



Types of Physicochemical Parameters Used in Water Treatment

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DESCRIPTION

The study examined seasonal variations in water physicochemical parameters, identified potential sources of pollution, and grouped monitoring months with similar characteristics. Water samples were analyzed for temperature, pH, dissolved oxygen concentration, 5-day biochemical oxygen demand, chemical oxygen demand, electrical conductivity, chloride ion were collected in four different seasons to assess the Measure concentration, total alkalinity, turbidity, total dissolved solids, total suspended solids, and total hardness using standard methods. Analysis results showed that 40% of the water quality indicators were within acceptable limits proposed by various authorities in all seasons except for EC, Cl concentration, TA, turbidity, DO concentration, BOD5 and COD. Statistical analysis showed that 52% of the contrasts were significantly different with a 95% confidence interval. Factor analysis showed the best fit between the parameters, with four factors explaining 94.29% of the total variance. TDS, BOD5, COD, EC, turbidity, DO, and Cl- were the main pollutant loads, caused by large amounts of industrial wastewater and toxic compounds. Cluster analysis indicated seasonal variations in surface water quality. This is usually an indicator of contamination from precipitation or other sources. Bioinorganic chemistry is an active field these days. It deals with the chemistry between natural resources such as air, soil, water, plant by-products, environmental essences and heavy metals. The purpose of this study was to determine the concentrations of heavy metals in food effluent samples and to study the environmental impact of metal ion concentrations. To carry out the research work, physio-chemical parameters and levels of five heavy metals were collected from food wastewater samples at five sampling points in well-known hotels, restaurants, canteens and confectionery shops in a state of India and

standardized were evaluated using analytical methods. Sampling was done from January 2017 to December 2017. physico-chemical parameters such as pH, temperature, turbidity, conductivity, total dissolved solids, totalsuspended solids, total alkalinity, biological oxygen demand, chemical oxygen demand, dissolved oxygen, total organic carbon; Sulfates, nitrates, phosphates. Heavy metal concentrations were determined using a UV spectrophotometer and the results were compared with standards prescribed by WHO, BIS, ICMR, and local authorities. Drinkingwater quality was investigated in a suspected area of Perak, Malaysia to ensure a continuous supply of clean and safe drinking water for public health protection. In this context, detailed physical and chemical analyzes of drinking water samples were conducted in various residential and commercial areas of the country. pH, turbidity, conductivity, total suspended solids, total dissolved solids and various heavy metals such as Cu, Zn, Mg, Fe, Cd, Pb, Cr, As, Hg, Sn parameters were measured. Each water sample collected during winter and summer was analyzed. The values obtained for each parameter were compared to standard values from the World Health Organization (WHO) and regional standards such as the National Drinking Water Quality Standards (NDWQS). Values for each parameter were found to be within safe limits set by WHO and NDWQS. Overall, we found the water at all locations to be safe to drink. However, it is also important to examine other potential water contaminants over time, such as chemicals, microbes, and radioactive materials, including human body fluids, to assess the overall water quality of Perak.