THE LEVELS OF ENVIRONMENTAL DAMAGE ON THE POST SAND AND STONE MININGS IN HARGOBINANGUN VILAGE AREA PAKEM DISTRICT SLEMAN REGENCY

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ABSTRACT

Sand and stone mining activities can be found in Hargobinangun Village, Kapanewon Pakem, Sleman Regency. Sand and stone materials are important materials in building construction. Mining techniques carried out by miners at the research location are considered to pay less attention to the proper management and monitoring of the mining environment so that they have the potential to cause environment damage to the land around the mining site. The purpose of this study was to determine the level of environment damage after sand and stone mining and map the level of environment damage due to sand and stone mining in Hargobinangun Village. The method used in this study is a survey method to observe and measure environment degraded, purposive sampling to determine sample points at research locations, scoring to assign values to parameters, and matching to determine the value and class of post-mining land degraded. The determination of the level of environment damage in this study refers to the Decree of the Governor of the Special Region of Yogyakarta Province Number 63 of 2003. The parameters observed include: 1) Relief of Hole Surface, 2) The Slope of the Hole Cliff, 3) High Wall Hole, 4) Depth of Hole from Initial Ground Surface, 5) Condition of the Road, 6) Transportation of Mining Materials, 7) Reclamation Time, and 8) The Cover Vegetation, and 9) Return of Rooting Zone Soil to be Managed. The results showed that the level of environment to land after sand and stone mining in Hargobinangun Village at 10 observation points observed was divided into two levels of damage, namely at observation point 10 included in the low damage criteria, which is 19,681 m² while at observation points 1, 2, 3, 4, 5, 6, 7, 8, and 9 included in the criteria for moderate damage, which is $54,232 \text{ m}^2$.

Keyword : environmental damage, reclamation, mining sand and stone