

PEMANFAATAN LUMPUR TINJA SEBAGAI PUPUK KOMPOS PADA INSTALASI PENGOLAHAN LUMPUR TINJA (IPLT) PULO GEBANG

Rochman Homsa Fadila

Jurusan Teknik Lingkungan, Fakultas Teknik, Universitas Sahid Jakarta

Email: omanfadila@gmail.com

Abstract

Fecal Treatment Plant (IPLT) Pulo Gebang is an installation that treats sludge taken by using a fecal truck. Every day it operates, giving rise to processed products in the form of solid mud, causing piles to fill the area of the IPLT, so steps need to be taken to overcome this. Making solid mud as compost can reduce pollution and deposits in the IPLT area. Compost can be useful as an alternative to reduce sludge generation in the IPLT and provide economic value because it can be sold as organic fertilizer to fertilize the soil and can provide additional income to reduce the operational costs of Pulo Gebang IPLT.

This study focuses on testing the characteristics contained in solid sludge with parameters, temperature, pH, moisture content, c-organic, nitrogen and phosphorus by distinguishing samples of wet solid sludge and dry solid sludge from drying results for 6 months. The results of the characteristics of compost analysis on solid sludge samples were 28.9 ° C, air content 81.48%, pH 7.22, organic C 27.97%, nitrogen 2.65%, phosphorus 0.33%, and ratio c / n 10.55 and in solid sludge samples obtained at 30 ° C, air content 52.53%, pH 6.83, C-organic 26.92%, nitrogen 2.54%, phosphorus 0, 17%, and the ratio c / n 10.60. The results of analysis that do not meet SNI 19-7030-2004 quality standard are that the moisture content in solid mud samples is wet because of $\geq 60\%$.