

ABSTRACT

Gunung Tugel Landfill use open dumping methods it's oprasional. Organic matter on uncomposed waste will decompose together with rain water produces leachate. The problems is, in Gunung Tugel Landfilln has not leachate treatment, so the leachate can flow to irrigation channel and highly potential to pollute surface water in aglicultural plan (paddy field). It is necessary to analyzed the distribution of heavy metals (Cd, Cr, Cu, Pb, Mn and Zn) on the surface water of irrigation channel and aglicultural plan from Gunung Tugel Landfill Banyumas District. The determination of sampling method locations use purposive sampling with location of water sampling is : 1 sample in irrigation channel, 2 samples in afur channel, 3 samples in paddy field and 1 sample in river. The concentration of heavy metals on surface water around Gunung Tugel Landfill Site is: Cd (0,004 mg/l), Cr (0,007 mg/l), Cu (0,026 mg/l), Fe (0,992 mg/l), Pb (0,138 mg/l), Mn (0,066 mg/l), dan Zn (0,1 mg/l). The concentrations of heavy metals Fe, Pb, Zn and 1 Mn samples has exceeded the quality standard of Government Regulation No.82 of 2001.

Keywords: Landfill, Leachate, Heavy Metals, Surface Water