

Fermented fish production wastewater treatment by constructed wetland system

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ABSTRACT: The objectives of this study was to provide the wastewater treatment system for fermented fish production factory which will alleviate the water pollution problem caused by discharging of un-treated wastewater into the lagoon and to demonstrate the constructed wetland technology as on-site solution for treatment of wastewater. The treatment system composed of grease trap, anaerobic tank and 2 constructed wetland beds. After the treatment system has been operated, the environment of the factory has been improved as there is no wastewater discharged around the factory anymore. Therefore, the factory has been renovated to approach good sanitation. However, the management policy and regulation must be established by local authority for advantageous operation and maintenance of the system. The cooperation by community is the most important to make the system sustainability. The characteristics of low costs for construction and maintenance are the important issues for achieving sustainability of the system.

KEYWORDS: constructed wetland, natural treatment, community, fermented fish production wastewater, sustainability