

Dam: Shimantan

Country: China

River: Gunhe

33°16'56.23"N 113°33'17.09"E

33.282288 113.554749

Owner/Client: Department of Water Resources, Henan Province

Designer/Engineer: Tiangjin Investigation & Design Institute

Contractor: 11th Construction Bureau and Department of Electricity in Wuyang

Purpose (code): F I W

Site start: 31.07.1993

RCC start: 01.04.1994

RCC completion: 30.12.1995

Site completion: 15.07.1996

Height (m): 41

Length (m): 650

Volume of RCC (m<sup>3</sup>x10<sup>3</sup>): 272

Total volume (m<sup>3</sup>x10<sup>3</sup>): 351

Reservoir capacity (m<sup>3</sup>x10<sup>6</sup>): 120

Upstream slope: V

Forming of upstream face (code): (3')

Downstream slope: 0.75

Forming of downstream face (code): (3) \*

Spillway slope: 0.75

Forming of spillway face (code): (1)

Depth of layers (mm): 300

Depth of lifts (mm): 300

Cement content (kg/m<sup>3</sup>): 98  
51

Pozzolan content (kg/m<sup>3</sup>): 98  
107

Code for pozzolan: (F)

RCCDAM Unique Serial No.: RCCDAM0163

## Google Earth



RCCDAM0163GE

# 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