

## **Regulation of Mining of Nuclear Materials in Indonesia**

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Currently, Indonesia does not have regulations related to mining for nuclear minerals. Indonesia presently has conventional mining regulations (Act number 4 Year 2009 on Mineral and Coal Mining). Article 92 of this Act states that the permit holder can mine minerals, with the exception of radioactive minerals. A study has been carried out by the National Nuclear Energy Agency of Indonesia (BATAN - as Indonesia nuclear research agency) that found several sources of radioactive minerals in several regions of Indonesia. These findings resulted in BAPETEN, as Nuclear Energy Regulatory Agency, drafting government-based regulation to address the absence of radioactive mineral extraction in the conventional mining regulations.

The newly drafted government-base regulation was divided into two sections. The first section relates to licensing which regulates the procedure for issuing licenses for the exploitation of radioactive minerals. For the exploitation of nuclear minerals, the regulation now states that the exploration and exploitation of nuclear minerals can only be carried out by BATAN. The regulation further states that if a private company is interested in the exploitation of radioactive minerals it must cooperate with BATAN. The licensing for mining of nuclear minerals and residual TENORM is regulated by administrative, technical, and financial requirements.

The second section of this regulation is related to the safety of mining of nuclear materials and the technical provisions relating the safety of mining. This section of the regulation takes into account the activity cycle (stages) of mining activities. These stages include: site evaluation, design, construction, production, closure including remediation.

The provisions stipulated in this draft of government regulation attempt to answer the challenge of regulation if there are parties or companies wanting to exploit minerals containing radioactive elements or residual TENORM in the future. It is anticipated that these regulations will provide clear guidance to interested parties to conduct mining of radioactive-based minerals. Overall, this type of activity will ultimately increase state income.