

### **TECH NOTE**



**Paul Derby** *Xypex Technical Consultant* 

# FCM 80 for Rehabilitation of Areas with Low to Medium Pedestrian Traffic

The Riverside WTP rehabilitation project commenced in late 2015. The basic scope of work included the repair and resurfacing of the interior and exterior walls of the sedimentation basins, filters and flocculation basins. In addition, Xypex Concentrate and Xypex FCM 80 were used to coat the top surfaces of the non-air entrained concrete walkways and beams. Xypex was chosen to protect these horizontal elements from water ingress, chemical exposure and potential freeze thaw damage.

This report reviews the performance of the Xypex Concentrate and FCM 80 applications that were installed approximately 2.5 to 3 years prior to the site inspection.

### **Application and Performance**

Both Xypex products performed well and have provided a waterproof and slip-resistant surface on the horizontal elements. FCM 80 material was applied by trowel (stainless steel pool trowels were utilized to reduce surface tearing) 12 - 24 hours after installation of a 2 pounds per square yard coat of Xypex Concentrate. After 2.5 - 3 years the composite coating system is exhibiting excellent wear and physical properties with no signs of the material delaminating, crazing or cracking.







## **TECH NOTE**

### **Owner's Report**

The owners reported that Xypex FCM 80's non-slip characteristics provided additional safety as a walking surface for plant personnel while at the same time providing necessary waterproofing of the horizontal elements. Immediately after installation some areas of discoloration were noticed on the surface of FCM 80. This is believed to have been caused by rain or humidity that created pooling water on some areas of the newly applied material. However, by the time of inspection these areas no longer exhibited discoloration and the material aesthetics and appearance were uniform. The owner also noted that the operators find the semi-flexible FCM 80 surface comfortable to walk on and are very pleased with the overall performance to date.

#### **FCM 80 Benefits**

The use of FCM 80 as a pedestrian coating system has merit as part of an overall protective and waterproofing approach to horizontal surfaces and should be considered on future projects involving water and wastewater treatment plants and other areas where low to medium pedestrian traffic is expected. FCM 80 has proven to be an effective waterproofing and protection solution for the horizontal surfaces at the Raccoon Creek Project in Summerville, Georgia and the Riverside WTP in Gainsville, Georgia, with the added benefit of also being a comfortable and non-slip surface to walk on.