

In order to engage with our readers and simplify the legal complexities of the infrastructure sector, EPC World has partnered with Rajani Associates, a full-service law firm for a series of legal Q&As. Through this Legal Q&A column, **SHISHAM PRIYADARSHINI**, Partner, Rajani Associates and **AMISH SHROFF**, Principal Associate, Rajani Associates, will endeavour to address the queries and challenges faced by our readers.

What is mine closure plan?

The mining activity of extracting metals and minerals from the Earth is for a specific limited time period. The operating life of a mine usually depends upon the natural environment such as weather, soil and quality, excavation of resources mined through the mining, use and availability of land.

Mine closure occurs once the mineable mineral resource at a working mine is exhausted, or operations are no longer viable.

Planning for mine closure is a critical component of environmental management in the mining industry. Mining operations though quite essential usually create a negative environmental impact not only during the ongoing mining activity but even after the mine has closed. Considering the hazard that the mining activity poses to the overall environment, it becomes imperative to have a well thought of mine closure plan in place.

Some of the technical aspects of mine closure planning deal with the management of pit slopes, hydrology and hydro-geology, decommissioning of infrastructure etc.

In India, the Government has set out comprehensive regulations dealing with mine closure. Existing as well as new mining lessees are required to submit the progressive mine closure plan along with prescribed financial sureties and a final mines closure plan prior to the proposed closure of the mine.

At what stage the mine closure plan needs to be put in place?

Mine closure plans are required by the regulatory agencies in India before a mining permit is granted, and must demonstrate that the site will not pose a threat and adverse impact on the environment or society in the future.

What essential elements should be considered in any ideal mine closure plan?

Any closure plan must consider the long-term physical, chemical, biological and social effects on the surrounding natural systems (aquatic, groundwater, surface water etc.). Steps related to mine closure planning usually include preparation of detailed drawings of disturbed landscape,



Shisham Priyadarshini



Amish Shroff

compilation of baseline information, discussions with regulators and stakeholders with regard to end purpose of land use, formulating of supporting research programs, and preparation of budgets and schedules to facilitate smooth closure and provisions for adequate financial assurance from the mine owners. Financial assurance is increasingly required

by regulators as a guarantee that the funds required for mine closure will be available in the event that the responsible Company is unable to complete the closure as planned.

The mine owners shall have to ensure that the protective, reclamation and rehabilitation work in accordance with the final mine closure plan have been carried out before closure of mine. Where the reclamation and rehabilitation measures as envisaged in the approved mine closure plan, in respect of which a financial assurance is given, have not been carried out in accordance with the mine closure plan, the Government is entitled to forfeit the financial assurance given by the mine owners.

What are the benefits of the Mine Closure Plan?

Some of the benefits of planned mine closure include identification of high risk priorities for research or rehabilitation; reduction of ongoing environmental liabilities by progressive rehabilitation, distribution of rehabilitation and closure costs during the productive phase of mining rather than deferral to the end of the project, improved access to capital from lending institutions, lower risk of regulatory non-compliances and less regulatory interest, improved access to land resources from governments, greater acceptance by key stakeholders, and reduced post-closure monitoring and maintenance period for areas rehabilitated earlier during the life of the mine.

An effective mine closure plan and its implementation can create a self-sustained ecosystem.

What happens to the site after the mining operations are over?

Depending on the site, after the mining operations are over, it may be used for some other purpose or restored to its pre-mining use following closure.