Evaluation of Road Transports From Front Toward Coal Mine Stockpile Block B In Coal Mining PT Minemex In Indonesia, Village Serdang Talang District of Mandiangin Regency Sarolangun Province Jambi

ABSTRACT

For the coal production target of 1,000,000 tons / year, haul roads provide a major contribution to the smooth running of the transport operation if the road geometry according to the dimensions of transport means used. Based on direct observation in the field, very narrow road geometry assessed for movement of conveyance and can be dangerous for other road users. The calculation is based on the American Association of State Highway and Transportation Officials (AASHTO) Rural High Way Design Manual 1973, the minimum width haul roads to be passed by both the Dump Truck Scania P420 passing is 9 meters to go right and 14 meters to the street corner.

The slope of the curve (superelevation) should be created ranges between -195.763 mm / m to 1.246 mm / m in order to get through tikunga conveyance with maximum speed. Based on the width of the road made, cross slope to be made in the amount of 18.75 cm to the side of the road so that the road was not flooded by water. Carrying capacity of the existing material can be classified that material bearing capacity for road transport are included in the category of compact gravel and boulder-gravel formation; very compact sandy gravel soil that has a carrying capacity of 20,000 psf. With a carrying capacity of 20,000 psf material, it can withstand the load is distributed on the surface of 17601.234 psf.

To support the safety and salvation of work on the haul roads made stopping distance on a straight road is 18.458 to 21.690 meters and stopping distances at the corner of 8 to 20 meters. To dike safety (safety berm) needs to be made is 0.571 meters high.

Travel time Scania P420 dump trucks loaded before the repair is 176.072 seconds and after the decrease in the slope of the haul road dump trucks loaded travel time is 165.517 seconds, faster ± 11 seconds.

Keywords: Wide Road Transport, road slope of Transport, Elevation