

Dam: Kafue Gorge Lower (KGL)

Country Zambia

River Kafue

15°52'8.6"S 28°31'32.05"E

-15.869056 28.52557

Owner/Client Kafue Gorge Lower Power Development Co. Ltd.

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 ( $m^3 \times 10^3$ ) 1290

Total volume ( $m^3 \times 10^3$ ) 1390

Reservoir capacity ( $m^3 \times 10^6$ ) 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 ( $kg/m^3$ ) 60

Pozzolan content ( $kg/m^3$ ) 112

Code for pozzolan (F)

RCCDAM Unique Serial No. RCCDAM0969

## Completed Dam



RCCDAM0969CD

# 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