TECHNICAL DESIGN OF LIMESTONE MINING RECLAMATION IN SIDOREJO VILLAGE, LENDAH DISTRICT, KULON PROGO REGION, SPECIAL REGION OF YOGYAKARTA

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ABSTRACT

This research has been done in Sidorejo village, Lendah district, Kulon Progo region. The research location was a calcarenite mining area taken care by citizens which done traditionally and was not conceptualized. Goals of this research was to determine and analyzed the existing condition in mining land and to give a direction and to determine the proper technical reclamation design.

The methods used in this research are mapping method to know the field existing condition and survey method to acquired primary data done by measuring and observation. Soil sampling taken with purposive sampling (Non Probability Sampling) based on vegetated land and non-vegetated land, and laboratory analysis to determine physical and chemical properties. The results of measuring and observation are descripted to describe the existing conditions based on parameters of environmental damage criteria referring to Keputusan Gubernur DIY No.63 tahun 2003 tentang Kriteria Baku Kerusakan Lingkungan Bagi Usaha Dan/atau Kegiatan Penambangan Bahan Galian Golongan C di Wilayah Propinsi DIY.

Based on the results of research and analysis known the existing conditions of mine land are as follows: excavation boundary has <5 meters from the land ownership border, the base relief excavation depth with an average 1,6 meters, the height of the excavation wall with an average 7,6 meters, excavation cliff slope with an average 69° or 262,84%, road damage presentation in amount of 9,5% with a wavy road and gravel condition, and land cover/vegetation 68,77%. Technical reclamation of mine land in research location are recommended to become community forest corresponded to Rencana Tata Ruang Wilayah Kabupaten Kulon Progo Tahun 2012-2032, making drainages and the planting method chosen is monoculture pattern with a pot system planting pattern. The size of the pot/hole is 30 x 30 x 30 cm with a spacing of 3 x 3 m. The selected plants are teak as a pioneer plant for cultivated plants and vetiver as a cover crop.

Keywords: *Mining Activities, Land Damage, Reclamation.*