

## ABSTRACT

PT. Allied Indo Coal Jaya is a coal mining company in the city of Sawahlunto, which mines with two mining systems, namely open pit mining and underground mining. The mining method used in open pit mining is the open pit mining method and in the underground mine, namely the room and pillar method. PT. Allied Indo Coal Jaya carried out blasting activities for the dismantling of overburden rock layers. In this study, a calculation of the costs incurred in blasting activities was carried out so that it could be known the costs needed to achieve the monthly overburden production target. In this study, the results of overburden blasting, the need for explosives and the costs incurred were analyzed. The actual geometry of the average used by PT. AICJ is; burden: 3 m; space: 3 m; blast pit depth: 6.5 m. In the discussion, the average volume of blasting results in each detonation was 6,732.34 m<sup>3</sup> and the average powder factor value from blasting activities in February 2022 was 0.325 kg/m<sup>3</sup>. The costs incurred by the company in blasting activities during February 2022 were Rp. 658,529,573.25,-, with an average cost of Rp. 32,926,478.66,-. Based on the calculation of the blasting results and blasting costs, it can be known that the average cost required to produce one cubic meter of overburden rock is Rp. 5,008.50,-. When compared to the selling price of PT. AICJ with SR 1: 8, the costs incurred for overburden production per volume are still economical with a percentage of 1.29%.

Keywords : overburden, cost, blasting