## REKLAMATION OF SAND AND STONE MINING LANDS AS PRODUCTION FOREST AREA IN TILENG DUSUN, SANGGANG VILLAGE, DISTRICT BULU, SUKOHARJO REGENCY, PROVINCE OF CENTRAL JAVA

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## <u>Abdul Jabar</u> 114130127

## ABSTRACT

Mining is an activity of a company or community that involves nature. Mining that occurred in Tileng Village, Sanggang Village, Bulu District, Sukoharjo Regency, Central Java Province underwent a change in the form of the initial land that was once a plantation into mining land. Land damage caused such as changes in the landscape, and there is a pool of water that fills the basin, so prevention of environmental changes is important to be managed by applying the technical engineering method of reclamation. The research aims to find out the environmental geophysical damage due to sand and stone mining and to know how to design reclamation directives.

The method used for this research is survey method and parameter mapping as well as the determination of land damage measurement points using purposive sampling method that is by making certain considerations with the assumption that it can represent the whole. The initial step is to take rock samples and take soil samples using Diagonal Systematic by determining the midpoint of a sample and taking samples in the four corners of the compass and then mixing it into one sample. The second step is laboratory test of andesite rocks and the soil tested is the value of C, N, P, K and PH. Then an assessment of 7 parameters is used as a reference level of land damage, namely excavation boundary, excavation depth, excavation, excavation slope, excavation wall, MAT, road conditions and vegetation based on the Decree of the Governor of Yogyakarta No. 63 of 2003 Standard Environmental Damage Criteria for Group C Business or Mining Material Activities.

The results of the study stated that the condition of the excavation boundary area is good, Cliff Slope Damage Value Excavation, High Damage Value Excavation Wall, Groundwater Advance Good Value, Basic Relief of Damaged Value Excavation, Medium Value Road Condition, and Damaged Value Vegetation Cover. Referral reclamation carried out is referring to the 2011-2031 RTRW of Sukoharjo Regency which is intended as an acacia plantation. The level of damage to the slope of the excavation is done perlandaian slope using a bench terrace that is 1: 3 and made the drainage channeled to the river then carried out planting which is intended for reclamation land is acacia with a spacing of 9 x 9 meters and covercrop plants in the form of peking grass.

## Keywords: Sand and Rock Quality Analysis, Teak Garden, Land Damage, Mining, Slope Engineering.