

ABSTRACT

Wastewater Discharges at The University of the West Indies, St. Augustine Campus

Maureen Dass

Wastewaters discharged at The University of the West Indies, St. Augustine Campus were analysed to assess the compliance with the existing environmental standards. The efficiency of the sewage treatment plant was determined. A total of seventeen Sampling Points were identified and physical, chemical and biological parameters were determined on a weekly basis, for a period of two months. Significant concentration levels of faecal coliforms, biodegradable and non-biodegradable organic matter were present in the wastewaters. Significant sources of water pollutants included the Halls of Residence – Canada Hall, Trinity Hall and Milner Hall; the Chemistry, Food Technology and Engineering Laboratories; and the SAC Cafeteria. Effluents from the Soil Sciences building, St. Augustine Villas, Sir Frank Stockdale Building, Cocoa Research Greenhouses and swimming pool contributed to water contaminants in the receiving environment. The treatment plant was found to be inefficient. The higher values of certain parameters with respect to the maximum permissible limits indicate the high pollution nature of the effluents and render the water unsuitable for various applications.

Keywords: Maureen Dass, wastewaters, University of the West Indies, compliance, effluents.