

CHUKWUEMEKA ODUMEGWU OJUKWU UNIVERSITY

DEPARTMENT OF CIVIL ENGINEERING

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Chukwuemeka Odumegwu Ojukwu University
P.M.B. 02, Uli.*Our Ref:*.....*Your Ref:*.....*Date:*20/10/2026**WATER DISCHARGE GUIDELINES
FOR
CHUKWUEMEKA ODUMEGWU OJUKWU UNIVERSITY**

Parameter	Unit	Drinking-water guideline*	Typical environmental/effluent reference
pH	—	6.5–8.5	6.0–9.0
Temperature	°C	—	≤40°C for many effluents
Turbidity	NTU	≤5	≤5–50, depending on receiving water/use
Electrical conductivity	μS/cm	~1,500	Site/use dependent
TDS	mg/L	≤1,000	≤2,000–3,000 in many effluent standards
Total suspended solids (TSS)	mg/L	—	Often ≤30–50
Dissolved oxygen (DO)	mg/L	—	Generally ≥5 for healthy aquatic ecosystems
BOD ₅	mg/L	—	Often ≤30
COD	mg/L	—	Often ≤100–250
Nitrate (NO ₃ ⁻)	mg/L	≤50	Site dependent
Nitrite (NO ₂ ⁻)	mg/L	≤3	Site dependent
Ammonia (NH ₃ /NH ₄ ⁺)	mg/L	~1.5	Site dependent
Chloride	mg/L	≤250	Site dependent
Sulphate	mg/L	≤250	Site dependent
Fluoride	mg/L	≤1.5	Site dependent
Iron (Fe)	mg/L	≤0.3	Often ≤1–2
Manganese (Mn)	mg/L	≤0.1–0.4	Site dependent
Lead (Pb)	mg/L	≤0.01	Should be as low as practicable
Chromium (total Cr)	mg/L	≤0.05	Site dependent
Cadmium (Cd)	mg/L	≤0.003	Site dependent
Mercury (Hg)	mg/L	≤0.006	Site dependent
Arsenic (As)	mg/L	≤0.01	Site dependent
Copper (Cu)	mg/L	≤2	Site dependent
Zinc (Zn)	mg/L	≤3	Site dependent

Nickel (Ni)	mg/L	≤ 0.07	Site dependent
E. coli	CFU/100 mL	0 in 100 mL	Should be very low/absent for potable water



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