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CHATTOGRAM WATER SUPPLY AND SEWERAGE AUTHORITY

MANAGEMENT INFORMATION SYSTEM REPORT

FOR THE MONTH OF September-2024

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Chattogram Water Supply & Sewerage Authority
Monthly MIS Report
September 2024

			Unit	This month	Year to date	Previous year actual	This year target *1	Evaluation *2	Remarks *3 ++ Too good ! Very bad
Selected Key Indicators									
E	**17***	**Non Revenue Water= {1-(billed water(C2)/distributable water production(E15*))} X 100**	%	**29**	**30**	**30**	**25**	**-19%**	
C	**4***	**Revenue collection efficiency (monthly coll.+ outstand. Coll.)/ monthly bill. = (collection(C3)/billing(C1)) X100**	%	**88**	**86**	**90**	**129**	**-32%**	!
D	**9***	**Collection period = (accounts receivable(D6)/monthly billings(C1)) X number of days of month**	Day	**279**	**283**	**270**	**200**	**-42%**	!
F	**2***	**No. of perma. employee per 1000 connections(excl. non-perma. Empl.) = (No. of permanent staff(F1) + non-permanent staff(F5) / total billable connections (A1.1)) X1000**	Nos.	**5.7**	**N/A**	**5.8**	**6.0**	**5%**	
D	**8***	**Operating Ratio = (personal cost (D2.1) + electricity cost (D2.2) + chemical cost (D2.3) + other O & M (D2.5.1)) / (Total Revenues(D1))**	Ratio	**0.93**	**0.79**	**0.71**	**0.56**	**-41%**	!
A	**3.5***	**Functioning meter rate of installed meter = no. of metered (A3.1)/ (no. of metered (A3.1) + average reading (A3.2)) X 100**	%	**90**	**N/A**	**90**	**90**	**0%**	
E	**19**	**Water quality sample (E19)**	No./month	**240**	**720**	**2,880**	**2,880**	**-92%**	!
E	**18***	**Leakage occurrence = (no. of leakage recognized by complaint (G3)/ Length of Pipeline at the end of period(E9)/ no. of months covered)**	No./km/mth	**0.27**	**0.22**	**0.28**	**2.27**	**90%**	++
A	**6***	**Water supply coverage = ((Billed connection (A1.3) X 26 Person per Connection) + (Total Street Hydrant (A4) X 80 Person per Street Hydrant) / Total Population in water Supply Area (N.B)) X 100**	%	**65**	**N/A**	**66**	**67**	**-2%**	
B	**5***	**Average tariff = (Total billing(C1)/ Billed volume(C2)) / 1000**	Tk/m3	**19.27**	**19.17**	**19.00**	**20.00**	**-4%**	
E	**16***	**Unit production cost (in/c Capt. Cost,Deprec. & Financial Expense.) = Expenses Total(D2)/ (Production distributable water(E15*) +DTW Water directly distributed (E15.1*)) / 1000)**	Tk/m3	**23.04**	**19.17**	**20.30**	**21.90**	**12%**	
A) Connection data									
A	1	Total registered connections	Nos.	98,168	N/A	97,137	101,222	-3%	
A	1.1	Billable (non-disconnected) connection	Nos.	92,120	N/A	91,121	95,220	-3%	
A	1.2	Non-billable (disconnected) connection	Nos.	6,048	N/A	6,016	6002	-1%	
A	1.3	Billed connection	Nos.	90,297	N/A	89,508	91,932	-2%	
A	2	Breakdown of billable connection (by customer type)							
A	2.1*	Domestic	%	93	N/A	93	91	2%	
A	2.2	Non-domestic	%	7	N/A	7	9	23%	
A	3	Breakdown of billable connection (by meter status)							
A	3.1	Metered	Nos.	82,605	N/A	81,589	85,572	-3%	
A	3.2	Average reading	Nos.	9,413	N/A	9,430	9,546	1%	
A	3.3	Non meter	Nos.	102	N/A	102	102	0%	
A	3.4*	Meter installation rate	%	100	N/A	100	100	0%	
A	3.5*	Functioning meter rate of installed meter	%	90	N/A	90	90	0%	
A	4	Street Hydrant	Nos.	689	N/A	689	689	0%	
A	5	Religious Institutions	Nos.	368	N/A	368	368	0%	
A	6*	Water supply coverage	%	65	N/A	66	67	-2%	
A	7	Bill sent-out ratio	%	98	N/A	98	97	2%	

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B) Tariff								
B 1	Domestic	Tk/m3	18.00	N/A	18.00	18.90	-5%	
B 2	Non-domestic	Tk/m3	37.00	N/A	37.00	38.85	-5%	
B 3	Street Hydrant	Tk/m3	18.00	N/A	18.00	18.90	-5%	
B 4	Religious Institutions	Tk/m3	18.00	N/A	18.00	18.90	-5%	
B 5*	Average tariff	Tk/m3	19.27	19.17	19.00	20.00	-4%	
C) Billing and Collection								
C 1	Total billing	Tk	200,443,213	599,770,207	2,347,888,407	2,400,000,000	0%	
C 1.1*	Private	Tk	177,214,481	529,769,820	2,062,051,833	2,160,000,000	-2%	
C 1.2*	Government	Tk	23,228,732	70,000,387	285,836,574	240,000,000	17%	
C 2	Billed volume (Total Volume Accounted)	ML	10,401	31,287	123,549	120,000	4%	
C 3	Total collection	Tk	176,307,419	514,756,401	2,105,177,399	3,094,120,000	-33%	!
C 3.1*	Private	Tk	167,126,862	482,516,493	1,992,878,824	2,929,067,275	-34%	!
C 3.2*	Government	Tk	9,180,557	32,239,908	112,298,575	165,052,725	-22%	
C 4*	Revenue collection efficiency (monthly coll.+ outstand. Coll.)/ monthly bill.	%	88	86	90	129	-32%	!
C 4.1*	Private	%	94	91	97	136	-30%	!
C 4.2*	Government	%	40	46	39	69	-43%	!
D) Financial data								
D 1	Revenue (Total)	Tk	195,415,586	572,841,276	2,425,189,135	3,457,920,000	-34%	!
D 1.1	Water revenue	Tk	176,307,419	514,756,401	2,105,177,399	3,094,120,000	-33%	!
D 1.2*	Tubewell license	Tk	2,420,487	9,636,768	115,878,743	100,000,000	-61%	!
D 1.3*	Other operating revenues	Tk	8,354,346	23,448,107	114,132,993	163,800,000	-43%	!
D 1.4*	Interest income	Tk	8,333,333	25,000,000	90,000,000	100,000,000	0%	
D 2	Expenses (Total)	Tk	338,780,313	855,010,281	3,583,597,467	4,396,985,820	22%	
D 2.1*	Personnel cost	Tk	51,228,707	116,705,379	517,744,367	631,470,000	26%	++
D 2.2	Electricity cost	Tk	92,511,000	290,141,000	912,448,000	920,000,000	-26%	!
D 2.3	Chemicals	Tk	28,216,000	28,283,000	139,542,000	140,000,000	19%	
D 2.4*	Depreciation	Tk	129,182,985	387,548,955	1,500,000,000	1,550,195,820	0%	
D 2.5	Other operating cost	Tk	17,728,000	31,076,000	513,863,100	935,960,000	87%	++
D 2.5.1	Other O & M	Tk	10,737,000	20,043,000	159,148,100	260,700,000	69%	++
D 2.5.2	Capital cost from revenues	Tk	6,991,000	11,033,000	354,715,000	675,260,000	93%	++
D 2.6*	Financial expense	Tk	627,974	1,255,947	0	7,200,000	30%	++
D 3	Net Income (Loss)	Tk	(143,364,727)	(282,169,005)	(1,158,408,332)	(939,065,820)	20%	
D 4*	Cash at bank	Tk	0	N/A	0	0	N/A	
D 5*	Stock & stores	Tk	0	0	0	0	N/A	
D 6	Accounts Receivable	Tk	1,861,854,211	N/A	1,737,729,584	1,737,729,584	-7%	
D 6.1*	Accounts receivable from Government	Tk	423,171,818	N/A	366,318,888	366,318,888	-16%	
D 6.2*	Accounts receivable from Private	Tk	1,438,682,393	N/A	1,371,410,696	1,371,410,696	-5%	
D 7*	Long term loans	Tk	19,285,647	38,571,295	212,142,000	212,160,000	91%	++
D 8*	Operating Ratio	Ratio	0.93	0.79	0.71	0.56	-41%	!
D 9*	Collection period	Day	279	283	270	200	-42%	!

		Unit	This month	Year to date	Previous year actual	This year target *1	Evaluation *2	Remarks *3 ++ Too good ! Very bad
E) Water Supply								
E 3	Capacity of Surface WTP (Mohora+Sk.H.WTP-1+Sk.H.WTP-2+SRPS)	MLD	466	N/A	466	466	0%	
E 4	Capacity of Ground WTP	MLD	68	N/A	68	68	0%	
E 5	Deep Tube Wells in Operation	Nos.	46	N/A	45	55	-16%	
E 6*	Capacity of DTW - direct distribution	MLD	36	N/A	33	48	-25%	
E 7*	Capacity of DTW - supply to GWTP	MLD	0	N/A	0	0	#DIV/0!	#DIV/0!
E 8*	Capacity of distributable water production	MLD	569	N/A	566	581	-2%	
E 9	Length of Pipeline	km	962	N/A	962	992	-3%	
E 15*	Production (distributable water)	ML	14,704.02	44,598	176,510.35	200,750	-11%	
E 15.1*	DTW water to users before boosters	ML	0	0	0	0	N/A	
E 16*	Unit production cost (in/c Capt. Cost,Deprec. & Financial Expense.)	Tk/m3	23.04	19.17	20.30	21.90	12%	
E 17*	Non Revenue Water	%	29	30	30	25	-19%	
E 18*	Leakage occurrence	No./km/mth	0.27	0.22	0.28	2.27	90%	++
E 19	Water quality sample	No./month	240	720	2,880	2,880	-92%	!
E 20*	Satisfactory sample in chlorine level	%	100	100	100	100	0%	
E 21*	Satisfactory sample in microbiological level	%	100	100	100	100	0%	
F) Personnel								
F 1	No. of permanent employees (Total)	Nos.	523	N/A	527	570	8%	
F 1.1	Grade-3-9	Nos.	56	N/A	56	60	N/A	++
F 1.2	Grade-10-11	Nos.	35	N/A	36	30	N/A	++
F 1.3	Grade-12-16	Nos.	201	N/A	203	260	N/A	++
F 1.4	Grade-17-20	Nos.	231	N/A	232	220	N/A	++
F 5	No. of non-permanent employees (Total)	Nos.	0	N/A	0	0	#DIV/0!	#DIV/0!
F 5.1	Work charge (6 month contract worker)	Nos.	0	N/A	0	0	N/A	++
F 5.2	Master roll (Daily basis casual worker) Outsource in	Nos.	0	N/A	0	300	N/A	++
F 5.3	Project staff (hired by project budget)	Nos.	40	N/A	50	50	N/A	++
F 2*	No. of perma. employee per 1000 connections(excl. non-perma. Empl.)	Nos.	5.7	N/A	5.8	6.0	5%	
F 3	Average Monthly Salary	Tk	29,756	N/A	21,044	33,516	11%	
F 4*	% of Overtime to Basic Salary	%	33.90	N/A	24	32	-6%	
G) Customer Services								
G 1	New Service Connection							
G 1.1	Service Connection Application Received	Nos.	253	677	4,570	4,000	-32%	!
G 1.2	Service Connection given	Nos.	199	693	4,480	3,800	-27%	!
G 2	Billing complaints							
G 2.1	Complaints received	Nos.	180	580	2,335	2,800	17%	
G 2.2	Complaints acted on	Nos.	160	510	1,960	2,300	11%	
G 3	Leakage complaints received and attended	Nos.	262	645	3,237	2,250	-15%	

N/A = not applicable (= pointless to calculate, or nonexistent)
Some numbers may show the same value in spite of different values, which is due to rounding.
*1: "this year target" can be set according to (1) Business Plan, (2) Performance Agreement, (3) discussion with D M D (Engineering), (same or modified value of previous year)
*2: Evaluation is made on the basis of variance from the set target. An evaluation result "X % " means that performance of particular indicator is X % better than what is set as the target.
if the NRW is 24% and the target is 20%, this performance is considered unfavorable. The evaluation result is shown as -20% (= 1 - 24 / 20).
If the number of water quality sample is recorded as 24 when the target is set at 20, this performance can be considered favorable. The evaluation result is shown as 20% (= 24 / 20 - 1).
*3: A warning sign " ++ " appears when the evaluation result exceeds 25%, which is considered as the high-end threshold indicating "too good".
A warning sign " ! " appears when the evaluation result is less than - 25%, which is considered as the low-end threshold indicating "very bad".
A2.1: If the total number of billable connections is 45,000 and the number of domestic connections in billable connections is 36,000, this will be 80% (= 36000 / 45000).
A3.4: Meter installation rate = 1 - (number of non-meter connection / number of billable connection).
A3.5: Functioning meter rate = 1 - (number of average reading connection / number of billable connection). This indicator is used as a proxy of ratio of metered water sold to total water sold.
A6: Water supply coverage is defined as (population served with piped water + population served by street hydrant) / population in service area.
In FY 2010/11, this was estimated at 42% {= (1.192 million + 0.07 million) / 2.98 million)
Suppply coverage of this month is computed based on the following assumptions used in Business Plan.
(population in service area = 3 million; user population per connection = 30; population served with standpipes = 100,000; number of standpipes = 689)
A6* :Water Supply Coverage=(Billed Connection x 26 Person per Connection + Total Street Hydrant x 80 Persor per Street Hydrant) / Total Population in Water Supply Area *100.
A7: Bill sent-out ratio = Billed connection / Billable connection x 100.
B5: Average water tariff = total billing / total billed volume
C1.1: "Private" includes private customers and users of loose water (sold by bowser)
C1.2: "Government" includes government users, street hydrants and religious institutions
C3.1: Same as C1.1, C3.2: Same as C1.2
C4: Revenue collection efficiency = collection /billing x 100. CWASA's existing accounting system cannot classify accounts receivable by age.
Therefore the revenue collection efficiency can be shown merely as (total collection during a period ÷ total billing during the same period).
C4.1: Same as C4, C4.2: Same as C4
C5: Metered volume to billed volume ratio data currently becomes available twice a year due to capacity limitation of computer section.
D1.2: "License and renewal fee of tubewell" in "other operating revenue"
D1.3: Excludes "License and renewal fee of tubewell
D1.4: As the interest income is not obtainable until the year end, a proxy value is used here so that the net income can be computed. The proxy value is the previous year's monthly interest.
D2.1: Includes salary & allowances, provident fund, gratuity, festival bonus, overtime and earn leave encashment
D2.4: Data is only available quarterly instead of monthly. The cost of the latest three month is converted to a monthly average and shown in the monthly data column.
D2.6: Data is only available quarterly instead of monthly. The cost of the latest three month is converted to a monthly average and shown in the monthly data column.
D4: Under the current system, this value is not obtainable until the year end. However it is expected to become obtainable monthly in the future.
D5: Under the current system, this value is not obtainable until the year end. However it is expected to become obtainable monthly in the future.
D6.1: Same as C1.1, D6.2: Same as C1.2
D7: Long term liabilities outstanding as unpaid at the end of month
D8: To see more clearly the CWASA capacity to generate the operating profit before depreciation and interest,
the operating ratio is defined as (personnel cost + elec. cost + chemical cost + other O & M) / (total Revenues).
D9: Collection period = (accounts receivable) / (monthly billings/number of days in month)
E6: Production capacity of deep tube wells that supply water directly to users
E7: Production capacity of deep tube wells that supply water to Karulgaht WTP
E15: Distributable water (or system input water) = Water produced at Surface WTP + Water produced at Ground WTP + Water directly distributed from DTW
E15.1: Raw water distributed directly to users from some DTWs on the way to boosters are not included in the distributable water (E15).
E16: Unit production cost =Expenses(Total)/((Dstributable Water Volume+DTW Water directly distributed)*1000)
E17: NRW = (unbilled water / water produced x 100) = [1 – billed water / (distributable water production + DTW Water directly distributed)] x 100
E18: Leakage occurrence = Number of leakage recognized by complaint / length of pipeline at the end of period / number of months covered
E20: This is the rate of satisfactory sample complying with the chlorine standard.
E21: This is the rate of satisfactory sample complying with the microbiological standard.
F2: No. of employee per 1000 connections = (number of permanent staff + non-permanent staff) / (total billable connections/1000)
F4: Only staff workers (Class 3 and Class 4) receive overtime. Thus this ratio is computed based on Class 3 and Class 4 workers' pay.

01.12.2024
চট্টগ্রাম ওয়াসা, চট্টগ্রাম

01.12.2024
সহকারী প্রকৌশলী
ডিজাইন বিভাগ
চট্টগ্রাম ওয়াসা, চট্টগ্রাম

(Richard Nelson Penher)
Executive Engineer (A
Design Division
Chattogram WASA, Chattog

01.12.2024
মোহাম্মদ আরিফুল ইসলাম
তত্ত্বাবধায়ক প্রকৌশলী
(পরিকল্পনা ও নির্মাণ সার্কেল)
চট্টগ্রাম ওয়াসা।

CE
প্রধান প্রকৌশলী
চট্টগ্রাম ওয়াসা, চট্টগ্রাম।

DMD(E)
উপসচিব
চট্টগ্রাম ওয়াসা, চট্টগ্রাম।