PEMANTAUAN KUALITAS LIMBAH CAIR INDUSTRI PENCELUPAN DI KELURAHAN BENG KECAMATAN GIANYAR KABUPATEN GIANYAR 2011

NM. Marwati¹, IW Merta², IW Sali³

Abstract. Production process in large industry, small industry and home industry definitely result in wastes, which like gas wastes, liquid and solid wastes. Immersion industry observed is a small industry. Liquid waste as a result from immersion industry is not only polluting the environment but also threatening economical productivity and quality of life of its citizens. This research is a descriptive one with 12 liquid wastes as samples. Quality of samples compared with quality status of Governor Regulation of Bali No.8 2007, the pollution index counted depend on Decision of Ministry of Life Environment No.115 2003 and calculation of the sample's pollution load based on parameter's concentration and discharge of wastes. The results showed that concentration of TSS, TDS, BOD, and COD for each samples exceed the quality standard. In addition, concentration of Pb, Cd, Zn, Fe, and Cu exceed the quality standard for several samples, while for other parameters (temperature, pH) all samples exceed the quality standard. Sample's quality standard varied from severe polluted with pollution index (PI) 10,75 on sample number 09, mild polluted with range PI 4,00 – 4,89 on sample number 05, 08 and 12 meanwhile moderate polluted with PI ranges from $5{,}41 - 7{,}41$ showed on all samples. TSS and TDS pollution load exceed the quality standard for all samples, BOD, exceed the quality standard on sample number 03 and 04, while COD exceed the quality standard on samples number 01, 02, 03, 04, 05, 06, 07, 09, 11 and 12. Pollution load of Cu exceed the quality standard on samples number 01, 04, 07, 08 and 09. Recommendations given to local government include relevant agencies to be more focus on handling environmental issues particularly about water pollution and for related public health services expected to optimalize the implementation of their programs because environment can reflect the public health.

Keywords: Immersion industry, liquid waste, quality status and pollution load