

## KAJIAN PENGELOLAAN LINGKUNGAN PADA PENAMBANGAN TANAH URUG DAN BATU (GALIAN C) DI BUKIT WATULUMBUNG DI ROWOSARI, KOTA SEMARANG

### INTISARI

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Setiap kegiatan penambangan hampir dipastikan akan menimbulkan dampak terhadap lingkungan, baik bersifat positif maupun negatif. Penambangan mineral bukan logam di daerah Rowosari, Kecamatan Tembalang, Kota Semarang mempunyai potensi yang signifikan terhadap kerusakan lingkungan. Penelitian ini bertujuan untuk mengkaji mengenai aktivitas penambangan, jenis kerusakan lingkungan, tingkat kerusakan lingkungan, dan merumuskan strategi pengelolaan lingkungan

Metode yang digunakan dalam penelitian ini adalah metode kuantitatif. Data primer dan sekunder didapatkan dengan cara wawancara, pengamatan langsung (*survey*), pengukuran, dan pencatatan secara sistematis terhadap fenomena yang diselidiki dengan sifat deskriptif analitis yang dideskripsikan untuk memberi gambaran terhadap objek yang diteliti.

Kegiatan penambangan tanah urug dan batu di bukit Watulumbung yang menggunakan teknik tradisional dan modern mengakibatkan kerusakan lingkungan. Hasil penelitian ini menunjukkan bahwa kegiatan penambangan tanah urug dan batu di bukit Watulumbung berdampak pada komponen abiotik (hilangnya lapisan tanah subur, berkurangnya ketersediaan air tanah, terjadinya longsor, dan polusi udara), biotik (luas hutan dan pertanian yang berkurang, hilangnya hewan dan tumbuhan asli di bukit watulumbung), dan kultural (meningkatnya ekonomi masyarakat desa, menyebabkan gangguan kesehatan pada masyarakat, rusaknya sarana prasarana jalan). Tingkat kerusakan lingkungan akibat penambangan di bukit Watulumbung tergolong rusak sedang (pada titik pengamatan 4 dan 8) dan Tingkat kerusakan lingkungan berat pada titik pengamatan 1, 2, 3, 5, 6 dan 7.

Kegiatan reklamasi sebaiknya dilakukan dengan segera selama aktivitas penambangan masih berlangsung untuk mengurangi potensi terjadinya kerusakan lingkungan lebih lanjut. Secara garis besar tahapan reklamasi yang perludilakukan adalah Konservasi Top Soil, Penataan Lahan, Pengelolaan Sedimen dan Pengendalian Erosi, dan Penanaman Cover Crop. Berdasarkan pada jenis pemilihan pemanfaatan lahan dan kondisi lahan yang sesungguhnya, lahan pasca tambang tanah urug dapat berpotensi menjadi obyek wisata buatan

**Kata kunci:** *Tambang Galian C, Komponen Lingkungan, Dampak*

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## ENVIRONMENTAL MANAGEMENT STUDY ON SOIL AND STONE MINING (GALIAN C) ON WATULUMBUNG HILL AT ROWOSARI, SEMARANG

### ABSTRACT

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Every mining activity will almost certainly have an impact to the environment, either positive or negative. Non-metal mineral mining at Rowosari, Tembalang, Semarang is significantly potential for causing environmental damage. This research aims to investigate the mining activity, type of damage environment, and level of environmental damage as well as to formulate environmental management strategies.

Land and stone mining activities in the hill of Watulumbung using traditional and modern techniques result in environmental damage. The mining activities are destructive to the environment due to the lack of knowledge of miners on proper mining techniques. The method used in this research was the quantitative one. Both primary and secondary data were obtained by interviews, direct observations (*survey*), measurements, and systematic recording of phenomena to investigate and deploy the descriptive analytical properties that were then described to give description of the object under study.

The results of this study indicate that the mining activities of urug land and rocks in the hill of Watulumbung impact on abiotic (loss of fertile soil layers, decrease of ground water availability, landslide potencies, and air pollution), biotic (reduction of forest and agricultural areas, endemic loss of animals and plants) and cultural components (improvement of villagers' economy, health problem production, cultural loss in society, destruction of road infrastructures). The rates of environmental damage due to mining at Watulumbung Hill were classified as moderate (at the observation points of 4 and 8) and severe (at the observation points of 1, 2, 3, 5, 6 and 7).

Reclamation activities should be done immediately while the activity mining continues to reduce potential damages of environment. Reclamation steps that need to be done are Top Soil Conservation, Land Arrangement, Sediment Management and Erosion Control, and Cover Crop Planting. Based on the type of land use selection and actual land conditions, post-mining land can potentially become an artificial tourist attraction

**Keywords:** *Non-metal Mining, environmental components, impact*

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