

ABSTRACT

PT. Allied Indo Coal Jaya (PT AICJ) Parambahan Mining Unit is one of the company of coal mining foreign private parties in West Sumatra. Area of PT. AICJ form regions Coal Mining Company Agreement (PKP2B) covering an area of 747 hectares located within the Mining Permit of PT. Bukit Asam Ombilin Mining Unit (PT BA-UPO), it is located at 100 047 'E - 100 049' E and 0035'30 "LS - 0037 'LS. The mine is located Sawahlunto within 90 km from the city of Padang. PT. AICJ conduct mining with underground mine system and the method is room and pillar.

In the mining activities would result the opening holes that is not used, which could result in a methane gas deposits and has the potential dangers of the mine blast. So it is necessary for closing the opening holes, subsequent study of ventilation networks because there is a change of air flow. Besides the dust is also a problem that must be addressed so that the performance and health of the workers can be optimal.

According to analysis carried out for the quantity of air taken into the mines is 133.564,66 cfm while only 17.225,74 cfm air requirements, so the air is said to be fulfilled. While the coal bin area has the highest concentration of dust is 2.3 mg/m^3 , this is because in the coal bin area is a source of dust that always takes place during the accumulation of the coal. It is necessary for efforts to dilution of dust with auxiliary fan (exhaust fan) and also sprinkling water upon the accumulation of coal in the coal bin in order to reduce the concentration of dust in the area. For the temperature meets the criteria set by the government through the minister of mines and energy decision no.555/K/26/M.PE/1995.