

Table 23 Annual Operation and Maintenance Cost of Ujjain Sewerage System						
S. No.	Description	Unit	Rate	No.	Rs.	Amount (Rs. In Lakhs)
1	Civil & Electrical, Mechanical & Instrumenation works					
1.1	Sewer Network @ 0.25% sewer line works	Per year				110.81
1.2	Sewage Pumping Station(Civil works) @ 1.5% of Civil Works	Per year				4.71
1.3	Sewage Pumping Station(E & M) @ 3% of E&M Works	Per year				28.74
1.4	Force main/ Pumping of Sewage @ 1.5% of FM Works	Per year				0.00
1.5	Sewage treatment Plant @ 1.5% of Civil Works	Per year				131.69
1.6	Effluent Disposal and Utilities @ 1.5% of Civil	Per year				3.23
2	Requirement of officers and Staff for O&M work		Rs.	No.	Per Annum rs. In lakhs	
2.1	Executive Engineer/Manager	Per year	600000	1	600000	6
2.2	AE(Civil) Asstt. Engineer	Per year	360000	12	4320000	43.2
2.3	AE(E&M) Asstt. Engineer	Per year	360000	1	360000	3.6
2.4	Sub Engineer	Per year	264000	12	3168000	31.68
2.5	Fitter (Mech) cum pump operator	Per year	126000	2	252000	2.52
2.6	Electrician	Per year	81000	2	162000	1.62
2.7	Gardener/ Sweeper	Per year	20000	58	1160000	11.6
2.8	Chemist/ Asst. Chemist/ Lab Attendant.	Per year	180000	2	360000	3.6
2.9	UDC,LDC,Peon,Watchman,Driver	Per year	9000	10	90000	0.9
3	Energy Charges (Based on Consumption on Load and tariff)	Per year				880.00
4	Equipment / Tools and Plants (3% of E & M on Maintenance) includes Loaders Scrapers, Dozers, Hand cart, Cleaning Agents etc.	Per Year	65000			721
Section Total						1984.89
5	Contingent Expenditure (3% of above Cost) including Cost of Consumables					59.55
Grand Total						2044.44
					Say 20 Crores	
O & M Cost for 5 years (Adding 33.45%)					26.69	Crores