ABSTRACT

PT. BARAMEGA INDONESIA SURYA ALAM (PT. BISA) is contractor company that worked on coal mining at mining business license of PT. BARAMEGA CITRA MULIA PERSADA (PT. BCMP) who covering an area of 1549.98 ha in the Sarongga Village, Kelumpang Hilir Subdistrict, Kotabaru District, South Borneo Province.

PT. BISA has not had organised pushback design of mining yet every month, because the company could not operate for several times. PT. BISA necessary to plan a mining pushback design every month for 10 months refers to the minimal coal production target amounted 60.000 tonnes / month with restrictions stripping ratio of 3: 1. In addition, PT. BISA also need to plan disposal area design for 10 months to remove the overburden.

Based on the coal deposit modeling, it amounted 830.976 tonnes of coal reserves and amounted 2.146.228 bcm overburden. The design of the production target of overburden and coal on a monthly as follows: For the first month amounted 240.014 bcm and 82.907 tonnes, for the second month amounted 203.868 bcm and 80.149 tonnes, for the third month amounted 185.546 bcm and 64.316 tonnes, for the fourth month amounted 241.261 bcm and 104.887 tonnes, for the fifth month amounted 232.301 bcm and 78.512 tonnes, for the sixth month amounted 240.604 bcm and 86.395 tonnes, for the seventh month amounted 229.113 bcm and 86.113 tonnes, for the eighth month amounted 211.732 bcm and 73.144 tonnes, for the ninth month amounted 196.684 bcm and 66.150 tonnes, and for the tenth month are 165.105 bcm and 108.401 tonnes.

Disposal area is designed as efficiently as possible with the details as follows: For the first month covering 7,27 hectares with a capacity of 292.050 lcm, for the second month in an area of 5,84 hectares with a capacity of 248.067 lcm, for the third month in an area of 5,45 hectares with a capacity of 225.772 lcm, for the fourth month in an area of 4,65 hectares with a capacity of 293.567 lcm, for the fifth month in an area of 3,88 hectares with a capacity of 282.664 lcm, for the sixth month in an area of 3,02 hectares with a capacity of 292.767 lcm, for the seventh month covering 7,27 hectares with a capacity of 278.785 lcm, for the eighth month in an area of 6,68 hectares with a capacity of 257.635 lcm, for the ninth month in an area of 5,26 hectares with a capacity of 239.325 lcm, for the tenth month covering an area of 4,48 hectares with a capacity of 200.899 lcm.

The mining pushback design is capable the targets of coal production that a company expected without exceeding the stripping ratio limit of 3 : 1. Design of disposal area can remove all the overburden from the mining pit.