

## 2 Year Inspection Shows Amazing Results!



Spiral Weld Steel Pipe manufactured by Northwest Pipe and internally lined with Madison's CorroPipe II PW®

In 1997, the Denver Water Board joined forces with Northwest Pipe and Madison Coatings International to resolve a problem at Lake Marston, a huge manmade reservoir. Every year, towards the end of the summer, customers in Southwest Denver complained that their drinking water (yielded from the Marston reservoir) smelled "foul" and tasted terrible.

Upon investigation, the Denver Water Board discovered the problems were a result of a common phenomenon known as inversion. As the temperature drops in August, the water on the reservoir's surface grows cold and, being more dense, sinks to the bottom of the lake. In essence, the fresh surface water swaps places with the murky water from the depths of the reservoir. Although the water was perfectly healthy to drink, the Board acted quickly to resolve the problem and

initiated construction of a raw water pipeline designed to bypass Lake Marston and carry water directly to the treatment plant during the months when the lake is prone to inversion.

Northwest Pipe manufactured 8,000 lineal feet of 108" diameter steel pipe. Northwest Pipe realized that service conditions within the pipe would be quite harsh, so they demanded a lining that offered superior abrasion resistance and longevity, but met ANSI/NSF standards for potable water applications.

The coating had to be absolutely inert; the parties couldn't risk introducing one potential off-taste problem in the course of solving another. Northwest Pipe chose to line the pipe with Madison's CorroPipe II PW®, a two component, quick setting, 100% solids polyurethane specifically designed to protect potable water pipelines.

The performance has been amazing. Since the installation of the bypass, the Board has thoroughly inspected the pipeline on three separate occasions. On each occasion, they have been delighted with the performance of the lining.

The most recent inspection took place on December 15, 1999 and brought together engineers and field personnel from Denver Water

and Northwest Pipe. Officials from both organizations were thrilled to discover Madison's polyurethane lining remained in excellent condition; no touch up or repairs were needed to any of the 225,000 square feet of steel surface.

Neal Kelemen of Northwest Pipe was present during the inspection and noted the lining's incredible performance: "Visual inspection showed the polyurethane lining to be in extremely good condition. The lining still retained a gloss surface when wiped clean. No blisters or obvious defects were observed. Minor field touch-ups to the polyurethane that were made during installation were intact. The field applied joint material did not show any delaminations; in fact, it was difficult to detect the point of interface between the factory and field applied material".

John Bambie of the Denver Water Board was also present during the inspection and commented on the performance of CorroPipe II PW®. Noting that the Board has since chosen CorroPipe II PW® as an alternate lining for another large project, Bambie said he was "very pleased with the product's performance".

Madison's CorroPipe II PW® is now covered by American Water Works Association Standard ANSI/AWWA C222, Polyurethane Coatings for the Interior and Exterior of Steel Water Pipe and Fittings.



Madison Chemical Industries, Inc.

The World Leader for Infrastructural Coatings™

Phone: (905) 878-8863 Fax: (905) 878-1449 e-mail: [sales@madisonchemical.com](mailto:sales@madisonchemical.com)

490 McGeachie Drive, Milton, Ontario, Canada L9T 3Y5 [www.madisonchemical.com](http://www.madisonchemical.com)