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EFFECTS OF DYE WASTE MATTER ON WATER POLLUTION: EVIDENCE FROM RIVER SHEHURI SOUTH, MAIDUGURI, NIGERIA

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ABSTRACT

A study on dye waste water was conducted in Maiduguri, Borno State in January, 2012 with the aim of determining the level of pollution of the area over time. This is of great concern to the people/animals residing there. Waste water samples (originating from dye activity) were collected daily in already pre-cleaned plastic containers for a paired of three (3) weeks and labeled appropriately. The samples were digested and analyzed for p^H, metals (Cu, Fe, Cl, Pb, Cr, Ni, Cd, Mn, As, Hg); pollution indicators, DO, BOD, TDS and TOC using standard methods. Results show high temperature (27.3^oc – 28.1^oc); p^H (10.5 – 12.1); BOD (8.0 – 9.0mg/l) Pb (0.1 – 0.25) and Cu (0.90 – 2.30mg/l) respectively. Canonical Correlation analysis shows a canonical R of 0.91 $p<0.05$ and a relationship between the minerals and pollution indicators.

KEYWORDS: Dye Waste Water, Pollution, Shehuri, Maiduguri, Canonical Correlation