

# **RANCANGAN TEKNIS REKLAMASI PENAMBANGAN PASIR DAN BATU DI DUSUN KALIGOMPYONG, DESA BALERANTE, KECAMATAN KEMALANG, KABUPATEN KLAEN, PROVINSI JAWA TENGAH**

Oleh  
Shony Nurzaman  
114140070

## **INTISARI**

Kegiatan penambangan pasir dan batu berada di Dusun Kaligompyong Desa Balerante, Kecamatan Kemalang, Kabupaten Klaten, Provinsi Jawa Tengah. Kegiatan penambangan ini dilakukan dengan sistem terbuka (*quarry*). Penelitian ini bertujuan untuk mengetahui perubahan lingkungan geofisik, biotis, sosial-budaya dan ekonomi akibat kegiatan penambangan, serta menentukan suatu perancangan teknis reklamasi sebagai upaya untuk memulihkan, memperbaiki atau menata kembali lahan yang terpengaruh oleh adanya kegiatan penambangan agar dapat berfungsi sesuai peruntukannya kembali.

Metode penelitian menggunakan metode survei pemetaan, analisis data, uji laboratorium, wawancara dengan menyertakan data primer maupun sekunder. Pengambilan sampel menggunakan metode *purposive sampling* (*Non Probability Sampling*). Pengukuran dilapangan menggunakan kompas geologi, meteran, dan GPS untuk pemetaan topografi serta pengukuran tiap parameter. Hasil pengukuran dan pengamatan dideskripsikan untuk menggambarkan kondisi perubahan lingkungan geofisik, biotis, sosial, dan budaya akibat adanya kegiatan penambangan berdasarkan parameter-parameter yang mengacu pada Keputusan Gubernur DIY No. 63 Th. 2003 tentang Kriteria Baku Kerusakan Lingkungan Bagi Usaha Dan/Atau Kegiatan Penambangan Bahan Galian Golongan C dan Keputusan Menteri Lingkungan Hidup No. 43 Th. 1996 tentang kriteria kerusakan lingkungan bagi usaha atau kegiatan penambangan bahan galian C. Acuan di gunakan menjadi dasar dalam merancang teknis reklamasi sesuai kondisi di lapangan.

Hasil penelitian dan analisis diketahui kondisi perubahan geofisik, sosial-budaya, dan ekonomi sebagai berikut, Kemiringan tebing galian  $>30^{\circ}$ , Relief dasar Galian berupa 2 cekungan  $>1$  meter dan 2 onggokan  $<1$  meter, Tinggi dinding galian mencapai 16,6 meter, belum ada pemanfaatan untuk tanah pucuk, Lahan tambang bervegetasi hanya 7,07%, sedangkan berdasarkan wawancara parameter sosial-budaya dan ekonomi tidak mengalami perubahan. Arahan teknis reklamasi yang dilakukan dengan pembuatan teras bangku dengan perbandingan 1:2 yaitu tinggi 3 meter dan lebar 6 meter serta pembuatan SPA. Teknik penanaman pada sistem pot dengan menanam tanaman tahunan dan tanaman vertiver dalam satu lahan. Tanaman tahunan yang digunakan adalah pohon sengon, dan rumput vetiver sebagai *cover crop*. Arahan reklamasi mengacu pada RTRW di lokasi penelitian berupa hutan produksi

Kata kunci: Reklamasi, Lahan Penambangan, Revegetasi

*TECHNICAL DESIGN OF SAND AND STONE MINING  
RECLAMATION IN KALIGOMPYONG VILLAGE,  
BALERANTE VILLAGE, KEMALANG DISTRICT, KLATEN  
DISTRICT, CENTRAL JAVA PROVINCE*

*By  
Shony Nurzaman  
114140070*

*ABSTRACT*

*Sand and stone mining activities are in the Kaligompyong Hamlet of Balerante Village, Kemalang District, Klaten Regency, Central Java Province. This mining activity is carried out with an open system (quarry). The aim of this research is to find out changes in the geophysical, biotic, social, cultural, and economic environment due to mining activities to determine a reclamation technical design as an effort to restore, repair or re-arrange land affected by mining activities so that it can function according to its re-designation.*

*The research method used mapping survey methods, analysis data, laboratory tests, the interview to include primary and secondary data. Sampling using a purposive sampling method (Non Probability Sampling). Field measurements using geological compass, meter, and GPS for topographic mapping and measurement of each parameter. The results of measurements and observations described the changing conditions of the geophysical, biotic, social and cultural environment due to mining activities based on parameters referring to the Decree of the Governor of DIY Number 63 years of 2003 concerning the Standard Criteria for Environmental Damage for Businesses and / or Mining Activities for Group C Material and Decree of the Minister of Environment Number 43 years of 1996 concerning the criteria of environmental damage for mining excavations or mining activities C. Reference is used as the basis for designing technical reclamation according to conditions on the ground.*

*Based on the results of research and analysis known conditions of geophysical, social, cultural, and economic changes: Slope of the excavation cliff > 30°, basic relief of Galian in the form of 2 basins > 1 meter and 2 piles < 1 meter, the excavation wall height reaches 16.6 meters, no utilization for topsoil, mining land has only 7.07%. Social, Culture, and economy did not change. Social, Culture, and economy did not change. The reclamation technical directives were carried out by making bench terraces with a ratio of 1: 2, namely 3 meters high and 6 meters wide and making SPA. Planting techniques in the potting system by planting annual plants and vetiver plants in one land. Annual plants used are the sengon tree, and vetiver grass as a cover crop. Reclamation directives refer to the Regional Spatial plans at the research location in the form of a production forest.*

*Keywords: Reclamation, Mining Land, Revegetation*