

Dam: Penn Forest

Country USA

River Wild Creek

40°55'46.05"N 75°33'58.15"W

40.929459 -75.566154

Owner/Client Bethlehem Authority, City of Bethlehem

Designer/Engineer Gannett-Fleming Inc.

Contractor Conti Enterprises Inc.

Purpose (code) W

Site start 01.08.1996

RCC start 18.09.1997

RCC completion 29.10.1998

Site completion 15.12.1998

Height (m) 49

Length (m) 610

Volume of RCC ( $m^3 \times 10^3$ ) 283

Total volume ( $m^3 \times 10^3$ ) 283

Reservoir capacity ( $m^3 \times 10^6$ ) 2

Upstream slope V

Forming of upstream face (code) (6)

Downstream slope 0.50

Forming of downstream face (code) (15)

(7)

Spillway slope conduit

Forming of spillway face (code)

Depth of layers (mm) 300

Depth of lifts (mm) 300

Cement content ( $kg/m^3$ ) 58

Pozzolan content ( $kg/m^3$ ) 41

Code for pozzolan (F)

RCCDAM Unique Serial No. RCCDAM0201

### Under Construction



RCCDAM0201UC

### Google Earth



RCCDAM0201GE

# Guide to Abbreviations

## Purpose

- E Environmental
- F Flood control
- G Groundwater recharge
- H Flood control
- I Irrigation
- N Navigation
- P Pollution control
- R Recreation
- W Water supply

## Facing method

- (1) Traditional concrete against formwork
- (2) Traditional concrete against formwork with external geomembrane
- (3) RCC against formwork
- (4) RCC against formwork with external geomembrane
- (5) Traditional concrete against precast concrete panels
- (6) Traditional concrete against precast concrete panels with geomembrane
- (7) RCC against precast concrete panels
- (8) RCC against precast concrete panels with geomembrane
- (9) RCC against precast concrete panels with hot poured membrane
- (10) RCC against precast concrete blocks
- (11) Reinforced conventional concrete cast before RCC placement
- (12) Reinforced conventional concrete cast after RCC placement
- (13) Reinforced concrete cast against precast units or slip-formed facing elements
- (14) Slip-formed/extruded facing elements
- (15) RCC supported by fill shoulders
- (16) Mechanically compacted unformed face of RCC
- (17) Unformed face of RCC
  - ' GEVR/GE-RCC
  - \* Stepped face

## Pozzolans

- (-) No Pozzolan Used
- (C) High-lime flyash (ASTM Class C)
- (F) Low-lime flyash (ASTM Class F)
- (M) Milled sand
- (N) Natural pozzolan (ASTM Class N)
- (R) ROLAC (mixture of flyash and slag with or without limestone fines)
- (S) Ground-granulated blast-furnace slag
- (L) Mixture of GGBFS and limestone fines