

NOTICE

The Ministry of Mines is in the process of drafting a new National Mineral Policy. As part of the Pre-Legislative Consultation Policy, the draft National Mineral Policy has been put on the website of the ministry. Comments/suggestions are invited from the general public, Governments of States and Union Territories, Mining Industry, Stake Holders, Industry Associations, and other persons and entities, on the draft National Mineral Policy. The last date for receipt of the comments/suggestions is 9th February 2018.

The comments/suggestions may be sent by e-mail in MS-Office Word format to the following ID:

mines5.mom@nic.in

The subject of the e-mail should be **“Comments/suggestions on National Mineral Policy”**.

Alternatively, comments/suggestions may also be sent by post to the following address:

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The envelope may kindly be super scribed on the top with:
“Comments/suggestions on National Mineral Policy”.

Government of India
Ministry of Mines
DRAFT NATIONAL MINERAL POLICY, 2018
(For non-fuel and non-coal minerals)

1. VISION

Minerals are a valuable natural resource being the vital raw material for the core sectors of the economy. Exploration, exploitation and management of minerals have to be guided by national goals and perspectives to be integrated into the overall strategy of the country's economic development and the Make in India initiative. Minerals, are nature's endowment which we need to leverage in a fair and transparent manner to sub-serve the common good. Mining needs to be carried out in an environmentally sustainable manner keeping stakeholders' interest in mind. It shall also be ensured that the regulatory environment is conducive to ease of doing business with simpler, time-bound procedures for obtaining clearances. Since mining contributes significantly to state revenues by way of auctions, there is a need for an efficient regulatory mechanism with enabling e-governance systems to prevent illegal mining.

2. REGULATION OF MINERALS

- 2.1** Management of mineral resources is the responsibility of both the central and state governments in terms of entry 54 of the Union List (List I) and entry 23 of the State List (List II) of the Seventh Schedule of the Constitution of India.
- 2.2** In order to make the regulatory environment conducive to ease of doing business, the procedures for grant of mineral concessions shall be transparent with an assured security of tenure alongwith transferability of concessions playing a key role in mineral sector development.

- 2.3** To ensure enforcement of mining plans, the Indian Bureau of Mines (IBM) and the State Directorates of Mining & Geology will be strengthened with adequate man power, equipment and skill sets upgraded to state-of-the-art levels.
- 2.4** There will be an emphasis on strengthening the regulatory mechanism by incorporating e-Governance, including satellite and remote sensing applications. Provisions shall be made for end-to-end accounting of mineral/ore in the supply chain with use of IT enabled systems. Efforts shall also be made to devise appropriate mechanism(s) for awareness and information campaigns and also for involvement of local populations to supplement the law enforcement capabilities in preventing illegal mining.

3. ROLE OF STATE IN MINERAL DEVELOPMENT

The core functions of state in mining will be facilitation and regulation of exploration and mining activities by investors and entrepreneurs, making provision for development of infrastructure and tax collection. There shall be transparency and fair play while reserving areas for State agencies unless security considerations or specific public interests are involved. Grant of clearances for commencement of mining operations shall be streamlined with simpler and time bound procedures facilitated through an on-line public portal with provision for generating triggers at higher level in the event of delay.

4. PROSPECTING AND EXPLORATION

- 4.1** The country is blessed with ample resources of a number of minerals and has the geological environment for occurrence of many others. To explore the country's entire geological potential, it shall be ensured that regional and detailed exploration is carried out systematically and intensively in the entire geologically conducive mineral bearing area of the country, using state-of-the-art technology in a time bound manner.

- 4.2** While the Government agencies will continue to perform the tasks assigned to them for survey and exploration, the private sector would be encouraged to take up exploration activities. Government agencies will expend public funds particularly in areas where private sector investments are not forthcoming due to reasons such as high uncertainties.
- 4.3** Particular attention will be given to the prospecting and exploration of minerals in which the country has a poor resource-cum-reserve base despite having the geological potential for large resources. Special attention will be given towards exploration of energy critical minerals, fertilizer minerals, precious metals and stones, and strategic minerals which are otherwise difficult to access and for which the country is mainly dependent on imports.
- 4.4** Exploration shall be incentivised to attract private investments as well as the state-of-the-art technology, through an adequate financial package or through right of first refusal at the time of auction or any other appropriate incentive as per international practice.
- 4.5** Clearances shall be streamlined with simpler, accountable and time bound procedures to facilitate exploration in order to conform to the statutory requirements especially for geologically complex deposits.
- 4.6** In the offshore areas, it is necessary to ensure that India's Exclusive Economic Zone is explored and exploited to the maximum possible extent. Cooperation between Ministry of Earth Sciences (MoES) and Geological Survey of India (GSI) needs to be further institutionalised, so as to achieve this objective within a time bound framework. Efforts shall be made to amend the legislation governing development and regulation of minerals in offshore areas to provide an enabling environment that encourages private participation in exploration and exploitation of minerals while also ensuring transparency in allocations as well as a fair share of revenue to the Government.

5. DATA BASE OF MINERAL RESOURCES AND TENEMENTS

- 5.1** National inventory of mineral resources will be based on a comprehensive and up to date review of exploration data which will be maintained in digitised form comprising both a resource inventory and a tenement registry. The resource inventory will be in accordance with a globally accepted public reporting standard for ensuring reliability of reporting and acceptability to financial institutions and stock exchanges showing reserves and remaining resources as well in the traditional IBM form of resources and probable and proven reserves. The registry shall be a web-based system for public viewing integrated with GIS, such that information could be shown spatially in the form of map based service.
- 5.2** Efforts shall be made by the Government to establish a Mining Tenement System (MTS) which would primarily involve automating the entire concession life-cycle using state-of-the-art IT systems.
- 5.3** Baseline and mineral exploration information generated by various central & state government agencies and also mineral concession holders will be collated and maintained for open dissemination of geoscientific data as a public good. Collaboration between national and international scientific and research bodies, universities and industry will be encouraged for scientific and technological research to address the mineral exploration challenges in the country.

6. MINING AND MINERAL DEVELOPMENT

6.1 General Strategy

Minerals as a major resource for the core sectors of the economy, there is a huge demand for minerals in view of the rapid urbanization and the projected growth in the manufacturing sector. With the thrust on Make in India initiative the demand for minerals is likely to grow at a rapid pace. Exploitation and management of minerals

has to be guided by long-term national goals and perspectives and integrated into the overall strategy of the country's economic development. Mining technology will be upgraded to ensure extraction and utilisation of the entire Run-of-Mines (RoM) materials.

A thrust will be given to exploitation of mineral resources in which the country is well endowed so that the needs of domestic industry are fully met keeping in mind both present and future needs, while at the same time fulfilling the demand of external markets for such minerals, so as to enhance domestic economic and social well-being.

Though primary materials will remain the principal source for fulfilling demand, efforts shall be made to augment supply by developing processes for recovery of metal through recycling. The reusable nature of metals contributes to conserve natural resources and includes other benefits in terms of energy conservation, environmental and economic benefits.

Considering that a large number of merchant mining leases are going to expire in the year 2020, and for captive mines in 2030, efforts shall be made to ensure uninterrupted supply of minerals/ore to the downstream industry.

6.2 Conservation and Mineral Development

Conservation of minerals shall be construed not in the restrictive sense of abstinence from consumption or preservation for use in the distant future but as a positive concept leading to augmentation of reserve/resource base. There shall be an adequate and effective legal and institutional framework mandating zero-waste mining as the ultimate goal and a commitment to prevent sub-optimal and unscientific mining. Value addition and general customisation of product will be encouraged by providing fiscal and/or non-fiscal incentives.

6.3 Scientific Methods of Mining

Mine development and mineral conservation as governed by the rules and regulations will be on sound scientific basis, with the regulatory agencies, viz. IBM and the State Directorates, closely interacting with R&D organisations and scientific and professional bodies, to ensure preparation of optimal Mining plan. Conditions of mining leases regarding extent of area/size, shape, disposition with reference to geological boundaries and other mining conditions shall be such as to favourably predispose the leased areas to systematic, scientific, optimum, and complete extraction of minerals. The regulatory agencies will be suitably strengthened through capacity building measures in terms of adequate manpower, technology, equipment and skill-set.

6.4 Mining Machinery and Mineral Beneficiation Equipment

Use of equipment and machinery which will improve the efficiency, productivity and economics of mining operations as well as mineral beneficiation process, safety and health of persons working in the mines/beneficiation plant and surrounding areas shall be encouraged. Availability of such equipment and machinery shall be incentivized and freely allowed. At the same time capacities shall be developed for indigenous industry for manufacture of mining machinery and mineral beneficiation equipment and machinery for which induction of modern technology and participation shall be encouraged.

6.5 Human Resource Development

Development of human resources shall be the mainstay to improve the competitive edge of the national mining industry. Emphasis shall be laid on mechanisation, computerisation, automation and adoption of state of the art technology of the existing and new mining units. The human resource development strategy shall be suitably reoriented for the purpose. Facilities for basic and specialised training

shall be constantly reviewed and upgraded from time to time, to ensure that adequately trained manpower at all levels is available for the development of mines and minerals. As the mining sector takes off, the country will need more and more mining engineers, geologists, geo-physicists, geo-chemists, geo-instrumentation specialists, software professionals etc.

6.6 Infrastructure Development

Mining infrastructure requires a special thrust as the economic efficiency of evacuation of minerals from pit mouth to user point or port or rail head is closely linked to the end use value of the mineral and of the viability of the industry producing and using the mineral.

While local evacuation networks will be encouraged to be built in an integrated manner along with developing the mineral blocks, dedicated mineral corridors shall be planned to facilitate transport of minerals from mining areas in hinterland. Development and installation of innovative, eco-friendly and efficient modes of evacuation like slurry pipelines and close loop conveyors shall be promoted and encouraged. An enabling environment will be created to allow mining companies to undertake construction of such infrastructure including construction of conventional transportation networks like rail and road for their own usage in coordination of State/Central agencies. Use of coastal water ways and inland shipping shall also be promoted. To promote investment in the mining sector special incentives or priority movement by railways/port/coastal shipping must be encouraged.

The contribution of mineral development to regional and more specifically peripheral development, commensurate with the huge investment in large mining projects is substantial. An integrated approach shall be encouraged encompassing mineral development, regional development and the social and economic well-being of the local, and particularly, tribal population.

6.7 Financial Support for Mining

Mining is an eligible activity for obtaining financial support from financial institutions. However, at present only those mining projects which have a substantial component of mining machinery, equipment and buildings are being financed. Steps shall be taken to facilitate financing of mine development and also exploration being integral to the mining project for which efforts shall be made to grant mining the status of industry.

6.8 Small Deposits

Small and isolated deposits of minerals are scattered all over the country. These often lend themselves to economic exploitation through small scale mining. With modest demand on capital expenditure and short lead-time, they provide employment opportunities for the local population. However, due to lack of economies of scale they can also lead to sub-optimal mining and ecological disturbance. Efforts will be made for promotion of small mineral deposits in a scientific and efficient manner while safeguarding vital environmental and ecological imperatives.

Where small deposits are not susceptible to viable mining, a cluster approach will be adopted by granting the deposits together as a single lease within a geographically defined boundary.

In grant of mineral concessions for small deposits in Scheduled Areas, preferential right shall be given to Scheduled Tribes singly or as cooperatives while extending enabling environment to carry-out mining operations in a systematic and efficient manner.

6.9 Beach Sand Minerals

Efforts will be made to encourage exploitation of the replenishable deposits of beach sand minerals for improved economic growth as per the objectives of the extant policy on exploitation of beach sand minerals. However, there shall be coordination between the different agencies viz., State Governments, Indian Bureau of Mines, Department of Atomic Energy, Atomic Minerals Directorate for Exploration and Research, and Department of Customs and Excise etc. to ensure regulation of mining of beach sand minerals to be in conformity to the mining legislation and other related legislations like The Atomic Energy Act, 1962 and The Atomic Energy (Working of Mines, Minerals and Handling of Prescribed Substances) Rules, 1984 while also conforming to national security requirements and established international protocols.

6.10 Protection of Environment

Extraction of minerals impacts other natural resources like land, water, air and forest. It is necessary to take a comprehensive view to facilitate the choice or order of land use keeping in view the needs of development as well as needs of protecting the forests, environment and ecology.

Prevention and mitigation of adverse environmental effects due to mining in accordance with the latest scientific norms and modern afforestation practices shall form integral part of mine development strategy in every instance. All mining shall be undertaken within the parameters of a comprehensive Sustainable Development Framework which will ensure that environmental, economic and social considerations are integrated effectively in all decisions on mines and minerals issues. The guiding principle shall be that a miner shall leave the mining area in an ecological shape which is as good as it was before the commencement of mining or better.

Mining operations shall not ordinarily be taken up in identified ecologically fragile and biologically rich areas. The Government shall identify such areas that are critically fragile in terms of ecology and declare as 'in-violate areas' or 'no-go areas' out of bounds for mining.

With a view to reduce pollution, carbon footprint and operational costs, use of renewable sources of energy at mining sites will be encouraged through appropriate incentives.

6.11 Sustainable Development in Mining Sector

Environmental, economic and social considerations must be taken into account as early as possible in the decision-making process, to ensure sustainable development in the mining sector which envisions mining as financially viable; socially responsible; environmentally, technically and scientifically sound; with a long term view of development; uses mineral resources optimally; and, ensures sustainable post-closure land uses.

The Government shall set a benchmark against which all mining operations may be evaluated in terms of their comparative performance on sustainable development framework and enforce commitment on part of the mining companies to adopt sustainable development practices for achieving environmental and social goals.

6.12 Welfare of Project Affected Persons

6.12 (a) Relief & Rehabilitation of Displaced and Affected Persons

Mining operations can involve acquisition of land held by individuals including those belonging to the tribals and weaker sections. In all such cases a careful assessment of the economic, cultural, environmental, and social impact on the affected persons need to be undertaken to ensure that suitable, appropriate, relief and rehabilitation packages are evolved.

In areas in which minerals occur and which are inhabited by tribal communities and weaker sections, it is imperative to recognize resettlement and rehabilitation issues as intrinsic to the development process of the affected zone. A mechanism will be evolved which would actually improve the living standards of the affected population and ensure them a sustainable income. For this purpose, all the provisions of the National Rehabilitation and Resettlement Policy or any revised Policy or Statute that may come into operation, will be followed.

6.12 (b) Devolution of Mining Benefits to Project Affected Persons

The mining legislation has been amended to provide for the establishment of District Mineral Foundation (“DMF”) with the objective of working for the interest and benefit of persons, and areas, affected by mining related operations. The objectives for devolution of mining benefits under DMF for inclusive and equitable development of project affected persons and areas are to be guided by the provisions of the Pradhan Mantri Khanij Kshetra Kalyan Yojana (“PMKKKY”).

It shall be the endeavour of the Government to monitor and review the implementation of schemes under DMF for giving effect to PMKKKY for which a national web portal shall be developed with free access to the public.

6.12 (c) Welfare of Tribal Communities

Existence of minerals in tribal areas with rich biodiversity requires a comprehensive assessment. Land acquisition and displacement of tribal communities due to mining projects may lead to distress in tribal communities living in Scheduled Areas.

Grant of mineral concessions in Scheduled Areas shall be guided by the provisions contained in article 244 read with Fifth and Sixth Schedules to the Constitution relating to administration of the Scheduled Areas and Tribal Areas and the

provisions of the Panchayats (Extension to the Scheduled Areas) Act, 1996 and the Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006 or any other relevant statutory acts protecting the interests of tribals. All Relevant Acts/Rules related to rehabilitation and resettlement like The Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement Act, 2013, subsequent amendments or any other relevant acts/rules shall be strictly implemented.

6.13 Mine Closures

Once the process of extraction of a mine is complete, there is need for scientific mine closure which will not only restore ecology and regenerate bio mass but also take into account the socio-economic aspects of such closure. Where mining activities have been spread over a few decades, mining communities get established and closure of the mine means not only loss of jobs for them but also disruption of community life. Mine closure should be done in an orderly and systematic manner.

Government has a role in ensuring that post-production mine decommissioning and land reclamation are an integral part of the mine development process; that financial provisions for the costs incurred in mine closure are accorded a high level of priority by the industry; and that consistent approaches are adopted for efficient and effective mine reclamation and rehabilitation.

6.14 Mine Safety

Mining operations at times are hazardous in nature. Accidents happen and often result in occupational health problems, serious bodily injury or even loss of life. Efforts must be directed towards the development and adoption of mining methods which would increase the safety of workers and reduce accidents. Towards this end, participation and cooperation of mine workers shall be secured.

Steps will also be taken to minimise the adverse impact of mining on the health and safety of workers and the surrounding population. DGMS should be further strengthened through adequate manpower, equipments, and skill sets in order to carry out the regulatory role for ensuring mine safety effectively.

6.15 Mineral Security

Mineral resources security is an important issue with strategic as well as economic significance. Securing access to sufficient, reliable, affordable, and sustainable supplies of minerals is increasingly becoming an important factor for functioning of downstream industries and the overall economy. Hence, ensuring long-term mineral security for nation should be taken up with utmost priority. To ensure adequate supply of minerals which are not available locally, downstream regulations should be aligned for their exploration and development and for facilitating acquisition of mineral assets in other countries by public as well private Indian business entities.

7. FOREIGN TRADE

Minerals continue to be an important source of foreign exchange earnings. The policy of export shall keep in view the dynamics of mineral inventories as well as the short, medium and long term needs of the country. Efforts shall be made to export minerals in value added form as far as possible. The indigenous mineral industry shall be attuned to the international economic situation in order to derive maximum advantage from foreign trade by carefully anticipating technology and demand changes in the international market for minerals.

The import of mineral based material shall be coordinated as far as possible with the indigenous development of mineral based industries. Areas of cooperation with countries with complementary resource base shall be developed for mutual advantage. The approach shall be to make available mineral based materials to domestic users at reasonable prices as determined by market forces.

A long term export policy for the mineral sector would provide stability and prove to be an incentive for investing in large scale commercial mining activity. To develop mining as a modern stand-alone industry substantial investment is required. Assurances on export of minerals will be a key factor for investment decisions particularly on Foreign Direct Investment (FDI) in the sector. The Export Policy should be based on a clear long term strategy for export of mineral taking these aspects into consideration.

8. FISCAL ASPECTS

It will be the endeavour of government to design fiscal measures within the context of the budget and for rationalisation of taxation and royalty, conducive to the promotion of mineral exploration and development including beneficiation and other forms of product refinement. In the context of the changing mineral scenario and the economies of mineral development and products, both at the national and international level, fiscal changes will be examined from time to time consistent with the general tax structure and through the normal budgetary process.

9. RESEARCH AND DEVELOPMENT

9.1 General Approach

Research and development in the mineral sector has to cover the entire gamut of activities from geological survey, exploration, mining, beneficiation, concentration of minerals to development of materials. Efforts will be directed towards the development of new technologies for conversion of existing mineral resources into viable economic resources. Appropriate technologies shall be developed to enable indigenous industries to utilise the mineral resources with which the country is abundantly endowed. R&D efforts shall be directed to find new and alternative uses for minerals whose traditional demand is on the wane. Indigenous

technology has to be upgraded through research and appropriate absorption and adoption of technological innovations. Research and development efforts shall be made to improve efficiency in process, operations and also the recovery of by-products and reduction in specification and consumption norms. Efforts will also be directed to evolve low capital and energy saving processing systems.

9.2 Research in Mining Methods

Mining methods determine the safety, economy, speed and the percentage of extraction of the ore reserves from a mine. Research and development thrust shall be directed specially in the areas of rock mechanics, ground control, mine design engineering, equipment deployment and maintenance, energy conservation, environmental protection, safety of operations and human engineering.

9.3 Mineral Processing and Beneficiation

Attention will be given to beneficiation and agglomeration techniques to bring lower grades and finer size material into use. Research organisations, including the National Mineral Processing Laboratories of the Indian Bureau of Mines will be strengthened for development of processes for beneficiation and mineral and elemental analysis of ores and ore dressing products. There shall be cooperation between and coordination among all organisations in public and private sector engaged in this task. Research and development shall be oriented to ensure maximum economic recovery of the associated minerals and valuable metals.

9.4 Development of Automated Equipment

To meet the objective of safety and economic production attention will be given to the development of robotics, automated equipment and system for mining, especially for deep mining and transportation to surface. While efforts shall be made for indigenous development, Government shall also consider an appropriate fiscal

measures to facilitate import of automated equipments, machinery and mining robots etc. which are not available in the country, which can be used for exploration, mineral development and value addition in the downstream industry.

9.5 Deep Sea Mining

Deep ocean resources represent an exceptionally large and potentially important mineral resource. Integrated systems for exploration, exploitation, mining and processing of these resources shall be expedited with the development/ acquisition of necessary technologies. Appropriate mechanism for coordinating the survey and exploration of Deep Sea Bed Area will be established with the Ministry of Earth Sciences. Efforts towards this end need to be supplemented through necessary amendments to The Offshore Areas (Regulation and Development) Act, 2002 or any other appropriate administrative actions to create an enabling platform for encouraging exploration and exploitation of mineral reserves/resources in offshore areas.

9.6 Production of Materials of High Purity

Research will be directed towards raw materials required for production of materials of high purity for use in advanced technology applications such as semi-conductors, photo-voltaic, lasers, special sensors, high temperature new ceramics, hard and high temperature materials, superconductors, insulators, very thin films, glasses and liquid crystals and metal and mineral fibres.

9.7 Coordination of Research Organisations

Research and development activities in the mineral sector are carried out in the national laboratories, educational institutions and R&D units of public and private sector enterprises. Pooling of resources, efforts and expertise available in various R&D Organisations is imperative to meet the challenges and to fulfil

the tasks ahead in the mineral sector. Coordination, synergy and convergence among the various institutions engaged in R&D in the mineral sector shall be strengthened to derive the maximum benefit. Interchange of scientists between institutions shall be encouraged to accelerate the pace of interaction. It shall also be ensured that the research findings are made available to users expeditiously. There shall be cooperation between and coordination among all organisations in the public and private sectors engaged in this task.

Mining methods determine the safety, economy, speed and the percentage of extraction of the ore reserves from a mine. Research and development thrust needs to be directed in areas of such as rock mechanics, ground control, mine design engineering, equipment deployment and maintenance, energy conservation, environmental protection, safety of operations and human engineering. This has to be done in a holistic way so that inter-linkages are established to the advantage of each segment.

10. INTER GENERATIONAL EQUITY

There is a need to understand that natural resources, including minerals, are a shared inheritance where the state is the trustee on behalf of the people to ensure that future generations receive the benefit of inheritance. State Governments will endeavour to ensure that the full value of the extracted minerals is received by the State. However, a disaggregated approach in respect of each mineral requires to be adopted considering aspects like reserves/ resources and potential for reuse through recycling, which are relevant and suitable in the Indian context.

11. INTER MINISTERIAL MECHANISM FOR SUSTAINABLE DEVELOPMENT

An inter-ministerial body with members like MoM, MoES, MoEFCC, States at Ministerial and Secretariat level, may need to be constituted to institutionalise a mechanism for ensuring sustainable mining with adequate concerns for

environment and socio-economic issues in the mining areas, and to advise the Government on rates of royalty, dead rent etc.

This proposed mechanism or any other institutional process can also decide the limits on the extent of mining activities that should be permitted which would, *inter alia*, involve undertaking a detailed study for assessing what should be the state-wise/region-wise ceiling of annual excavation of minerals, considering the availability of mineral resources, the carrying capacity of the region, and the macro environmental impact on the region while also keeping in mind the principles of sustainable development and intergenerational equity and all other relevant factors.

12. CONCLUSION

Under the 'Make in India' initiative, the Government of India aims to increase the share of the manufacturing sector. These national initiatives/vision, may require a holistic development of the mineral sector on a sustainable basis in order to fulfil the demand of downstream industries dependent on mineral/ore supply. The success of the third national mineral policy will depend largely on a national consensus by various key stakeholders and their commitments to fulfil its underlying principles and objectives.
