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**Analysis of Wastewater Quality after the Reopening of the Faculty of Technology,
University of Sri Jayewardenepura**

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Abstract

Wastewater is a complex matrix consists of varied pollutants namely particulate matter, microorganisms, dissolved solids, biogeochemical species at significant concentrations. Wastewater treatment brings down the concentration of pollutants to permissible levels. The Technology faculty has approximately 1,600 students and approximately 110 academic and non-academic staff members. We have observed that wastewater from the washroom systems, canteens and water used for cleaning activities are directed to the wastewater treatment plant. The study was conducted to determine the quality of generated and treated wastewater when the faculty functions in full capacity. Upon the treatment of wastewater, these are pumped for the garden water supply of the faculty. In this research, parameters like water pH, temperature, turbidity, dissolved oxygen (DO), chemical oxygen demand (COD), conductivity, total suspended solids (TSS) and temporary hardness of water were analyzed for both influent and effluent. The treatment efficiencies COD, DO, TSS and turbidity were recorded 53%, 41%, 96% and 93% respectively after the wastewater is passed through equalization anaerobic tanks, aeration tank, clarifier, chlorination tank, sand filter and carbon filters. The occurrence of an efficient treatment of wastewater can be concluded and it is recommended to be used for general water usage at the faculty gardening activities.

Keywords: COD, Dissolved Oxygen, Wastewater treatment