

Dam: Shimagawa

Country Japan

River Shima

36°41'47.34"N 138°46'53.68"E

36.696484 138.78157

Owner/Client Gunma Prefecture

Designer/Engineer Gunma-ken

Contractor Taisei Construction Co Ltd, Sato Kogyo Co Ltd and Hazama-gumi Co Ltd J.V.

Purpose (code) F W

Site start 01.03.1991

RCC start 01.01.1994

RCC completion 31.05.1996

Site completion 31.03.1998

Height (m) 90

Length (m) 330

Volume of RCC ( $m^3 \times 10^3$ ) 390

Total volume ( $m^3 \times 10^3$ ) 516

Reservoir capacity ( $m^3 \times 10^6$ ) 9

Upstream slope V  
0.50

Forming of upstream face (code) (1)  
(1)

Downstream slope 0.80

Forming of downstream face (code) (1)

Spillway slope 0.80

Forming of spillway face (code) (1)

Depth of layers (mm) 250

Depth of lifts (mm) 750

Cement content ( $kg/m^3$ ) 84

Pozzolan content ( $kg/m^3$ ) 36

Code for pozzolan (F)

RCCDAM Unique Serial No. RCCDAM0171

## Completed Dam



RCCDAM0171CD

## Google Earth



RCCDAM0171GE

# 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