



# MARKET APPLICATION FOCUS

*Clean Water Treatment Structures*  
*Concrete Repair/Protection/Waterproofing*  
*Leaking Cracks & Surface Erosion*

**The Project:** Trenton Water Works  
Trenton, NJ  
**The Owner:** City of Trenton, NJ  
**The Specifier:** Buck, Seifert, & Jost  
**The Year:** 1996

## **THE PROBLEM**



After more than 40 years of providing its community with a clean water supply, the Trenton Water Works treatment facility was in need of a major upgrade.

Condition surveys of the concrete flocculation/sedimentation tanks revealed considerable erosion and spalling of the concrete surface and cracking of the tank walls. The roof slab had also suffered cracking and wear after exposure to many harsh winters. After documenting all necessary repairs and mapping all existing cracks, a comprehensive repair and protection system from Sika was selected.

## **THE SIKA SOLUTION**

Leaking water through moving cracks presented a formidable challenge. Sikadur® Combiflex® was selected - a unique "strip and seal" system which offers excellent movement capability even on large, irregular cracks or joints. Combiflex provides an absolutely watertight seal where conventional sealants or caulks cannot.

The spalling and erosion of the tank walls was addressed using a "repair and protect" approach. SikaTop® Plus repair mortars were used to restore the profile of the concrete. These polymer-modified repair mortars offer excellent strengths and adhesion, and contain a corrosion-inhibiting admixture to help protect reinforcing steel from corrosion.



Finally, the surface of the tank walls was protected using Sikagard® 62, a high-build epoxy protective coating. All repairs were made using NSF/ANSI standard 61 approved products for drinking water contact.

CASE STUDY