KADAR BOD DAN COD LIMBAH CAIR RUMAH SAKIT SEBELUM DAN SESUDAH PENGOLAHAN DENGAN CHLORELLA SP

Studi Lapangan Skala Kecil Limbah Cair RSUD Bangli

Cok. Dewi Widhya HS[1], NK Rusminingsih[2], N Notes[3]

Abstract. *Hospital activity has the potential to produce waste which may cause pollution of the environment, therefore it is necessary to control the disposal of liquid waste are discharged into the environment by setting the Liquid Waste Quality Standards for Hospital Activities. Because of the potential impact of hospital wastewater onn health is very large, then each hospital is required to process the waste to meet the quality standards that have been established. This research uses microorganisms chlorella sp. to improve the quality of hospital sewage. The purpose of the research was to determine the effluent quality before and after treatment with chlorella sp. This type of research is a quasi experimental design with before and after treatment. Hospital waste used in the study is waste Bangli General Hospital. To dertemine water quality parameters used hospital waste levels of BOD and COD of wastewater samples before and after hospital treatment. The result mean BOD levels of hospital wasterwater before treatment was 151,125 mg/l and the mean BOD levels after treatment with chlorella sp. was 101,75 mg/l. Average effluent COD levels before hospital treatment is 182,90 mg/l and average levels of COD after treatment with chlorella sp. was 101,75 mg/l. Wilcoxon Signed Ranks Test Result showed there is difference Rangks Tes levels of BOD and COD of hospital wasterwater before and after treatment with chlorella sp. Suggested order for the General Hospital Bangli further optimize the functions of sewage treatment plants by means of routine maintenance and continuous.*

Keywords: *hospital waste treatment, Chlorella sp.*

1,2,3 Dosen Jurusan Kesehatan Lingkungan Poltekkes Denpasar