

Dam: Kubusugawa

Country Japan

River Kubusu

36°30'37.34"N 137°11'15.81"E

36.510372 137.187729

Owner/Client Toyama Prefecture

Designer/Engineer Toyama-ken

Contractor Maeda Construction Kogyo Co Ltd., Ohbayashi Co Ltd and Shinei Construction Co Ltd. J.V.

Purpose (code) F H I W

Site start 24.03.1993

RCC start 01.04.1998

RCC completion 31.12.1999

Site completion 30.10.2002

Height (m) 95

Length (m) 253

Volume of RCC ( $m^3 \times 10^3$ ) 364

Total volume ( $m^3 \times 10^3$ ) 469

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

Upstream slope V  
0.40

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

Downstream slope 0.78

Forming of downstream face (code) (1)

Spillway slope 0.78

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. RCCDAM0228

## Completed Dam



RCCDAM0228CD

## Google Earth



RCCDAM0228GE

# 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