ASSESSMENT OF THE EXISTING WASTEWATER TREATMENT SYSTEM AND PROPOSED DESIGN OF NEW PLANT BED WASTEWATER TREATMENT SYSTEM OF CENTRAL PHILIPPINE UNIVERSITY

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ABSTRACT

This study entitled “Assessment of the Existing Wastewater Treatment System and Proposed Design of New Plant Bed Wastewater Treatment of Central Philippine University” was conducted to determine the efficiency of the existing treatment system. The researcher had borrowed a Dissolved Oxygen (DO) kit from Environment Management Bureau (EMB) Laboratory Services Section to conduct a field analysis of the influent and effluent of the existing wastewater treatment system of CPU. The parameters analyzed were the DO, pH and temperature. The researcher had also taken wastewater sample from the existing treatment system for analysis of EMB Laboratory Services Section at Parola, Iloilo City. The parameters analyzed were Biological Oxygen Demand (BOD), Dissolved Oxygen, Total Suspended Solids (TSS), pH, Color and Temperature.

The results were compared to the standards of the Department of Environment and Natural Resources (DENR) for the effluent waters.

The BOD analysis of influent and effluent were 430 mg/li and 19 mg/li, respectively and the TSS of 608 mg/li for influent and 2 mg/li for effluent showed that the existing wastewater treatment system of CPU is efficient in treating the water discharged from Dr. Alfonso Uy Student Union Building.

The analysis value will also be used as basis to the proposed design of the new wastewater treatment system for CPU.