

ABSTRACT

Slippery is a wet condition and the time lost after rain to dryness then the road can be used again. Slippery handling activity is the activity of dredging materials on the surface of the road that can make mechanical equipment that uses rubber tires can slip. This activity was carried out in order to avoid slippery conditions when the conveyance passed the road and to avoid accidents.

PT. Bukit Makmur Mandiri Utama (BUMA) is a private company engaged in coal mining contractors conducts activities mining in pit Roto South and pit Roto Middle by using an open pit mining system so that the mining activities depend on the weather conditions. One of the barriers to working in open mine is the existence of work barriers in the form of activities slippery caused by natural factors in the area of mining operations that is rain. equipment must wait until the handling slippery activities on the haul road are handled.

The method used in this study is a quantitative approach so the problems are solved. The results of the research are in the form of the haul road width of each pit is a pit Roto South 38.30 m and the pit Roto Middle 36.49 m and distance of overburden haul road each pit is a pit Roto South 10,861.09 m and the pit Roto Middle 14,162.07 m so that the area handling slippery of each pit is the pit Roto South 415,979.59 m² and the pit Roto Middle 516,773.82 m² make handling the slippery on the long haul road overburden of each pit is a pit Roto South for 58.18 hours and the pit Roto Middle for 72.54 hours. The company determined the budget for carrying out activities slippery by 50% of the total rainy hours of each pit is a pit Roto South for 54.57 hours and the pit Roto Middle for 56.77 hours and the production target of motor grader equipment for each pit is a pit Roto South amounting to 165,728.92 m² and Roto Middle pit amounting to 173,414.03 m².

There is a need to improve the width of the road according to the standard, which is 27.35 m and the formation of cross slope by 4-8% which can reduce the duration of handling slippery to be below budget the company's predetermined with the duration of each pit is a pit Roto South 52.44 hours pit and pit Roto Middle during 54.99 hours and increased production of equipment motor grader by increasing work efficiency from 67.71% to 74.64% so that the production of motor graders for each pit which was previously 186,030 m² increased, that is, the pit Roto South increased to 209,283.75 m² and the pit Roto Middle increased to 279,045 m² so that the production of equipment motor grader reached the target set by the company.