

Table 2 Water quality of the Karnafully River

Parameters	WHO Standard	Present Study	Previous Study
Ambient temp (°C)	-	18.25-35.00	ND
Water temp (°C)	-	19.50-34.30	ND
pH	NYS	6.36-9.86	7.01-8.24
EC (S/cm)	800-1000	90.00-45600.00	100-26150
TDS (mg/L)	--	45.00-20000.00	ND
TSS (mg/L)	--	14.40-5100.00	ND
TS (mgL ⁻¹)	--	46.00-27700.00	ND
DO (mg/L)	4-6	0.00-7.91	3.20-7.20
Transparency (cm)	--	1.50-150.00	ND
Acidity (mg/L)	--	1.60-52.25	ND
CO ₂ (mg/L)	6	1.41-49.98	ND
P.alkalinity (mg/L)	--	0.00	ND
T.alkalinity (mg/L)	--	5.64-121.00	32.10-84.70
T.Hardness (mg/L)	80-120	10.00-4500.00	39.50-3700.00
Chloride (mg/L)	600	2.09-13147.70	1.50-10196.84
H ₂ S (mg/L)	--	0.00-6.39	ND
NH ₃ -N (mg/L)	0.2-5	0.01-0.08	BDL-7.91
BOD (mg/L)	6	0.21-9.17	ND
COD (mg/L)	NYS	11.39-179.87	6.00-6480.00
NO ₂ -N (mg/L)	0.03	0.00-5.18	BDL-0.09
NO ₃ -N (mg/L)	NYS	0.00-1.63	BDL-1.45
NO ₂ + NO ₃ -N (mg/L)	-	0.54-14.60	ND
PO ₄ -P (mg/L)	0.8	0.12-4.94	BDL-7.60
SO ₄ -S (mg/L)	-	9.26-977.08	8.50-1250.70
Zn (mg/L)	-	0.01-0.04	0.02-0.45
Cu (mg/L)	<0.4	0.01-0.03	0.02-4.23
Co (mg/L)	-	BDL	BDL-0.02
Cr (mg/L)	NYS	BDL-0.01	0.02-0.35
Cd (mg/L)	NYS	BDL	BDL-0.01
Pb (mg/L)	0.05	BDL-0.02	BDL-0.11
Fe (mg/L)	NYS	0.06-3.24	0.01-9.35
Mn (mg/L)	0.1-1	BDL-0.92	0.02-2.59
%NaCl	-	0.20-19.10	ND
Coliform/100 mL	5000	≥1600	ND

Note: Source: Ahmed et al. (2010)