

Dam: Loyalty Road flood retarding basin

Country: Australia

River: Darling Mills Creek

33°46'32.52"S 151°00'18.83"E

-33.775726 151.005234

Owner/Client: Upper Parramatta River Catchment Trust

Designer/Engineer: New South Wales Public Works Department

Contractor: White Construction (NSW) Ltd.

Purpose (code): F

Site start: 23.06.1995

RCC start: 20.12.1995

RCC completion: 12.04.1996

Site completion: 28.08.1996

Height (m): 30

Length (m): 111

Volume of RCC (m<sup>3</sup>x10<sup>3</sup>): 20

Total volume (m<sup>3</sup>x10<sup>3</sup>): 22

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

Upstream slope: V

Forming of upstream face (code): (7)

Downstream slope: 0.80

Forming of downstream face (code): (7)

Spillway slope: 0.80

Forming of spillway face (code): (7)

Depth of layers (mm): 300

Depth of lifts (mm): 300

Cement content (kg/m<sup>3</sup>): 50

Pozzolan content (kg/m<sup>3</sup>): 30

Code for pozzolan: (S)

RCCDAM Unique Serial No.: RCCDAM0169

## Under Construction



RCCDAM0169UC

## Completed Dam



RCCDAM0169CD

## Google Earth



RCCDAM0169GE

# 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