ABSTRACT

EVALUATION OF EROSION RATE PLOT WITH SMALL DUMPING AREA ON ACTIVE IN PT KALTIM PRIMA COAL, NORTH SANGATTA DISTRICT, EAST KUTAI REGENCY, EAST BORNEO

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The study area is located in the area of active dumping area Panel 5, Pit Jupiter PT. Kaltim Prima Coal, Sangatta, East Kalimantan. PT Kaltim Prima Coal is a company engaged in coal mining. This study aims to determine the rate of erosion in the active dumping area in accordance with the specifications slope of PT Kaltim Prima Coal for designated dumping areas 25° and 14°. The designation of the reclaimed area of the measurement method in erosion rates in the active dumping area using small plots that aim to find out the amount of eroded soil and total volume of surface water being stored in a tank plot small plots. Number of small plots that are created are two pieces with different inclination. The first plot with a slope of 25° and a second plot with a slope of 14°.

The study was conducted in several phases: preparation, field work stage, the stage of laboratory work, evaluation stage, and the stage of preparation of the report. Primary data were obtained to calculate the rate of erosion is precipitation, surface water volume, and heavy soil.

Based on the research that was done showed the rate of erosion of the active dumping on the slope of the plot 25° is 83.27 tonnes / ha with very severe erosion hazard classification, while for dumping final with slope plot 14° is 48.72 tonnes / ha with classification very severe erosion hazard as well.

Keywords: erosion, small plots, overburden.