



EUCLID CHEMICAL

## PROJECT PROFILE

# MINSI LAKE DAM



### PROJECT DATA

**Location** – Upper Mount Bethel Township, PA  
**Application** – Cast-In-Place Concrete Spillway  
**Design Engineer** – Schnabel Engineering, Inc.  
**General Contractor** – KC Construction Company  
**Concrete Producer** – Pocono Transcrete  
**Applicator** – Performance Construction  
**Total Area** – 2,000 ft<sup>3</sup> (56.6 m<sup>3</sup>)

### PRODUCTS FEATURED

#### EUCON® SRA-XT

Shrinkage Reducing Admixture

#### CONEX®

Shrinkage Compensating Admixture

### SCOPE OF PROJECT

Replacement of the trapezoidal weir, chute and stilling basin in the spillway



Photos courtesy of Schnabel Engineering, Inc.

### PROJECT SUMMARY

The project involved replacement of the deteriorated and inadequate trapezoidal concrete weir, chute and stilling basin with a new cast-in-place concrete spillway. The replacement spillway is a two-stage, five-cycle labyrinth weir designed to generally match existing spillway hydraulic characteristics for flows up to the computed 100-year flood and also pass the Probable Maximum Flood without overtopping the embankment. The spillway side walls are 1 ft (0.3 m) wide at the top with a 1:16 batter on the back side: 1 ft (0.3 m) wide at the top and 2 ft (0.6 m) wide at the bottom of the 16-foot-high (4.9 m) wall section. The labyrinth weir walls have a constant width of 1.5 ft (0.5 m). By utilizing the combination of EUCON SRA-XT and CONEX in the concrete for the spillway weir and walls, cracking was virtually eliminated.