

Dam: Bui

Country Ghana

River Bui

8°16'43.13"N 2°14'13.49"W

8.278647 -2.237081

Owner/Client BPA (Bui Power Authority)

Designer/Engineer Tractebel (Coyne et Bellier)

Contractor SinoHydro Co. Ltd. (8th Construction Bureau)

Purpose (code) H I

Site start 24.08.2007

RCC start 01.02.2009

RCC completion 31.05.2012

Site completion 27.11.2014

Height (m) 108

Length (m) 493

Volume of RCC (m<sup>3</sup>x10<sup>3</sup>) 830

Total volume (m<sup>3</sup>x10<sup>3</sup>) 900

Reservoir capacity (m<sup>3</sup>x10<sup>6</sup>) 12570

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) 3000

Cement content (kg/m<sup>3</sup>) 45  
61

Pozzolan content (kg/m<sup>3</sup>) 85  
91

Code for pozzolan (F)

RCCDAM Unique Serial No. RCCDAM0553

## Under Construction



RCCDAM0553UC

## Completed Dam



RCCDAM0553CD

## Google Earth



RCCDAM0553GE

# 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