Usually when the CIPP crews arrive, there’s some kind of underground drama in the street. In this case, rainwater from leaking pipe joints dripped over the heads of event guests seated in luxury suites and down the walls of the Louisiana Superdome. The leaking pipes and busy event schedules at this premier property looked like they were on a collision course.

Jay Arnold, chief plumber inspector for the City of New Orleans contacted an area plumbing company to look at replacing 16 of the 60 leaking lines. Once that company realized that Cured-in-Place Pipe (CIPP) might be a faster, more viable option, they brought in Masterliner, Inc.

Arnold had evaluated repairing the lines using traditional plumbing methods. The estimate supplied by the plumbers was actually lower than Masterliner’s but had a much longer timeline. That had a big impact on their decision. Arnold knew if he used CIPP, his staff would not need to be involved at all. Masterliner’s crews could do it in three or four days, whereas a conventional plumber would need 2.5 weeks and involve the Dome’s electrical and HVAC people too. The busy Superdome schedules could not be disrupted. All things considered, using CIPP made excellent economical sense.
Dwayne Rovira, Materliner’s President, said this CIPP project needed a user-friendly combination of resin/catalyst with one-hour stability and ambient curing. A specially-formulated CoREZYN vinyl ester resin from Interplastic’s Thermoset Resins Division was used to achieve these goals. “Their CIPP vinyl ester resin was modified to make it an ambient cure product, requiring no external heat to gel and cure,” explained Rovira.

Vitolic pipe is commonly used for pressure water lines to support water sprinklers but the Superdome has it on its rainwater drains because of the volume they experience there. Video taken inside the lines showed scale deposits so first the lines were thoroughly cleaned. The CoREZYN vinyl ester resin was maintained around 60°F/16°C so it would not cure faster in warmer environments. Each drain line was 45 to 60 feet long (14 to 18m long); however the Superdome’s maintenance crew only wanted 25 to 35 feet (8 to 11m) of each pipe lined. It took only ten minutes to impregnate the 4-in. (102mm) Masterliner CIPP tube and invert it with compressed air in the host pipe. Complete cure was achieved in one hour.

The relining went even more quickly than expected. “We were able to do two pipes at a time. Generally the video crew (which also evaluates finished work and cuts any reconnections) can stay with the lining crew, but by the end of the second day, the video crew was five drains behind the lining crew!” added Rovira.

Masterliner’s Rovira says they’ve used just about every resin on the market but have rejected all of them except the CoREZYN vinyl ester. Interplastic’s Thermoset Resins Division’s labs helped develop the specifications for Masterliner. “We are getting excellent physicals, test results and superior stability from it. We’ve never had any negative performance issues with this product.” Because of this, CoREZYN resin has been used since the first Masterliner CIPP product was put in the ground in March 1994. Epoxy is typically used for this type of waterline rehabilitation but Rovira says the CoREZYN vinyl esters have all the capabilities necessary to reliably withstand this environment.

CIPP is new technology for the engineering department at the Louisiana Superdome but Rovira says the staff there couldn’t be happier with the work. “The Superdome’s staff said it was crucial to avoid disrupting the Dome’s busy event schedule. We completed 15 out of 16 pipes in just two days. That’s one-tenth of the time a conventional plumber would need. The Dome staff was very delighted.”