

ABSTRACT

PT. Newmont Nusatenggara (PT. NTT) located in District Jereweh, Sumbawa Barat State, Nusa Tenggara Barat Province. In order to do mining, PT.NTT using open pit method. To manage the impact of the water that cause problem around mine site therefore settling pond is build such as Tongoloka pond. In this pond, there are pump installed to handle water from outside run inside pond until 2032. That's way a research is needed to knowing about pump until life of mine.

Tongoloka pond placed around dumping area, so the catchmen area become big from time to time that make the volume of water that enter the pond getting bigger every year. Reclamation project to handle the effect of erotion and decrease the volume of water go to pond from dumping area.

Source of water in Tongoloka pond came from rainfall, ther is no groundwater effect in Tongoloka pond with volume of water flow about 26 m³/detik. Based on analisys rainfall data 2000-2011, the amount of planned rainfall is 142,451 mm/day and rainfall intensity is 31,111 mm/hour with rainfall return period (PUH) 2 years. That's way the intensity of Tongoloka is in hard rain katagory.

Tongoloka pond used, 3 poonton pump merk KSB type OMEGA 350- 360 B max capacity 1300 m³/detik, pumping head 44 meter with pararel installation and 4 booster pump merk KSB South Africa type WK/WL-JH 250 max capacity 918 m³/detik, pumping head 300 meter seri installed so in can handle the height of dumping area. The pipe streach about 8100 meter to Sejongong Toe Dike.