Use of Recycled Water Coming from De La Salle University - Dasmariñas Sewage Treatment Plant for Bathroom Fixtures and Irrigation of DLSU-D High School Building

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ABSTRACT

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By

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The purpose of this research is to conserve the water through recycling of the effluent water of the DLSUD Sewage Treatment Plant. The effluent water comes from Rapid Sand filter will be used in lavatory, urinal, and irrigation of the new High School Building.

Specifically, this study tried to (1) determine the classification of the effluent of the De La Salle University- Dasmariñas Sewage Treatment Plant in terms of BOD, COD, TDS, and pH, (2) determine the design of the water piping system and storage from the effluent of the Sewage Treatment Plant to the High School Building and, (3) to design an integrated process to use the Sewage Treatment Plant effluent water in irrigation and bathroom fixtures in the High School Building

The research is structured in five main chapters: (1) Introduction, discussing the statement of the problem, objectives of the study, scope and limitation and conceptual framework; (2) Review of the Related Literature, addressing the related topic in this research conducted to different literature and studies both local and foreign country; (3) Methodology, deliberating the methodological framework and the methods used in the research; (4) Data and Results, specify the result of the water testing and design aspect; and (5) Summary of Findings, Conclusion, and Recommendation, discussing the output of the study.

After analyzing the data and result, the treated water from the Rapid Sand Filter is safe for flushing water for toilet, urinals, and irrigation. The quantity of the effluent water from the STP is more than the water needed in the High School Building. The researchers recommend to use the excess water in the other buildings of DLSUD.

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