Evaluation of the impact of Kaduna refinery effluent on river Romi

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Abstract.
The continuous global quest for management of the scarce water resources to make available to the human populace, portable water for drinking has necessitated this study. River Romi is the effluent discharge point of Kaduna Refining and Petrochemical Company Limited where the refinery waste water is disposed after treatment. This study investigates the impact of Kaduna refinery effluent on River Romi. The physicochemical properties of Kaduna River, Kaduna refinery effluent, Romi River (upstream and downstream) were analyzed from dry and wet seasons. The results obtained were compared with standard set by regulatory bodies and it was discovered that Kaduna refinery effluent has the highest number of pollutants. The body of River Romi upstream was found to contain low level of contaminants which are generally within the standard limits. Comparing the results of both upstream and downstream of River Romi shows that the concentration of pollutants increased after the introduction of effluent.

Keywords: Effluent, Water, River, Refinery, Romi, Kaduna, UNEP, NDWS

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