

ASK THE TAC

Last December NASSCO's Technical Advisory Council, along with invited guests, presented an industry-wide webinar on remaining useful life of gravity pipe assets. The attendees were invited to submit questions, which are presented here, along with answers from the TAC. To view the webinar, please visit nassco.org/resources.



What are the recommendations you would like to see included to reduce piping failures caused by soil while designing and constructing?



Most utility owners have standard details that provide recommended trench requirements for bedding and backfill. Installing pipe per these standards is the biggest step towards improving the pipe asset remaining useful life. For installations that may have migrating groundwater conditions in the trench, like a French drain, the designer should consider the use of trench dams or collars to impeded flow of groundwater and keep the bedding and backfill in place.



As the technology of resins and liner material has advanced, are you finding the new material performs worse, as well as, or better than some of the older technology, say from 20+ years ago?



Innovation within the CIPP industry and the trench less industry in general has made the application of these methods more affordable. The materials are better and can address a wider range of pipe sizes and applications (gravity and pressure). Perceived quality issues may be a function of workmanship, inspection, and assurance testing.



Beside CIPP technology, is there any other method of rehab that will deliver over 100-year useful life expectancy?



Yes. Sliplining, spiral wound pipe, coating systems, etc. have the potential to be over 100-year useful life solutions. The key is proper use of the technology and industry standard installation procedures. Regardless of the rehabilitation technology used, inspection and quality assurance testing of the installed solution needs to be a part of every project to ensure the useful life goal can be met.



How is it recommended to use other types of geo-spatial or in-pipe condition assessment data (MSI, PPR, etc) in identifying remaining useful life?



In relation to PACP™ inspection, multi-sensor tools provide good supplemental data to provide context to the video inspection; however, they do not replace the video inspection and cannot be used as a sole basis for PACP coding and grading. Typically, a multi-sensor inspection is performed on larger gravity pipe assets and can provide better quantification of solids deposition (sonar), deformation and wall section loss (laser profiling). We anticipate further innovation and introduction of tools for adding more value to MSI in the future.

