 2005 is not required to be removed.

What do the staff of the State Water Resources Control Board recommend in regards to the transition to the revised requirements of UL 971?

Consider both the UL 971 standard and design and construction requirements when determining pipe to install after July 1, 2005. The California Health and Safety Code, Chapter 6.7 not only requires an independent testing organization listing, but requires that primary containment be compatible with the hazardous substance stored and that secondary containment be constructed to prevent structural weakening as a result of contact with any hazardous substance released from the primary containment.

We strongly recommend that any UST owners or operators choosing to install thermoplastic flexible piping, install only that piping that has been manufactured to meet the post-July 1, 2005 revised UL 971 standard, because we expect this piping to be less susceptible to degradation.

How do I identify piping manufactured on or after July 1, 2005?

Purchasing UL-listed piping after July 1, 2005 does not guarantee that the piping was manufactured after July 1, 2005 and meets the revised UL 971 standard. In fact it may take months, or even years, before inventory of piping manufactured before July 1, 2005 is depleted. Fortunately, piping manufacturers are required by UL to mark the date of manufacture on the piping at 10-foot intervals, and on fittings or fitting bulk packaging. Most piping manufacturers use what is called a modified "Julian Date Code." This code typically consists of a two-digit year code in which the piping was made (for example 2005, reads as 05), and a three-digit code for the day of the year (from 001 to 365) or a four-digit calendar month and day notation (for example 0412 for April 12). Depending on the piping manufacturer, a modified Julian Date Code for piping manufactured on April 12, 2005 could read 05102 (two-digit year identified first, followed by the three-digit code for the day of the year), or 10205 (three-digit day of year identified first, followed by the two-digit year code), or 050412 (two-digit year identified first, followed by two-digit calendar month, ending with the calendar day).

As each manufacturer uses a different modified Julian Date Code, it may take some time to determine the date the piping was manufactured. If you are unable to locate or

decipher the date the piping was manufactured you can contact the supplier or manufacturer of the piping for assistance. Also note that there are some differences in labeling (i.e., changes to product type and fuel types), and this might also help to determine the difference between pre- and post-July 1, 2005 piping.

Can piping manufacturers use listings from an independent testing organization other than UL?

There are a number of independent testing organizations under which piping may be listed, and many piping manufacturers hold listings under more than one independent testing organization. Therefore, it could be possible that piping manufacturers who fail to meet the revised UL 971 standard will continue to manufacture and sell their piping using one of their other independent testing organization's listings.

While this practice is not in direct violation of statute or regulation, you may want to question the manufacturer as to whether the piping is not UL listed because of testing failures related to the revised UL 971 or whether the piping is still undergoing testing. Piping that failed the revised UL 971 standard may have a greater probability of failure in the field, and may not meet California's statutory requirement for product compatibility.¹ If the piping is still undergoing testing, we recommend not installing the piping until it receives a passing report from UL.

¹ Health and Safety Code, Chapter 6.7, sections 25290.1(c)(1)-(2), 25290.2(c)(1)-(2), and 25291(a)(1)-(2).