

Dam: Nakai, part of Nam Theun 2 HPP

Country Laos

River Nam Theun

17°59'50.25"N 104°57'8.82"E

17.997292 104.952454

Owner/Client Nam Theun Power Corporation (NTPC)/EdF (Electricite de France)

Designer/Engineer EDF

Contractor Italian Thai-Nishimatsu Construction Co. JV

Purpose (code) H

Site start 15.04.2004

RCC start 01.03.2006

RCC completion 31.10.2007

Site completion 31.10.2009

Height (m) 39

Length (m) 436

Volume of RCC ($m^3 \times 10^3$) 150

Total volume ($m^3 \times 10^3$) 207

Reservoir capacity ($m^3 \times 10^6$) 3530

Upstream slope V

Forming of upstream face (code) (1)

Downstream slope 0.35
0.75

Forming of downstream face (code) (10)

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) 100

Pozzolan content (kg/m^3) 100

Code for pozzolan (F)

RCCDAM Unique Serial No. RCCDAM0380

Completed Dam



RCCDAM0380CD

Google Earth



RCCDAM0380GE

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