ABSTRACT

Handling water pit mine in Batu Hijau mine dewatering system uses penyaliran system. The system is done by making the Open Sump Drainage, plumbing and gas installations as well as open channels to drain water from the mine pumping into settling ponds.

Based on the observations and calculations in mind that mine water comes from rain water directly into the pits and the water runoff with a total of 85.963 m³/hr discharge. Mine water is accommodated on the ground floor as mine openings catchment sump with a volume of 103.746 m³/hr. Pumping water from the mine sump to the surface during the rainy season is done using Multiflo pump type MF 420 4 units with a capacity of 982 m³/hr pump. And when the dry season using a pump type and Hytra Tyco.

At Batu Hijau pit has three settling ponds are Santong 1 with a volume of 126.904 m³, Santong 2 = 1.158.447 m³, Santong 3 = 5.774.614 m³.

Keywords: mine dewatering system, mine water, sedimentation ponds.