Pit TW 1 is a coal mining project owned by PT. Sharpening Prima Coal carried out by PT. Arkananta Apta Pratista as a contractor with a production target of 700,000 BCM / Month. The project is located in the village Girimuki, District Penajam, Penajam Paser Utara, East Kalimantan.

Mining system applied to take Coal mine is an open system with a method Strip Mine. One of the additional activities on mining operations to remove the water that has entered the area flooded mine (Mine Dewatering), because the mine water that is not dealt with properly can disrupt mining operations. The progress of mining cause mine penyaliran system change. Hence the need for a review of the existing mine penyaliran system.

Based on the analysis of precipitation data in 2005-2014, obtained rainfall plan is 124.21 mm/day, the intensity of rainfall is 43.06 mm/h with a 3-year return period rainfall and hydrology risk by 86.83%.

Catchment research sites there is only one catchment, which is 0.19 km² with runoff coefficient of 0.7.

Pit mine water source TW 1 comes from rain water directly into the Pit area. Rain water discharge flow of 1.59 m³/sec.

Volume Water wells are (sump) which serves to accommodate the temporary water flowing in opening the mine amounted to 7.872 m³ with the long dimension of the surface of the sump 108 m, width of the surface of the sump 32 m, the length of the base sump 102 m, a width of the base sump 26 m, a depth of 4 m.

KSB pumps used is 150 LCC - H 150-500 with 450 pump discharge m³/hour, the pump lies in a puddle of water and water pumped directly to the settling pond.

There is accumulation of 86886.87 m³ of water volume, the time required to drain stagnant water use KSB pumps LCC- H 150-500 is 10 days.

Settling ponds owned by PT. Arkananta Apta Pratista very good, because it is designed with 4 compartments with a total value of Suspended Solid used is 238 mg/l. Based on the results of the calculation of settling ponds should be treated in the first compartment of each 256hari once, the second compartment 312 days, the third compartment 260 days, and the fourth compartment 291 days.