

From the Editor

The Law Number 4 Year 2009 concerning mineral and coal mining firmly emphasizes that all mining operations in this country must be carried out by applying good mining practices, because devastated environments due to these mining operations occur in all part of the country. Moreover, in order to reduce mine accidents, a good mining design must be prepared by providing an accurate geotechnical investigation. The government has a great concern for these conditions. Mining enterprises that neglect an environmentally friendly mining are terminated their mining licenses, and they must pay cost of the degraded environment. For the environmental issues, coal-steamed power plants have been studied regarding their pollutant products. Some of the powers are built by mining companies. Besides this environmental issue, the significant point of the law is to improve value added of mining products. Prior to implementing this law, all mineral and coal are exported as raw materials and this has caused loss of profit for the country revenue.

Papers presenting in this current journal relate to the above issues. The main point of papers tries to implement good mining practices, to overcome the environmental issues and to improve value added of mineral.

A geophysical investigation was conducted to explore a gold-bearing sulphidic deposit in the Sukabumi district. The potential deposit was found in quartz vein. This has provided a promising deposit that can further be explored in detail, so the reserve of the deposit can be illustrated for the mining purpose.

Because of the occurrence of mining failure in a coal mining at East Kalimantan, some investigations have been carried out, particularly in evaluating the slope stability by applying a certain method. This results in a safety condition in the mining operation, and it is recommended to make a safety-berm to prevent the mining failure.

Coal power plants in Indonesia create a huge amount of coal combustion products. This will potentially be an environmentally serious problem in the future. For this reason, a research was carried out to measure heavy metal contents in the coal. The result shows that boron is the dominant element content in the coal that tends to enrich fly ash. It is suggested to assess other heavy metal concentrations, especially for their characteristics that can affect the surrounding environment.

Kaolin from the Tapin area cannot directly be utilized as raw material for white ware ceramics because of certain chemical contents. This commodity must be upgraded its quality by fulfilling by a certain specification of ceramics. Based on several parameters of chemical contents, particle size density, whiteness and plasticity, the kaolin quality develops significantly and can be used for certain porcelain.

A kinetic model was applied for aluminum dissolution of West Kalimantan bauxite. The study shows that the dissolution was fluctuated due to the certain formation and as result of the reaction of sodium aluminate solution. This study also reveals alumina dissolution in which mechanism is altered from interface chemical reaction with energy activation to diffusion through reaction product (ash) layer.

After reading all the above papers, it is really expected that the mining issues in this country could be solved properly in terms of environment, value added, economy and policy. It could be successful by applying the good mining practices supported by the law and related supporting policies. This needs synergy among the stakeholders to build a prosperous future in the mining sector.

The Editor