

D-75 Biological treatment of desiccated coconut mill waste water

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A considerable number of desiccated coconut mills are located in the coconut belt of Sri Lanka in Negombo to Wennappuwa area. Asian countries are famous in D.C. production. Almost the entire local D.C. production is exported.

D.C. mill waste water mainly consists of coconut water and waste water generated during washing of kernels after the paring operation and the total amount of waste generated from this industry is considerable.

COD, BOD and volatile acids are considerably high in untreated waste water discharges, and therefore these discharges generate unpleasant environmental conditions. This research has clearly shown that the existing biological waste water treatment technologies can be easily adapted to treat D.C. mill waste water successfully.

Pilot scale process development work carried out using a combination of biological waste water treatment technologies have very clearly demonstrated that the coconut water can be treated efficiently and cost effectively to meet the required discharge consent limits. The process developed can operate with Hydraulic Retention Time as short as one day and organic loading of 10-15 kg COD/m³/d showing BOD reduction as high as 80 - 95%.
