

**Application:** Contaminated Sediment Dewatering

**Customer:** Public Utility, Saginaw, Michigan

**Product:** TitanTube® Geotextile Tube

### BACKGROUND

A public utility in Michigan, that currently provides both natural gas and electricity to over 1.7 million homes and businesses, had formerly operated a Manufactured Gas Plant (MGP) to produce manufactured gas from coal in the city of Saginaw, Michigan.

Commercial operations of these Manufactured Gas Plants (MGP) began in the United States in the early 19th Century and operated 24 hours a day, 7 days a week, 52 weeks a year to produce the gas urgently required by their customers. For over a century and a half the manufactured gas industry played a significant role in the nation's economy. More than 50,000 gas works operated at various times during this period ending just after WWII.

### THE PROBLEM

During the life span of the industry, billions of gallons of extremely hazardous wastes were generated. A substantial amount of these wastes were utilized by America's chemical and construction industries.

However, often coal tar and other associated wastes from the gas works were simply discharged into nearby waterways or deposited into nearby landfills, pits or underground tanks. Coal tar and associated wastes laced with high concentrations of Arsenic, Lead, Benzene, Phenols, Chromium, Xylenes, Toluene and PAHs contaminate many former industrial areas, posing a dilemma for those involved redeveloping brownfields.

Michigan's Saginaw River was one such body of water that required cleanup of approximately 30,000 cy of contaminated sediment. The sediment in question consisted of silts, sands and large quantities of clay with an overall percent solids of between 8 and 10.

