

Dam: Songyue (1st Stage)

Country: China

River: Hailanhe

42°28'44.74"N 128°55'48.97"E

42.479095 128.930267

Owner/Client: Helong Electricity Corporation

Designer/Engineer: Yanbian Investigation and Design Institute of Water Resources

Contractor: Helong Construction Bureau of Water Resources

Purpose (code): F H I R W

Site start: 01.09.1997

RCC start: 01.01.1998

RCC completion: 30.04.1999

Site completion: 10.09.1999

Height (m): 29

Length (m): 271

Volume of RCC ( $m^3 \times 10^3$ ): 44

Total volume ( $m^3 \times 10^3$ ): 77

Reservoir capacity ( $m^3 \times 10^6$ ): 21

Upstream slope: V

Forming of upstream face (code): (1)

Downstream slope: 0.73

Forming of downstream face (code): (10)

Spillway slope: conduit

Forming of spillway face (code): *Unknown*

Depth of layers (mm): 300

Depth of lifts (mm): 2000

Cement content ( $kg/m^3$ ): 80

Pozzolan content ( $kg/m^3$ ): 100

Code for pozzolan: (F)

RCCDAM Unique Serial No.: RCCDAM0212

## Google Earth



RCCDAM0212GE

# 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