

## ABSTRACT

This research was conducted on an area of  $\pm 70$  hectare in district Sebangau, Palangka Raya city divided two blocks, namely SBN East and West. The research area is an excavated pit sand mine that had long been abandoned so it occupied by water. The water that fills in an void comes from rainwater runoff. The water that fills the openings are acid ( $\text{pH} < 4.5$ ) because the conditions of sand mining area in peatlands.

The primary data obtained through observations in the field with direct measurement of the void, sampling of surface water, laboratory test and a quantitative survey with a questionnaire.

The results of this study indicate that the physical condition of the sand pits effect on water quality, namely potential occurrence of sedimentation, shape and depth of void forms rectangular and irregular, surface area of water that fills the void in SBN East locations of  $\pm 569,500 \text{ m}^2$  with an average depth of two meters, so the water volume of 1.14 million  $\text{m}^3$ , and surface area of water in the SBN West locations of  $\pm 131,000 \text{ m}^2$  with an average depth of 2.2 meters so that the volume of water of  $\pm 288,200 \text{ m}^3$ , age and type of voids both locations including category pits half-cooked (medium age holes). The results of water quality analysis by comparing the water quality standards based on Government Regulation No. 82 of 2001 that contamination at the parameters COD, DO, metal content Pb, Nitrite, free chlorine, oils and fats and low pH (acid). Assessment of water quality status using Storet Method showed that both the former location of the mine excavation earmarked for the Group IV (Class C or medium) and sediment load which lasts very low. Water quality management form on an void of sand mine has two management recommendations, namely a) Improving water quality by simply entering directly limestone into the void waterlogged active as much as  $\pm 0.55 \text{ ton / day per hectare}$  in eastern locations and  $\pm 0.33 \text{ ton / day per hectare}$  in western locations, b) Void have a large water volume with enough good quality water can be used as a water reservoir (water source in case of forest fires and land) and freshwater fish farming.

**Keyword :** Void, Sand, Water Quality.