

Mining industry updates

Major initiatives and achievements of Ministry of Mines

POLICY & LEGISLATION

(i) MMDR Act, 1957 – Introduction of auctions

The MMDR Act, 1957 has been amended by the MMDR Amendment Act, 2015 with effect from January, 2015. Through this amendment, the Central Government has replaced the first-come-first-served/discretionary mechanism for grant of mineral resources by a transparent and competitive auction process. This will also enable the states to obtain an enhanced share of the value of mineral resources. Provisions have been made to ensure certainty of tenure and easy transferability of mineral concession.

In order to implement this Policy relevant Rules like Mineral (Evidence of Mineral Contents) Rules, 2015 and Mineral (Auction) Rules, 2015 have been framed and notified by the Government. Model Tender Document (MTD) have also been made available to the state governments to facilitate them to commence auction. Pursuant to this the state governments have commenced to issue NITs. Gujarat, Rajasthan and Maharashtra have issued NITs in November, 2015. Other state governments like Karnataka and Chhattisgarh are likely to follow suit shortly.

(ii) District Mineral Foundations (DMF)

- Section 9B of the MMDR Act, 1957 prescribes the establishment of District Mineral Foundation (DMF) in any district affected by mining related operations. The objective of the DMF is to work for the interest and benefit of persons, and areas, affected by mining related operations.
- The manner in which the DMF shall work for the interest and benefit of persons and areas affected by mining, as also the composition and functions of the DMF, shall be prescribed by the State Governments.
- The rate of contribution to the DMF is to be prescribed by the Central Government. The Central Government has, in this regard, framed the Mines and Minerals (Contribution to District Mineral Foundation) Rules, 2015 to prescribe the amount of payment to be made to the DMF.

DMF is to be funded in the following manner:

- Ten per cent of the royalty in respect of mining leases or prospecting licence-cum-mining lease granted on or after 12.01.2015.
- Thirty per cent of the royalty in respect of mining leases granted before 12.01.2015.
- Directions have also been issued to all states under section 20A of the MMDR Act, 2015 to: (i) specify that the DMFs shall be deemed to have come into existence with effect from 12.1.2015; and (ii) to incorporate the 'Pradhan Mantri Khanij Kshetra Kalyan Yojana' into the rules framed by them for the District Mineral Foundations.

Pradhan Mantri Khanij Kshetra Kalyan Yojana (PMKKKY)

- The Pradhan Mantri Khanij Kshetra Kalyan Yojana will be implemented by the DMFs of the respective districts using the funds accruing to the DMF. The overall objective of PMKKKY scheme will be (a) to implement various developmental and welfare projects/programmes in mining affected areas, and these projects/programmes will be complementing the existing ongoing schemes/projects of State and Central Governments; (b) to minimize/mitigate the adverse impacts, during and after mining, on the environment, health and socio-economics of people in mining districts; and (c) to ensure long-term sustainable livelihoods for the affected people in mining areas.

(iii) Accelerating Mineral Exploration Activities in the country

National Mineral Exploration Trust (NMET)

These rules have been notified on 29.06.2015. National Mineral Exploration Trust aims to promote exploration in the country. Lease holders have been mandated to contribute a sum equivalent to 2% of the royalty to NMET.

In consonance with the MMDR Amendment Act, 2015, emphasis is being laid on intensifying mineral exploration activities in the country to bring up the mineral deposits to a mineable stage. The government has opened up the arena of exploration to other agencies and has, accordingly, notified five Central PSUs to carry out prospecting operations without obtaining prospecting license. The Central Government vide

notification dated 16.2.2015 notified five Central Government Public Sector Undertakings viz. Rashtriya Ispat Nigam Limited (RINL), Steel Authority of India Limited (SAIL), National Mineral Development Corporation (NMDC) Limited, Kudremukh Iron Ore Company (KIOCL) Limited, and Manganese Ore (India) Limited (MOIL) under second proviso to section 4 (1) of the MMDR Act, 1957. This enables these PSUs to do prospecting operations without obtaining prospecting licence.

The Geological Survey of India (GSI), primarily engaged in regional exploration, has been re-entrusted the work of taking up detailed mineral exploration at G2 and G1 levels of UNFC from 2015-16 onwards.

- Mineral Exploration Corporation Ltd. is being strengthened to intensify its detailed exploration activities by carrying out exploration of the deposits identified by GSI. These initiatives are expected to give a huge boost to the mineral exploration initiatives of the government.

- (iv) Increased revenue to states due to revision in rates of royalty

The Central Government has revised the rates of royalty for major minerals (except for coal, lignite and sand for stowing) on 01.9.2014. State governments, who receive 100% of the royalty, are benefited through this increase in rates of royalty for major minerals. For some of the states, this revision in rates of royalty may have resulted in an increase of more than 45% in revenue collection through royalty.

- (v) Delegation of powers to states through notification of 31 minerals as 'minor' minerals

The Central Government has notified 31 minerals as 'minor' minerals on 10.2.2015 to delegate entire regulation for these 31 minerals to states. This increased the number of minerals notified as 'minor' minerals from 24 to 55. It will empower states to frame their own rules for grant and regulation of these 31 minerals. States are also enabled to prescribe the method for grant of mineral concessions, rates of royalty, contribution to DMF etc. for these minerals.

GEOLOGICAL SURVEY OF INDIA (GSI)

Acceleration of the National Geochemical Mapping (NGCM) and National Geophysical Mapping (NGPM) Programmes of GSI.

In keeping with the priorities of the Central Government for national development, plans for accelerating the geochemical and geophysical mapping of the country have been prepared. NGCM and NGPM programmes have a significant import in the exploration for concealed mineral deposits besides other geo-scientific activities. Accordingly, the core areas of the identified obvious geological potential area of the country are envisaged to be covered by NGCM within the next two years, and by NGPM, within the next three

years, starting from 2015-16. It is expected that with this, mineral exploration in the country will get a huge fillip.

NATIONAL ALUMINIUM COMPANY LIMITED (NALCO)

Major highlights of performance

- Highest sales turn over (Rs.7771 crores in FY14-15 since inception)
- Highest profit (Rs.1322 crores) in last seven years - 106% growth over previous year
- Highest net foreign exchange earning CPSE in the country as per Public Enterprise Survey 2013-14
- Dividend pay-out of Rs.451 crores in FY 2014-15 @ 35%
- Outshining private peers in performance in aluminium sector

CSR schemes

- Rs.19.10 crores has been spent in various CSR projects of NALCO in 2014-15
- Under Swachh Vidyalaya Abhiyan, 433 toilets (which includes 79 toilets beyond MHRD target) have been constructed in 202 schools of Angul, Koraput and Visakhapatnam at a cost more than Rs.4 crores.
- Residential education for 655 poor children from 18 periphery villages of Damanjodi is being sponsored by Nalco Foundation at 3 schools i.e. Kalinga Institute of Social Sciences (KISS, Bhubaneswar), KDF Model School (Jeypore) and Bikash Vidyalaya (Koraput)
- 8 Mobile health units alongwith doctors are operational and providing health check up and free medicines to villagers of 215 periphery villages in M&R complex, Damanjodi and S&P complex, Angul
- Provided 10 lakhs drinking water pouches and 250 temporary toilets, during Nabakalebara Rathayatra in July 2015 in Puri.
- Nalco Ki Ladli Scheme introduced in Aug'15 - 100 BPL girl students from periphery villages of Angul and Damanjodi to be benefitted every year.

Awards and accolades

- CAPEXIL Export Award (for 27 years in succession since 1988)
- Alumina refinery awarded Kalinga Safety Award-2014 in Sept'15.
- Panchpatmali bauxite mines awarded Pollution Control Excellence Award-2015 from OSPCB in Sept'15.
- EEPC's Star Performance Award for outstanding export performance in 2013-14.
- Indian Institute of Industrial Engineering (IIIE) Award for Performance Excellence

HINDUSTAN COPPER LIMITED (HCL)

Major achievements

- Mine expansion - Malanjkhand 5 million tonnes per

annum underground copper mine project is the flagship mine expansion project of HCL. Foundation stone laying ceremony was held at Malanjkhanda on 12th April 2015 and work commenced at site has commenced after obtaining all the clearance.

- Re-opening of closed copper mines of Jharkhand – Obtained environment clearances from MoEF for Kendadih, Rakha and Chapri-Sidheswar mine projects located in Jharkhand.
- Capacity enhancement - The company has purchased Jhagadia Copper Limited (JCL) with “state of the art” technology located at Bharuch, Gujarat from Asset Reconstruction Company (India) Limited. The plant has the capacity to produce 50,000 Mt of LME “A” grade copper cathode. The plant has been named as “Gujarat Copper Project” and is the fifth operating unit of HCL.
- Green technology - Initiated pilot scale test for development of hydro-metallurgy technology for extraction of copper metal from sulphide copper concentrate. This will help to reduce the carbon foot prints in the manufacturing of refined copper as no fuel oil will be consumed in the manufacturing process.
- Extraction of Nickel as by product - The company has identified technology to recover nickel from the waste generated during the copper refining process. The plant is under commissioning at Ghatsila smelter and refinery plant. At present there is no primary producer of nickel metal in the country and this project will facilitate the production of primary nickel metal in the country for the first time.
- Swachha Vidyalaya Abhiyan - The company has actively participating in the Swachha Vidyalaya Abhiyan and has committed expenditure for construction/repair of 197 toilets covering 160 schools in the states of M.P, Jharkhand and Rajasthan.

MINERAL EXPLORATION CORPORATION LIMITED (MECL)

Mineral Resources: Added 6048 million tonnes of resources of various minerals in the National Mineral Inventory (NMI) during the period under review from April, 2014 to September, 2015. It includes (Table 1):

TABLE 1

Name Mineral	Resources (Million Tonnes)	States
Coal	4901	Chattisgarh, Telengana and Madhya Pradesh.
Lignite	392	Tamil Nadu
Limestone	519	Nagaland and Meghalaya.
Copper	11	Rajasthan
Lead-zinc	0.5	Rajasthan
Gold	3	Jharkhand
Iron ore	221	Karnataka

Exploratory drilling

- A total of 5.92 lakhs metres of exploratory drilling completed during the period under review (April’14 - September’15)
- Out of which 4,09 lakhs metres of exploratory drilling carried out during 2014-15 for establishing mineral reserves in the country.
- This is all time high in 43 years of MECL.

Turn over-profit

Highest turn over and profit since inception during 2014-15 as indicated in the Fig.1.

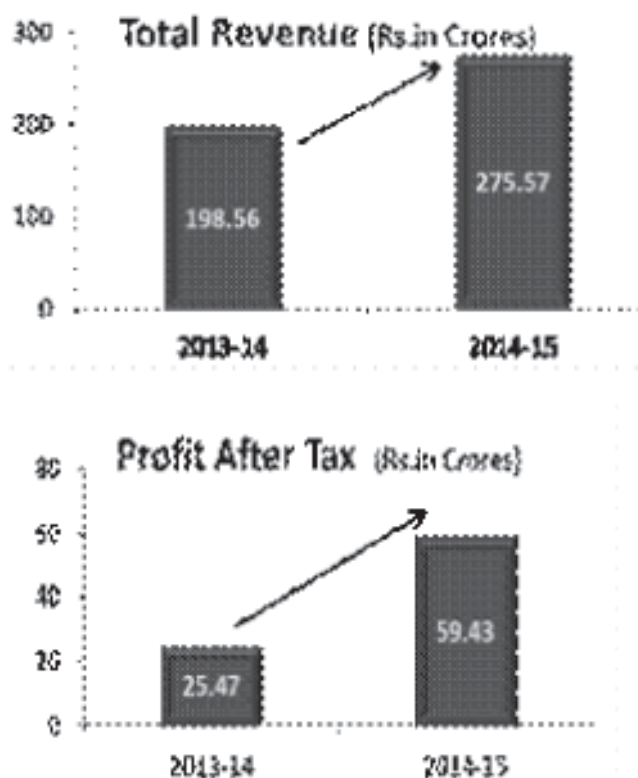


Fig.1

Exploration of iron ore

Completed reserves/resources estimation of iron ore for fifteen mines in Bellary district of Karnataka in a record period of 12 months. This work was entrusted by the Government of Karnataka as per the directives of Hon’ble Supreme Court as a sequel to cancellation of 51 ‘C’ category iron ore mines in the state

Fund utilization

MECL has utilized fully the plan outlay for promotional exploration on behalf of Ministry of Mines. In addition, Mineral Exploration Fund (MEF) was also utilized which was unused since last 12 years.

MoU rating-award

- MoU rating for the year 2013-14 is under “Excellent” category.

- Rating for 2014-15 is also expected to be under excellent category.
- Also rated excellent under Corporate Governance by Government of India.
- MECL has won “Silver Award” at 4th Annual Greentech CSR Award 2014 in service sector for outstanding achievement in Corporate Social Responsibility on 29th January, 2015 at Kolkata.

AUTONOMOUS BODIES

(i) Jawaharlal Nehru Aluminium Research Development and Design Center (JNARDDC)

- Process developed for low soda (Na₂O) hydrate (value addition) in Bayer circuit which can lead to import substitution.
- Portable analytical kit developed for field analysis for mineral prospecting, exploration and mining activities at remote areas.
- Provisional patent filed for “Process for selective in situ dissolution of alumina and silica bearing mineral phases in bauxite at room temperature for geo-analytical application” and two other R&D process.
- Certificate of appreciation by International Bauxite Alumina Aluminium Society (IBAAS) for significant contribution in environment/waste management under task force of Asia Pacific AP-7 partnership program on clean development and climate.
- IEBR for year 2014-15 was Rs.278 lakhs compared to Rs.253 lakhs of 2013-14.

Commercialization of R&D process

National Aluminium Co. Ltd, Odisha commercialized the R&D process developed by JNARDDC for “Development of heat treatment process for destruction of toxic cyanide and recovery of valuables from Spent Pot Lining Material (SPL)” with Green Energy Resources, Odisha.

(ii) National Institute of Miners’ Health (NIMH)

- Detailed protocol for assessment of vibration hazard has been made available to the Indian mines. This has enabled the industry to take corrective actions wherever necessary and also it can be used as a decision making tool for selection of less hazardous seat or equipment as a whole.
- Noise mapping facility along with latest technology has been made available to the mining industry.
- Inhouse Multiplex ELISA protocol was developed by using panel of six antibodies promising biomarkers is rapid, easy to perform and cost effective technique which is used for early diagnosis of NIHL.

Detection of silicosis among stone mine workers in Rajasthan

- NIMH evaluated chest radiographs of 471 persons with history of work in stone mines from Karauli and Dholpur

districts of Rajasthan and detected 202 cases of silicosis. Following NIMH report, the district administration has started free check up camps for silicosis victims and the state government is extending full support to them. The Government of Rajasthan has sanctioned Rs.3.00 crores as relief measures besides free treatment and sanction of BPL status to silicosis victims. Pneumoconioses Medical Boards have started functioning in Jaipur, Udaipur, Jodhpur and Ajmer Medical Colleges for medical examination of silicosis victims under Workmen Compensation Act, 1923.

(iii) National Institute of Rock Mechanics (NIRM)

R&D achievements:

- Controlled blasting carried out for a canal project near highly industrialized zone for SSNNL, Gujarat, and for Kota atomic power plant.
- 3-D numerical modeling of Mangdechhu hydroelectric project, Bhutan, and for Tehri pumped storage project, Uttarakhand.
- Engineering geological studies for Pranahitha-Chevella Sujala Shraavanthi (Telengana) scheme and Rajasthan atomic power project – Units 7&8, Rawatbhata.
- Geophysical resistivity image captured below the Haldia-Barauni oil pipeline of IOCL to identify old mining galleries below.
- Design of controlled blasting for speedy construction of road under bridges (ROBs) to South Western Railways.
- In-situ hydro-fracturing, deformability and shear tests carried out at Attunli hydroelectric project, Arunachal Pradesh and at Wangchhu project, Bhutan.
- During the FY 2014-15, NIRM has successfully completed 51 projects valued at Rs. 628.47 lakhs excluding the routine testing jobs.

The Ministry of Mines has prepared the draft Mines and Minerals (Development and Regulation) (Amendment) Bill, 2016 seeking to amend the Mines and Minerals (Development and Regulation) Act, 1957.

As part of the Pre-Legislative Consultation Policy, the draft Bill along with an Explanatory Note explaining the provisions of the proposed draft Bill are made available on the website of the Ministry of Mines at www.mines.gov.in inviting comments/suggestions from the general public, governments of states and Union Territories, mining industry, stakeholders, industry associations, and other persons and entities concerned, on the draft Bill. The last date for receipt of the comments/suggestions is 26th January, 2016.

Mines and Minerals (Development and Regulation) - Draft Amendment Bill 2016

Further to amend the Mines and Minerals (Development and Regulation) Act, 1957 the Government is considering

amendment of MMDR Act, be it enacted by Parliament in the Sixty Fifth year of the Republic of India as follows:

- 1.(i) This Act may be called the Mines and Minerals (Development and Regulation) (Amendment) Act, 2016
 - (ii) This Act shall come into force from the date of publication in the Official Gazette.
2. In the Mines and Minerals (Development and Regulation) Act, 1957, after sub-section (6) in section 12A, the following proviso shall be inserted, namely short title and commencement of insertion of proviso for allowing transfer of captive mining leases granted through other than auction route 'provided that where a mining lease has been granted otherwise than through auction and where mineral from such mining lease is being used for captive purpose, such mining lease will be permitted to be transferred subject to compliance with the terms and conditions as prescribed by the Central Government in this behalf.'

Explanatory note on Mines and Minerals (Development and Regulation) (Amendment) Bill, 2016

To amend the Mines and Minerals (Development and Regulation) Act, 1957 to allow the transfer of mining leases granted otherwise than through auction and where mineral from such mining lease is being used for captive purpose subject to compliance with such terms and conditions as may be prescribed by the Central Government in this regard.

The transfer of captive mining leases, granted otherwise than through auction, would facilitate banks and financial institutions to liquidate stressed assets where a company or its captive mining lease is mortgaged. The transfer provisions will also allow mergers and acquisitions of companies and facilitate ease of doing business for companies to improve profitability and decrease costs of the companies dependent on supply of mineral ore from captive leases.

The transfer of captive leases would be subject to the consideration of enforcing performance security, mine development and production agreement (MDPA), and realisation of an appropriate amount, if any, if found feasible at the time of framing

Steel and mines sectors make big strides

India has achieved all-round progress in 2015. There is a distinctly visible vibrancy, hope and enthusiasm among majority of Indians. Their belief and pride in their country has grown manifold and they are willing to go the extra mile for the nation.

The Ministry of Steel and Mines made their contribution to the cause of serving the nation, like all other government departments and organizations. The two Ministries contributed to 'Make in India' by dedication of two modernized and expanded steel plants to the nation by the

Prime Minister, setting up SRTMI and initiating special purpose vehicles for greenfield steel plants. The Government joined Skill India and Clean India, with the PSUs joining hands together to contribute their best to these achievements. The country benefitted from Digital India in the pledge to bring transparency and corruption-free processes in allocation of mines, when the MMDR Act was amended and e-auctions were introduced. The Pradhan Mantri Khanij Kshetr Kalyan Yojana was launched to give shape to Sabka Saath, Sabka Vikaas in the mining sector. The spirit of cooperative federalism was launched for devolution of more power and revenues to the states in mining sector.

INDIA BECOMES 3RD LARGEST STEEL PRODUCER IN THE WORLD

India became the 3rd largest producer of steel in the world in Jan. 2015, leaving behind US as the 4th largest producer. India bucks the global trend in steel production and consumption.

India was the only country among the major steel producing nations of the world which recorded a positive trend in steel production and consumption in 2015. First 11 months of 2015, steel production vis a vis 2014, India showed a growth of 2.8%, and world steel production registered decrease of 2.8%. India's steel production capacity has increased by 6% in 2015 and consumption has increased by around 5%.

Prime Minister dedicates two modernized steel plants to the nation

CPSEs under the Ministry of Steel completed modernization and expansion projects to enhance their crude steel capacity. The Prime Minister recently dedicated to the nation two such projects at SAIL's Rourkela Steel Plant in Odisha and IISCO Steel Plant at Burnpur, West Bengal. These two plants added a steel production capacity of nearly 5 million tonnes to the country.

The Index of Mineral production for MCDR minerals (April-October 2015) increased to 114.1, which was 105.0 in the corresponding period of last year (CPLY), showing a cumulative growth of 8.7%.

Iron ore production, which was 23.36 Mt in February, 2009, came down to 8.12 Mt by September, 2014. With the amendments introduced in MMDR Act in March 2015, the sector has shown revival. The monthly production of iron ore is now increasing. The production was 8.12 Mt in September, 2014, 12.44 Mt in March, 2015, 11.86 Mt in July, 2015, 10.8 Mt in September 2015 and 12.9 Mt in October 2015. The country is now again self-sufficient in iron ore.

The production of many other key minerals has also shown a positive growth in the period from April to October 2015 in comparison with last year on Y-o-Y basis. Some of them include bauxite (24%), chromite (13.8%), lead conc. (35.5%), zinc conc. (18.5%) and apatite and phosphorite (104%).

TABLE 2

Name of the exploration agency (s)	No. of geological reports of the blocks	State (s)	Expenses incurred in exploration of these blocks
GSI	75	Madhya Pradesh, Maharashtra, Jharkhand, Rajasthan, Odisha, Karnataka, Telangana, Gujarat, Andhra Pradesh,	Rs 103.45 crores (up to October, 2015)
MECL	62	Rajasthan, Jharkhand, Andhra Pradesh, Madhya Pradesh, Meghalaya, Odisha, Kerala, Karnataka, Maharashtra, West Bengal, Nagaland, Arunachal Pradesh, Assam	Rs 350 crores
Total	137		Rs 453.45 cr.

Slurry pipeline to carry iron ore from Bailadila to Vizag

The slurry pipeline to carry iron ore from Bailadila to Vizag has been planned in two phases. The first phase is of 138 km. This has been planned to be completed in 24 months after the obtaining all statutory clearances.

The slurry pipeline system is an alternate mode of transportation of iron ore fines in slurry form, after fine grinding and its concentration.

The capital expenditure of the first phase of the slurry pipeline system from Bailadila to Nagarnar is around Rs.4,000 crores and the second phase from Nagarnar to Vizag is around Rs.6,000 crores.

The portion of the iron ore fines transported in slurry form will be drawn at Nagarnar for making pellets in the pellet plant at Nagarnar and the remaining portion will be transported to Rashtriya Ispat Nigam Limited, Vizag for making pellets.

Handing over explored block of auctioned mines to states

The Government of India has not completed the process of auction for mines. All auctions for mines are to be conducted only by the respective state governments. The necessary rules for enabling the auction of minerals, viz. Mineral (Evidence of Mineral Content) Rules & Mineral (Auction) Rules, have been framed by the Ministry and have been already notified in the official gazette. The Ministry has also formulated a 'Model' tender document (including the models of notice inviting tender and information memorandum) and MDPA (Mine Development and Production Agreement), to facilitate the state governments to expedite the auction process. The process of auction of mineral blocks has been initiated by some state governments. Geological Survey of India (GSI), an attached office of Ministry of Mines and Mineral Exploration Corporation Limited (MECL), been engaged in exploration of minerals in the country. The Central Government has handed over geological reports of 75 blocks explored by GSI and 62 blocks explored by MECL to the respective state governments. The details of these blocks are given in Table 2:

Mineral Exploration Corporation Limited (MECL) has

TABLE 3 STATE-WISE DISTRIBUTION OF SPONGE IRON PLANTS, 2014-15

State	No. of Plants
Eastern region	
Jharkhand	64
Odisha	122
West bengal	41
Western region	
Chhattisgarh	57
Goa	3
Gujarat	2
Maharashtra	13
Southern region	
Andhra pradesh	9
Karnataka	31
Kerala	2
Tamilnadu	7
Telangana	15
Grand total	366

Source: JPC

informed that they have estimated more than 2341 million tonnes of mineral resources and handed over 62 geological reports of the blocks to the respective state governments.

SUPPLY OF IRON ORE

National Mineral Development Corporation (NMDC) provides iron ore to some of the sponge iron units in the country. NMDC supplies less than 1/3rd of iron ore supplies in India and balance of supplies are by private parties and hence no comment can be made on adequacy of iron ore supply which is largely determined by market and commercial factors. Steel is a deregulated sector since 1992 and the role of the Government is that of a facilitator only. Investments, production and procurement of raw material for the steel projects are therefore of conscious decision of the concerned investors based on commercial prudence and market dynamics. It may also be mentioned that there is no shortage of iron ore production capacity in the country at an aggregate national level. Odisha State Administration has not banned transportation of iron ore from the state to other states.