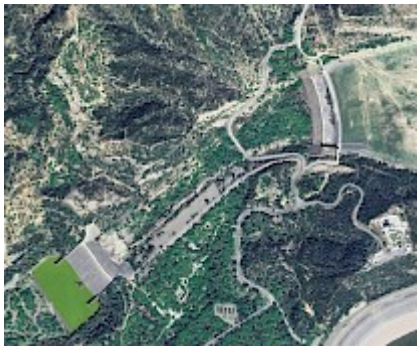
Dam:	Mangla Emergency Spillway Control Weir	Country	Pakistan
River	Jhelum	33°09'41.59"N 73°38'10.73"E	33.161552 73.636314
Owner/Client	WAPDA (Water and Power Development Authority)		
Designer/Engineer	MJV (Mangla Joint Venture) (NESPAK, Binnie Black and Veatch, Harza + others)		
Contractor	CWE JV		

Purpose (code)	H I
Site start	01.08.2004
RCC start	01.12.2007
RCC completion	30.11.2008
Site completion	31.01.2009
Height (m)	17
Length (m)	370
Volume of RCC (m^3x10^3)	54
Total volume (m^3x10^3)	79
Reservoir capacity (m^3x10^6)	6500
Upstream slope	V 0.30
Forming of upstream face (code)	(3') (3') *
Downstream slope	V 0.70
Forming of downstream face (code)	(3') (3') *
Spillway slope	0.70
Forming of spillway face (code)	(3') *
Depth of layers (mm)	300
Depth of lifts (mm)	300
Cement content (kg/m^3)	60
Pozzolan content (kg/m^3)	120
Code for pozzolan	(S)
RCCDAM Unique Serial No.	RCCDAM0420

Completed Dam

RCCDAM0420CD

Google Earth



RCCDAM0420GE

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