



Lyman Run Dam

Galeton, Pennsylvania, USA



Contractor
ALLAN A. MYERS INC.

Products
CONCENTRATE

Project Type
DAM



Built in the early 1950s, the old Lyman Run Dam at the 595-acre state park near Galeton experienced seepage and leakage almost since its construction. Closely monitored, the dam was finally closed for safety reasons and the surrounding lake breached and drained in April 2000. In April 2004, Allan A. Myers Inc. of Worcester began the removal of the old dam and spillway and the construction of the new, 50-ft-high, 1,000-ft-long earthen dam and spillway.

Hairline cracking in the concrete spillway of the new Lyman Run Dam required sealing before dam construction completion. Lehigh University was asked to investigate the cause of the cracking and possible solutions to effectively seal the cracks. In concrete spillways, however, the destructive power of water can be evident not only in concrete cracking but in the corrosion of the concrete rebar and overall deterioration of the structure as well. [Xypex Crystalline Technology](#) and supporting products were specified and used because of their proven reliability in solving all these problems.

72,000 sq.ft. of the concrete structure was coated with Xypex [Concentrate](#) followed by Xypex [Modified](#).

Xypex penetrates deep into concrete to form a non-soluble crystalline structure in pores and capillaries to block the penetration of water from any direction. Because it works from within the concrete and, unlike traditional barrier-systems, is not dependent on surface-adhesion, Xypex is particularly well suited to dams and spillways where extreme hydrostatic pressure is a common occurrence. Preventing water penetration from within also means that Xypex can better protect rebar from corrosion. The decision to specify Xypex also took into consideration the fact that Xypex products have, over some forty years, been highly successful in similar applications to concrete dams and spillways throughout the world.