TECHNIQUE RECLAMATION OF POST-MINING ANDESITE IN BENGKAL HAMLET, TANJUNGSARI VILLAGE, PACITAN SUB-DISTRICT, PACITAN REGENCY, EAST JAVA

BY

IVO DEWI MARISTA
114130057

ABSTRACT

The mining activity in Bengkal Hamlet, Tanjungsari village, Pacitan sub-district, Pacitan Regency carves the changes of the land, those the change of the land need to be manage. The mining activity of andesite in Bengkal Hamlet conducted by the hard tools such as excavator and rock breaker. In this research will be classifiable become the grade of the damage land which occurs in andesite mining Bengkal Hamlet, Tanjungsari village, Pacitan. Beside conducting the classification of the damage land, will be designed reclamation of post mining which accord of the RTRW regulation of Pacitan.

Research of Technique Reclamation Post-mining Andesite in Bengkal Hamlet uses survey and mapping method to create topographic map of mining area and measurement of land damage criteria, mathematical method to calculate rainfall in the research area, and also to scoring for the level of land damage of andesite mining in Bengkal Hamlet, Tanjungsari Village, Pacitan Subdistrict, Pacitan Regency and evaluation of environmental carrying capacity. Evaluation of environmental carrying capacity is done as consideration in determining the reclamation that will be done. Laboratory methods were conducted to analyze specific rock types, soil and water quality for reclamation. On the sampling method used purposive sampling method where the samples taken can represent the all characters of the sample in the research area. Interview method is used as additional data in research to support analysis of results.

Based on the result of measurement and analyzed of data indicate the level of damage of existing land in andesite mining Bengkal hamlet, Tanjungsari village, Pacitan included in broken category with the score of 2. Result from thin incision test of rock in the laboratory, andesite is an intrusion rock with petrographic naming pyroxene andesit. On testing of soil quality in the laboratory, the soil at the andesite mining area is a rather alkaline soil with a pH of 7.85 and other macro nutrients under the standard. The hydrological conditions in the research area has a good quality for clean water needed and water quantity was enough. Overburden and top soil calculation of existence in the reseach area were 27,000 BCM for top soil and 81,000 BCM for overburden. While the needed of top soil and overburden for revegetation needs is 1200 LCM for top soil and 90,000 LCM for overburden. Technique reclamation that will be conducted in the research area in the form of making terraces, vegetative reclamation, and infrastructure development in the form of settlements.

Keyword : Mining, land damage, revegetation, reclamation