

Dam: Saluda dam remediation

Country USA

River Saluda

34°3'12.32"N 81°13'6.09"W

34.053421 -81.218361

Owner/Client South Carolina Electric and Gas

Designer/Engineer Paul C. Rizzo Associates

Contractor Barnard Construction Co.

Purpose (code) H

Site start 01.08.2002

RCC start 31.07.2003

RCC completion 29.04.2005

Site completion 31.07.2005

Height (m) 65

Length (m) 2439

Volume of RCC ($m^3 \times 10^3$) 1004

Total volume ($m^3 \times 10^3$) 1410

Reservoir capacity ($m^3 \times 10^6$) 1970

Upstream slope *Unknown*

Forming of upstream face (code) (5)

Downstream slope *Unknown*

Forming of downstream face (code) (5) *

Spillway slope *Unknown*

Forming of spillway face (code) *Unknown*

Depth of layers (mm) 300

Depth of lifts (mm) 300

Cement content (kg/m^3) 89

Pozzolan content (kg/m^3) 89

Code for pozzolan (F)

RCCDAM Unique Serial No. RCCDAM0333

Under Construction



RCCDAM0333UC

Completed Dam



RCCDAM0333CD

Google Earth



RCCDAM0333GE

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