

BASIC WATER QUALITY PARAMETERS DEFINED

POTENTIAL OF HYDROGEN (PH)

PH is a measure of the acidity or basicity of an aqueous solution which is normally measured from a range of 0-14. Pure water is considered to be neutral with a PH close to 7 at 25°C, solutions with a PH less than 7 are said to be acidic and solutions with a PH greater than 7 are considered basic or alkaline.

DISSOLVED OXYGEN (DO)

Oxygen can be mixed into the water by waves or the movement/current of water. DO is essential for the maintenance of aquatic life forms. Dissolved Oxygen levels rise in the morning and reach a peak in the late afternoon due to photosynthesis but plants continue to consume oxygen at night, as a result, DO falls to a low point just before dawn. Dissolved Oxygen levels may drop below 4mg/L which is the minimum amount needed to sustain warm water fish.

BIOCHEMICAL OXYGEN DEMAND (BOD)

The amount of oxygen required to completely oxidize organic compounds to carbon dioxide and water through generations of microbial growth, death and decay is total Biochemical Oxygen Demand (BOD). It is the measure of oxygen required to decompose organic compounds in water.

TOTAL SUSPENDED SOLIDS (TSS)

TSS are solids in water that can be trapped by a filter. This includes a wide variety of materials such as silt, decaying plant and animal water, industrial wastes and sewages. High concentrations of TSS can cause many problems for stream and aquatic life.

TOTAL DISSOLVED SOLIDS (TDS)

TDS is the sum of all inorganic and organic particulate material found in water. TDS is an indicator test used for wastewater analysis and is also a measure of the mineral content of bottled water and groundwater.

TOTAL COLIFORM (TC)

Total Coliform includes bacteria that are found in soil, in plants and in human or animal waste. Total coliform count gives a general indication of the sanitary condition of a water supply.

FECAL COLIFORM (FC)

Fecal Coliform is a group of bacteria that comes from the intestinal tracks of warm-blooded animals. The presence of Fecal Coliform in drinking water or in a river system indicates the presence of human or animal waste.

STANDARD CRITERIA

STATIONS	PH	DO	BOD	TSS	TDS	TC	FC
CUBA, BUL, TAB, SAC, NAG, PAS, NAT, AMB, TANAP, AMP, DAM (Class B)	Within the range of 6.5 – 8.5	Not less than or equal to 5	Not more than or equal to 5	Not more than or equal to 65	Not more than or equal to 1000	Not more than or equal to 1000	not more than or equal to 100
BAN 1, SUD 1, BAN 2, SUD 2, ALI 1, SUG 1, BAN, ALI 2, ALI 3, SUY 1, SUY 2, ALI 4 (Class C)	Within the range of 6.5 – 9.0	Not less than or equal to 5	Not more than or equal to 7	Not more than or equal to 80	Not more than or equal to 1000	Not more than or equal to 5000	not more than or equal to 200