

**RANCANGAN TEKNIS REKLAMASI PENAMBANGAN BATUGAMPING
BERDASARKAN TINGKAT KERUSAKAN LAHAN DI DUSUN
DUNGKANCIL, DESA GIRITONTRO, KECAMATAN GIRITONTRO,
KABUPATEN WONOGIRI, PROVINSI JAWA TENGAH**

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INTISARI

Dusun Dungkancil dalam Rencana Tata Ruang dan Wilayah Kabupaten Wonogiri termasuk dalam kawasan karst golongan II. Kawasan tersebut dilarang dilakukan kegiatan eksplorasi dan eksploitasi bahan galian. Kenyataannya masih ada kegiatan penambangan batugamping di Dusun Dungkancil, Kecamatan Giritontro. Tujuan penelitian untuk mengetahui, mengevaluasi kondisi serta tingkat kerusakan lahan penambangan, menentukan rencana dan rancangan teknis reklamasi.

Metode yang digunakan dalam penelitian adalah survei dan pemetaan.. Tahapan kerja diawali dengan pemetaan topografi dan survei lapangan, dilanjutkan dengan pengukuran data kondisi fisik penambangan yang meliputi batas tepi galian, kedalaman galian, relief galian, tinggi dinding galian, kemiringan tebing, pengangkutan, kondisi jalan, pengembalian tanah pucuk dan penutupan lahan. Dilakukan uji laboratorium tanah yaitu menguji pH, tekstur, C-organik, N-total, dan K-tersedia. Wawancara dilakukan untuk mengetahui dampak positif dan negatif adanya kegiatan penambangan, pendapatan warga, cara penambangan dan kuantitatif bahan galian. Rencana dan rancangan teknis reklamasi dilakukan berdasarkan Peraturan Menteri Kehutanan Republik Indonesia No:P.4/Menhut-II/ 2011, peta topografi dan peta kerusakan lahan. Evaluasi tingkat kerusakan lahan terbagi menjadi ringan, sedang dan berat. Peraturan yang digunakan mengacu pada Keputusan Menteri Lingkungan Hidup No.43 tahun 1996 dan Keputusan Gubernur Daerah Istimewa Yogyakarta No.63 tahun 2003.

Berdasarkan hasil penelitian, tingkat kerusakan ringan dengan luas 5600 m² (35%). Tingkat kerusakan sedang dengan luas 6400 m² (40%). Tingkat kerusakan berat dengan luas 4000 m² (20%). Teknik reklamasi yang digunakan terdiri dari 2 tahap yaitu tahap I penataan lahan dan tahap II revegetasi. Teknik reklamasi tahap I yaitu penataan lahan bekas tambang yang belum rata dan pembuatan jenjang baru. Kebutuhan *overburden* total sejumlah 14.484,74 BCM. Teknik reklamasi tahap II yaitu terdiri dan perancangan sistem pot/ lubang tanam dan teknik penanaman. Kebutuhan top soil adalah 14,42 BCM dan kebutuhan pupuk organik adalah 5192 kg. Penentuan tanaman yang digunakan merupakan pohon jati sejumlah 432 batang sesuai dengan vegetasi dominan daerah penelitian.

Kata Kunci : Penambangan Batugamping, Reklamasi, Kerusakan Lahan,.

**TECHNICAL DESIGN OF RECLAMATION OF LIMESTONE MINING
BASED ON LEVEL OF LAND DAMAGE IN DUNGKANCIL, GIRITONTRO
VILLAGE, GIRITONTRO DISTRICT, WONOGIRI REGENCY, CENTRAL
JAVA PROVINCE**

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ABSTRACT

The Dungkancil hamlet in the Wonogiri Regency Spatial and Regional Plan is included in the category II karst area. The area conducts exploration and exploitation of quarries. In fact there are still limestone mining activities in Dungkancil Hamlet, Giritontro District. The research objective was to find out and evaluated the condition and extended of mining damage and also determine the appropriate plan and technical preparation for reclamation.

The method used in this studied were survey and mapping methods. The stage of field work were carry out topographic and survey mapping, followed by measurement of physical data of mining which includes excavation boundaries, depth of excavation, excavation, high wall excavation, cliff slope, transportation, road conditions, topsoil return and land cover. Soil laboratory tests included pH, texture, C-organic, N-total, and K-available. Interviews were conducted to find out the positive and negative impacts of mining activities, people's income, mining methods and quantitative quarrying. The technical plan and results of reclamation are based on the Regulation of the Minister of Forestry of the Republic of Indonesia Number: P.4 / Menhut-II / 2011, topographic maps and maps of land damage. Evaluation of the level of land damage is divided into mild, moderate and severe. The regulations used refer to the Decree of the Minister of Environment No.43 of 1996 and the Decree of the Governor of Yogyakarta Special Region No.63 of 2003

Based on the results of the studied, the level of light radiation with an area of 5600 m² (35%). Medium vulnerability with an area of 6400 m² (40%). The level of damage with an area of 4000 m² (20%). Reclamation technique which consists of 2 stages, namely stage I land management and stage II revegetation. Phase I reclamation techniques are uneven land use and the creation of new levels. Total over burden requirement of 14,484,744 BCM. Stage II reclamation technique consists of design planting pot systems and planting techniques. The need for soil is 14.42 BCM and the need for organic fertilizer is 5192 kg. Determination of plants that are teak trees is 432 thats are suitable to be planted with vegetations around the studied area.

Keywords: Grids System, Limestone Mining, Reclamation, Lavel of Damage Land, Reclamation Technique.