"EFFORTS RECLAMATION STUDY BASED ON PHYSICAL ENVIRONMENTAL CONDITIONS ON ANDESITE MINING AT PT. DEWATA BUMI NUSANTARA, SIDOMULYO VILLAGE, PENGASIH DISTRICT, KULON PROGO REGENCY, SPECIAL REGION OF YOGYAKARTA"

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ABSTRACT

The research was conducted on andesite mining at PT. Dewata Bumi Nusantara, Sidomulyo Village, Pengasih District, Kulon Progo Regency, Special Region Of Yogyakarta. Andesite mining with quarry method causing the environmental damage such as abiotic, biotic, culture, and neglected ex-mining land in the research location. The purpose of this research is to determine the physical condition of the environment in andesite mining at PT. Dewata Bumi Nusantara and to provide the efforts reclamation for andesite ex-mining land at PT. Dewata Bumi Nusantara based on the physical condition of the environment.

The method used is observations and measurements in the field. Sampling technique using nonprobability sampling with purposive sampling, and scoring method used for data analysis. The parameters used are extensive land clearing against mining permits, topsoil taken to be managed, slope of excavation wall, high of excavation wall, and the risk of disruption due to mining, which refers to the Special Region Of Yogyakarta Governor Decision Number 63/2003 About Raw Criteria Of Environmental Damages For Business And Excavation Activities For Group C Extractive Material In Special Region Of Yogyakarta.

By the results of measurements and analysis on the research location, showed that environmental damage level is categorized into the level of damage with a score of 2 = moderate, and the calculation result of topsoil 28.215 LCM. Effort reclamation which suggested is using pot cropping system with 3 meters distance between holes. The things that need to be considered is arrangement pattern on mine excavation such as slope of excavation wall must be ≤33.3%, high of excavation wall must be ≤3 meters and top soil pile must be ≤1 meter.

Keywords: effort, reclamation, mining, and andesite.