

Dam: Nam Ngiep I

Country Laos

River Nam Ngiep

18°38'47"N 103°31'11"E

18.646389 103.519722

Owner/Client Nam Ngiep 1 Power Company

Designer/Engineer Kansai

Contractor Obayashi (with sub-Contractor Song Da Corporation)

Purpose (code) H

Site start 01.09.2014

RCC start 19.04.2016

RCC completion 29.04.2018

Site completion 31.08.2019

Height (m) 167

Length (m) 540

Volume of RCC ( $m^3 \times 10^3$ ) 2288

Total volume ( $m^3 \times 10^3$ ) *Unknown*

Reservoir capacity ( $m^3 \times 10^6$ ) 1192

Upstream slope V

Forming of upstream face (code) (3')

Downstream slope

Forming of downstream face (code) (3') \*

Spillway slope

Forming of spillway face (code) (12)

Depth of layers (mm) 300

Depth of lifts (mm) 2400 -  
3600

Cement content ( $kg/m^3$ ) 80  
60

Pozzolan content ( $kg/m^3$ ) 120  
70

Code for pozzolan (F)

RCCDAM Unique Serial No. RCCDAM0721

### Under Construction



RCCDAM0721UC

### Completed Dam



RCCDAM0721CD

# 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