TWAD BOARD

NORMS FOR URBAN WATER SUPPLY SCHEMES

Sl. No.	Criteria	Description			Reference
1	Scheme Type &		Stand alone WS scheme	CWSS involving rural & ULBS	
	Implementation Period		1-2 Years	2-3 Years	
	Stages of project shall be construed as	Base Year	Year of conception + 1 or +2	Year of conception + 2 or + 3	SAS as per CPHEEO manual
		Intermediate	Base year + 15	Base year + 15	CWSS - MD/TWAD, Circular No.F.General/JJM/DO/PDC/ 2020, dt.13.05.2020
		Ulitimate	Base year + 30	Base year + 30	
2	Population	Population Projection is being computed by the following methods			As per CPHEEO manual
		Arithmetical increase, Incremental increase, Geometrical increase, Decadal growth rate line of best fit, Graphical methods etc.,			
3	Pro-rata supply	Town Panchayats	without UGSS	70 lpcd	MD, TWAD, Lr.No. 81110/SDO/PDC/2010/Dt. 08.11.2010
			with UGSS	90 lpcd	
		Municipalities	without UGSS	90 lpcd	MD, TWAD, Lr.No. 81110/SDO/PDC/2010/Dt. 08.11.2010
			with UGSS	135 lpcd	As per CPHEEO manual
		Corporation		135 lpcd	MD, TWAD, Lr.No. 81110/SDO/PDC/2010/Dt. 08.11.2010

		To be step up by one level for ULBs adjoining the boundary of any municipal corporation		B.P.Ms.No.102 (PDC)/ dt. 23.11.2010
		For town panchayats	From 70 lpcd to 90 lpcd	
		For muncipalities	From 90 lpcd to 110 lpcd	
		Urban towns/cities posed for GOI funding	135 lpcd	
4	Design period	Electric motors & pumps and Water Treatment Plant	15 years	As per CPHEEO manual MD/TWAD, Circular No.F. General/JJM/DO/PDC/ 2020, dt.13.05.2020
		1. Source 2. Raw water main 3. Pumping / branch/ feeder main 4. Sump, pump room and service reservoirs 5. Distribution system	30 years	
5	Transmission loss	10% of required demand		As per CPHEEO manual
6	Treatment loss if treatment is proposed	3 - 5% of clear water demand		As per CPHEEO manual
7	Industrial demand	10% of Total demand		As per GO.Ms.No.2, MA & WS (WS4) Dept., dt. 03.01.2011
8	Hours of pumping	For drawal of a. Surface water - 23 hours b. Sub surface - 18 Hours		MD/TWAD, Circular No.F. General/JJM/DO/PDC/ 2020, dt.13.05.2020
9	Sump capacity	Sump capacity has to be rounded off to next higher 5000 litres on actual requiremnet		As per GO.D.No.621, MA & WS (WS2) Dept., dt. 27.12.2010
		Capacity of sumps shall be worked out as follows		

		1. When the Rate of inflow and rate of out flow remains the same		1 hour detention time
		2. When the Rate of inflow and rate of out flow differs		Mass curve method
		Break Pressure tanks - 10minutes detention time		MD, TWAD, Lr.No. 81110/SDO/PDC/2010/Dt. 08.11.2010
10	Pump sets	Drawal of water below 2000 lpm	Submersible pumpset	MD, TWAD, Lr.No. 81110/SDO/PDC/2010/Dt. 08.11.2010 and 16.11.2010
		Drawal of water more than 2000 lpm to 5000 lpm	Turbine pumpset or Horizontal split casing pumpst	
		Drawal of water more than 5000 lpm	Vertical turbine pumpset	
		Efficiency of pumpset to be adopted	75%	
11	Selection of material for pipe line	As per guideline for selection of pipes and materials of TWAD Board		B.P.Ms.No.100, TWAD (RDT &PMC), dated:28.10.2022
12	Service Reservoir	1/3 rd of total intermediate requirement rounded off to next higher 10000 litres.		1.GO.D.No.621, MA & WS (WS2) Dept, Dt.27.12.2010 2. MD, TWAD,Lr.No.81110 /SDO/PDC/2010/ Dt. 08.11.2010
13	Distribution system	Minimum residual pressure i) 7 metres - for single storyed buildings and for supply to the ground level storage tanks in multi storyed buildings. ii) 12 metres - for two-storyed buildings iii) 17 metres - for three storyed buildings		As per CPHEEO manual

14	Centage charges	1. @ 10% for all urban shemes- (municipalities and corporations)	GO.MS.No.4, (WS4) MA & WS Dept, Dt.10.01.2022
		2. @ 18.50% for deposit schemes for Government industries and instiutions	MD,TWAD Lr.No.103022 / Budget/A2/ 2003 dt. 24.05.2004
		3. @ 23.50%for Deposit schemes for private industries and institutions	GO.MS.No.308, MA & WS (WS4)Dept, Dt.15.12.2010