

Dam: Kafue Gorge Lower (KGL)

Country: Zambia

River: Kafue

15°52'8.6"S 28°31'32.05"E

-15.869056 28.525570

Owner/Client: *Unknown*

Designer/Engineer: Power China/SinoHydro

Contractor: Power China/SinoHydro Co. Ltd. (11th Construction Bureau)

Purpose (code): H

Site start: 15.01.2016

RCC start: 06.06.2018

RCC completion: 16.04.2020

Site completion: 31.12.2022

Height (m): 131

Length (m): 375

Volume of RCC (m³x10³): 1290

Total volume (m³x10³): 1390

Reservoir capacity (m³x10⁶): 83

Upstream slope: 0.20

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): (12)

Depth of layers (mm): 300

Depth of lifts (mm): 300

Cement content (kg/m³): 60

Pozzolan content (kg/m³): 112

Code for pozzolan: (F)

RCCDAM Unique Serial No.: RCCDAM0969

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