ABSTRACT

The loss of soil layer because of mining activities can change the surface morphology and cause a decrease in environmental quality, another consequence of mining activities is that it can change topography. The purpose of this study was to determine the geophysical conditions due to sandstone mining and direction of mining management in Rejosari, Serut Village, Gedangsari District, Gunungkidul Regency, D.I. Yogyakarta.

The research method used is survey method, mapping and descriptive data analysis with the parameters used are management of topsoil, excavation edge, basic relief of excavation, high wall excavation, and road conditions. All parameters are carried out by area observation and mapping. Every parameter is measured and related to the Decision of the Governor Special Region of Yogyakarta Number 63 of 2003 which is used as a reference. After obtaining primary data from each parameter, then it is described and associated with the RTRW and conditions around the research location.

Based on observations in the research location with some parameters that become reference, management of topsoil is not separated by overburden so that it will inhibit the post-mining revegetation process, the excavation edge has been appropriate because the distance to the edge of ownership is not too close, basic relief of excavation in the research location has the depth and lower than the lowest topographic height around, the height of the excavation wall is exceeding the standard set so that it can dangerous workers and is prone to soil / rock mass movement, and road conditions in the research area traversed by mining vehicles causing a hole in the road some points but conditions are still quite good. Reclamation directives in the research area will later be made into terraces and levels which are then associated with the Spatial Plan and environmental conditions in the research area, which will be planted with teak and corn.

Keywords: geophysical condition, mining, sandstone