ABSTRACT

The recreational water of Jamaica with the exception of a few "problem" spot are safe as prescribed by WHO standards. Continuous monitoring of the marine environment by the various agencies, including Environmental Control Division (ECD), Ministry of Health, National Resources and Conservation Authority (NRCA), Ministry of The Environment and Housing, National Water Commission (NWC) and the Underground Water Authority (UWA) Ministry of Public Utilities and Transport ensures early detection of adverse trends.

The Quality of the water of the beaches in Kingston and its environs, including the Portmore area of St. Catherine was studied to assess the extent of pollution by virtue of the waste water problems besetting these parishes. The study found that with the exception of two spots in Kingston - Victoria Pier and Rae Town the quality of the water was well within the guidelines set by the World Health Organization.

The results of analysis of the water from the different beaches show that if the beaches are divided into eastern - those in Portmore that is, Hellshire and Fort Clarence and Western - those in Kingston and Port Royal, there is no significant difference in nitrate level $T = 1.1667, P = 0.005$. There is however a significant difference in mean BOD between eastern and western beaches, $T = 4.1569, P = 0.001$, D.F. = 28. This is also true for mean Faecal coliform count, $T = 4.4397, P = 0.0005$, D.F. = 28.
Until now dilution has been "a conditioner" of the beach waters, but with the rate of industrialization and residential development and the fact that all waste water eventually are discharged into the sea, there is the possibility that the time will come when the dilution factor will have its effects. When this happen eutrophication will result. Every effort therefore must made to treat our waste water before discharge into the sea or better yet find alternative means of disposal.