

Dam: Zungeru

Country: Nigeria

River: Kaduna

09°54'07.31"N 06°17'45.75"E

9.902031 6.296042

Owner/Client: Federal Ministry of Power, Nigeria

Designer/Engineer: EPC - SinoHydro Corporation, CNEEC (China National Electrical Engineering Corporation) Consortium

Contractor: SinoHydro Co. Ltd. (\*\*th Construction Bureau)/CNEEC (China National Electrical Engineering Corporation) Consortium

Purpose (code): F H

Site start: 29.09.2013

RCC start: 22.01.2018

RCC completion: 31.08.2020

Site completion: 31.10.2022

Height (m): 101

Length (m): 1090

Volume of RCC (m³x10³): 1920

Total volume (m³x10³): 2400

Reservoir capacity (m³x10⁶): 11400

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): (12)

Depth of layers (mm): 300

Depth of lifts (mm): 300

Cement content (kg/m³): 59  
69 94

Pozzolan content (kg/m³): 76  
69 76

Code for pozzolan: (F)

RCCDAM Unique Serial No.: RCCDAM0683

### Google Earth



RCCDAM0683GE

# 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