Title of Article: Physico-chemical characteristics of Industrial effluents in Lagos State, Nigeria.

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Abstract: The discharge of industrially polluted effluents into municipal drains in a populated and commercially vibrant state of Lagos, Nigeria stands to pose deleterious environmental threats. The aim of this study is to ascertain the inhibitive contributions of these industrial effluents even as they flow from municipal drains into the sink (River or Lagoon). Analysis such as pH, temperature, conductivity, Total Solids (TS), Dissolved Oxygen (DO), Biological Oxygen Demand (BOD), Chemical Oxygen Demand (COD), Oil/Grease and Heavy metal determination using Atomic Absorption Spectrophotometer (Spectra AA Varian 400 plus) were carried out. Five industrial effluents discharged at point sources were collected and analysed. The 1.36-4.91 pH range does not conform to the guide line stipulated by Federal Environmental Protection Agency (FEPA). Sample A and E have the highest microbial load which reflects in their high BOD5 as well as COD values. Unprecedented 10.54 mg/L Cd concentration in effluent B is highly unacceptable by FEPA and World Health Organisation (WHO). This study anchors on the need for treatment of industrial effluent before they are discharged into the environment.