भारत सरकार
Government of India
खान मंत्रालय
Ministry of Mines

ANNUAL REPORT 2011-2012



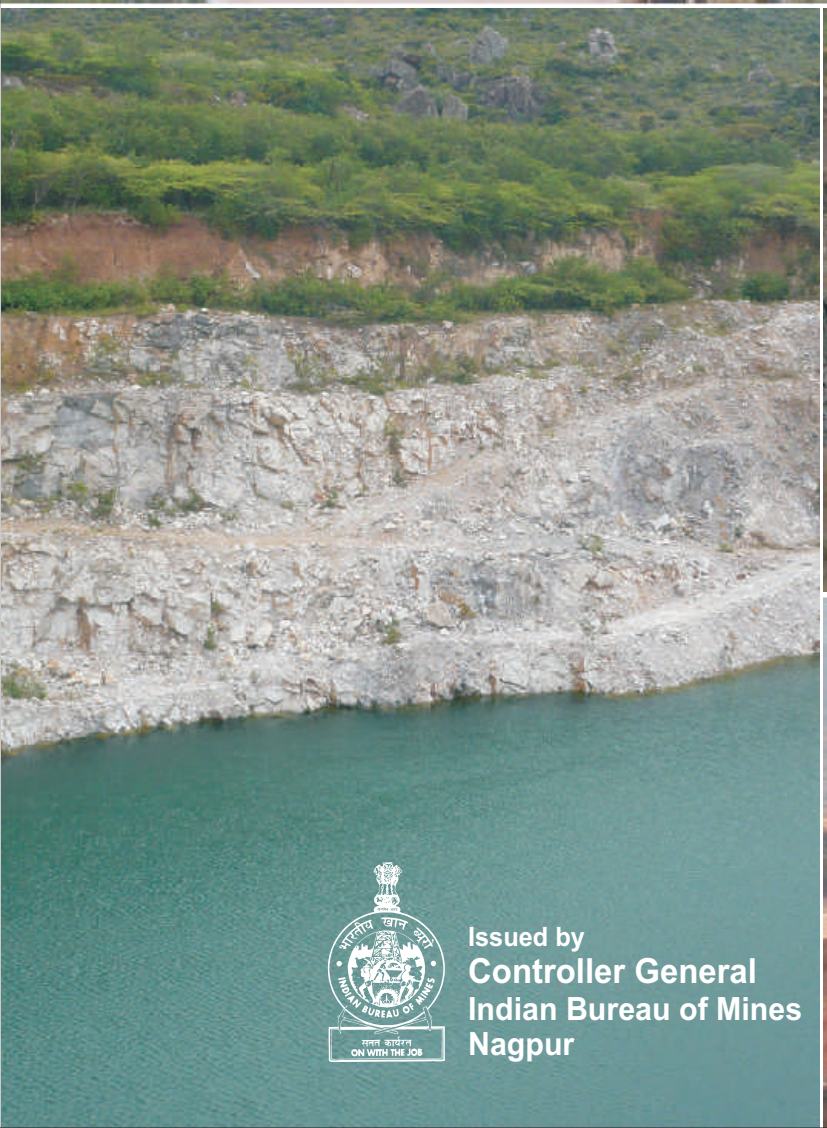
भारतीय खान ब्यूरो
INDIAN BUREAU OF MINES

Annual Report

2011-12

Thy snowy mountain heights, and thy forests, O earth, shall be kind to us! The brown, the black, the red, the multi-coloured, the firm earth, that is protected by Indra, I have settled upon, not suppressed, not slain, not wounded.

-Prithvi Sukta



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Foreword by the Controller General

C.S.Gundewar

The Annual Report of the Indian Bureau of Mines (IBM) 2011-12 highlights the Organisation's objectives and achievements in detail for the period April 2011-March 2012.

As a regulator, IBM performs regulatory functions through enforcement of Mineral Conservation and Development Rules, 1988, relevant provisions of the Mines and Minerals (Development and Regulation) Act, 1957, the Mineral Concession Rules, 1960 and some provisions of Environmental (Protection) Act, 1986 & Rules made thereunder and thus assist in the promotion of scientific development of mineral resources of the country, conservation of minerals, protection of environment in mines, other than coal, petroleum and natural gas, atomic mineral and minor minerals.

As a facilitator to the Mining Industry, IBM provides consultancy services in mining, geology, protection of mine environment and mineral beneficiation, and also work as data bank on mines and minerals. It also advises the Central and State Governments on all aspects of mineral industry, trade and legislation.

The year 2011-12 was the last year of the XI Plan. IBM achieved numerous goal and target earmarked for the Plan.

The scheme on Mining Tenement System which aims to develop an online National Mineral Information System for investors by linking Central and State organisations engaged in administration of mineral resources in the country will be operational in XII Plan.

Planning Commission had constituted a Working Group on Mineral Exploration and Development (Other than coal and lignite) for Twelfth Five Year Plan to assess the reserves and resources of all ores/minerals, to review the present status of Indian Mining Industry, to examine the present investment & taxation structure and suggest ways to ensure modernisation etc. The Working Group also reviewed the present role of IBM and suggested enhancement in its role to facilitate growth of the mining industry. Accordingly, IBM is implementing a new scheme, "Capacity Building of State Governments - Development & Implementation of Ore Accounting Software" to assist State Governments in ensuring adherence to standards and parameters of scientific mining, through leveraging technology.

As enunciated in the National Mineral Policy 2008, the Mines and Minerals (Development & Regulation), Bill 2011 has now been introduced in the Parliament and presently under examination with Parliamentary Standing Committee. IBM is intensely associated for framing of subordinate legislation under the new Bill. I am optimistic that once the new bill becomes effective, the mining industry would pick up the pace in our country.

The NMP, 2008 also provides for development of framework for sustainable development. Accordingly, the Ministry has brought out a Draft Sustainable Development Framework (SDF) document for Mineral Sector. The SDF lays a path towards achieving sustainable development aided by measurable outcomes and reporting assurance. IBM has created awareness about SDF among stakeholders by organising various workshops.

The Rule 45 of MCDR, 1988 has been amended with a view to allow end-to-end accounting of the minerals. With the gradual implementation of the provisions of Rule 45 by IBM, efficiency in accounting of minerals/ores produced will increase manifold. It will be easy to isolate and monitor areas of illegal mining effectively. The State Governments have been advised to ensure that any automation in the reporting system developed at their level should be compliant with the amended Rule 45 of the MCDR. IBM in association with National Informatics Centre (NIC) has developed online registration form and statutory monthly and annual returns form. The first phase of the online system of registration and submission of statutory returns was inaugurated by Hon'ble Minister of State for Mines (Independent Charge), Shri Dinsha J. Patel on 29 March 2012 at New Delhi.

IBM has brought out a publication entitled, "Iron & Steel Vision 2020". The publication discusses need for enhancement in iron ore reserves, beneficiation of low grade ores, agglomeration, use of pellets in iron making, conservation of limited high grade iron ore lumps. The Book attempts to steer a pathway to the future.

The report of the Committee for Review and Restructuring of the Functions and Role of IBM in terms of the policy directions given in NMP, 2008 has focused on enhancing IBM's core competency as a regulator, educator and technical advisor in the field of mining regulation, mineral beneficiation, mineral economics, mineral intelligence and mineral statistics etc.

The high inflation and high interest rates have affected all the sectors of the economy including the mining sector. The index of mineral production (base 2004-05) for the year 2011-12 is estimated to be 128.4 as compared to 131.0 for 2010-11, showing a negative growth of 2%. The minerals under MCDR 1988 reported negative growth of 10.95% as against the previous year owing to decrease in production of chromite, iron ore, manganese ore, barytes, gypsum, kaolin and magnesite. The decline is mainly in respect of iron ore (-17.8%), manganese ore (-17.7%) and chromite (-9.7%).The lower production can be attributed to suspension of iron ore mining in Karnataka as per Hon'ble Supreme Court order, discontinuance of mining for want of environmental clearance, suspension of mining operations as per statutory orders, development work in certain mines, etc. At this juncture we must rise to the occasion to withstand the negative growth turmoil and come out from this trend. I am sure that this negative turbulent trend will be of short duration and will end soon.

In order to sustain economic development and to cater the requirement of mineral industry within the country and outside, first-hand latest information on the mining leaseholds of the country, IBM has completed preparation of Multi-mineral Lease Hold Maps (MMLM) with Forest Overlays from mineral-rich states in the XI Plan. The MMLM gives first-hand information on the mining leaseholds of the country.

The concept of Mine Closure Plan introduced in 2003 address the issues relating to environment protection, management of top soil and overburden reclamation, rehabilitation of lands and control on ground vibration, surface subsidence and restoration of flora. The plan is approved by the IBM. In case of 29 non-metallic and industrial minerals, the powers have been delegated to the State Governments. Till March 2012, IBM collected Financial Bank Guarantees for a value of Rs.175.45 crore towards Mine closure plan or (EMP).

As a result of follow up for implementation of EMP, extensive afforestation has been undertaken around the mines by the mine owners. During the year 2011-12, about 3.56 million saplings are planted over an area of 888 hectares in and around mine areas.

IBM has completed updation of NMI as on 1 April 2010, in compliance with the United Nations

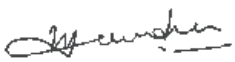
Framework Classification (UNFC), a globally understandable system. The inventory is a comprehensive effort to present the latest information on mineral resources of the country to the world.

As an 'Administering Authority' for implementation of Offshore Areas Minerals (Development & Regulation) Act, 2002, IBM has notified the mineral bearing blocks available for the grant of Exploration Licence in the offshore waters of Bay of Bengal and Arabian Sea vide S.O. 1341(E) dated 7 June 2010. In response, IBM received 377 applications and Grant orders were issued for 62 blocks to 16 applicants in April 2011. Further progress in executing the Exploration Licence is stalled as the matter is sub judice.

The Task Force of IBM constituted in 2009-10 to check illegal mining in respect of the States of Andhra Pradesh, Jharkhand, Karnataka and Odisha for iron and manganese ore and Gujarat for bauxite, inspected 454 mines from 2009-10 to 2011-12. Subsequently, mining operations were suspended in 155 mines, where mining was not carried out as per the approved mining plan/scheme of mining.

Thus, Role of IBM has become more vibrant in the changing scenario of the Indian Mineral Industry. With its motto "On with the Job", IBM will strive hard to accomplish the objective of "National Technical Regulator in the Indian Mining Sector".

This Annual Report underlines the organisation's role as a National Technical Regulator in the mining sector and highlights its importance as a repository and one stop destination for all information on mines and minerals.



Nagpur
15th March, 2013

(C.S.Gundewar)
Controller General

Contents

1 HIGHLIGHTS OF 2011-12

The Indian Bureau of Mines celebrated its Foundation Day as Khanij Diwas on March 1, 2012, heralding a new precedent. In this picture, seated on the dais are chief guests of the programme, Shri H.M. Nerurkar, MD, Tata Steel Ltd., Shri K.J. Singh, then CMD, MOIL along with Shri C.S. Gundewar (centre), CG, IBM. Shri Y.G. Kale, TS & RCOM is seen briefing the guests about the five-decade long journey of IBM.

❖Inspected 2,563 Mines (including 1046 inspections for approval of Mining Plans/Schemes of Mining/Mine Closure Plans).

❖ Updated National Mineral Inventory as on 1.04.2010 in respect of 70 minerals as per United Nations Framework Classification.

❖ Organised Mines Environment and Mineral Conservation Week at 14 Centres.

❖ Approved 181 Mining Plans, 351 Schemes of Mining and 40 Final Mine Closure Plans.

❖ Issued 4013 violations in respect of 1722 mines and prosecutions launched against 18 mine owners for non-compliance of provisions of MCDR, 1988. Suspended mining operations under rule 13(2), 45 and 56 of MCDR, 1988 in 398 mines.

❖ Prepared 60 multi-mineral leasehold maps with forest overlays in respect of Jammu & Kashmir, Himachal Pradesh, Haryana, West Bengal, North-Eastern States, Kerala and Goa .

❖ Completed 08 Mining Research oriented Consultancy Assignments.

❖ Completed 06 Technical Consultancy Assignments on Mining, Geology and Environment.

❖ Completed 65 Mineral Beneficiation Investigations.

❖ Carried out chemical analysis for 49,139 radicals and 2,408 Mineralogical Studies.

❖ Conducted 01 in-plant study.

❖ Generated a Revenue of Rs. 157.52 lakhs.

❖ Released 24 publications and periodicals on mines and minerals.

❖ Conducted 12 training courses including three for the NER States.

❖ To mark the IBM foundation day, it is decided to observe 1 March of every year as "Khanij Diwas". Accordingly, this year's 'Khanij Diwas' was observed on 1st March, 2012 at Bureau's headquarters.

❖ A large Share of the iron ore, an important mineral of our country is being exported without value addition. IBM brought out a vision document viz, "Iron & Steel Vision 2020" during 2011 which gives policy input on incentivisation of beneficiation and pelletisation.

❖ A scheme "Mining Tenement System" aims to develop an online National Mineral Information System for investors by linking Central and State organisations engaged in administration of mineral resources in the country. Development of Registry component by the consultant for online submission of data was in progress.

❖ Amended Rule 45 of Mineral Conservation and Development Rules, 1988 stipulates mandatory registration of miners, stockists, traders, exporters, and end-users of minerals and stringent reporting norms to ensure end-to-end accounting of the mineral produced. To give fillip to implementation of amended Rule 45, IBM in association with NIC has developed online system of registration and submission of

statutory returns. The first phase of the online submission of the returns was inaugurated by Hon'ble Minister of State, Shri Dinsha J. Patel on 29.03.2012 at New Delhi.

❖The Draft report of the Committee for Review and Restructuring of the Functions and Role of IBM was modified based on the comments received from the stakeholders; provisions of the Mines & Minerals (Development & Regulation) Bill 2011 and recommendations of the sub-groups of the Working Group constituted for 12th Five Year Plan.

❖ Observed Hindi Fortnight at the IBM headquarters and at all regional offices and Regional Ore Dressing Laboratories during 02-15 September 2011.

❖ Organised Hindi workshops at Ajmer, Dehradun, Hyderabad, Kolkata and Udaipur regional offices of IBM.

❖ Inputs given to the Ministry of Mines to formulate an Act to replace the existing Mines and Minerals (Development and Regulation) Act, 1957. The Mines and Minerals (Development & Regulation), Bill 2011 has now been introduced in the Parliament and presently under examination with the Standing Committee on Coal & Steel of Parliament. IBM associated for drafting of sub-legislations of the new proposed Act.

❖ Notified the mineral bearing blocks available for the grant of Exploration Licence in the offshore waters of Bay of Bengal and Arabian Sea, vide S.O. 1341(E) dated 7 June 2010 in the Gazette of India. In response, IBM received 377 applications and Grant orders have been issued for 62 blocks to 16 applicants in April 2011. Further activity is hold up as the matter is sub judice.

❖ Inputs given to Ministry of Mines in preparation of Report of Working Group on Mineral Exploration and Development (Other than Coal and Lignite) for XII Five Year Plan 2012-17. IBM represented on Working Groups for XII Plan of Ministry of Steel and Planning Commission (Industries Division).

❖ Central Government appointed a Commission of Inquiry consisting of Shri Justice M.B. Shah, Retd. Judge of the Supreme Court of India, vide Notification S.O. 2817 dated. 22 November, 2010 to enquire into the large scale mining of iron ore and manganese ore without lawful authority in several states. Commission has submitted its first interim report to Ministry of Mines on 14.07.2011. IBM has initiated action based on the Action Taken Report on the recommendations mentioned in the interim report.

❖Seven officers of IBM were on foreign deputation to Switzerland, Chile, Colombia, Australia, Norway, Turkey, China, South Africa, Mozambique and Canada during the year.

ShriViswhapatiTrivedi (left), then Secretary (Mines) during the visit to IBM headquarters in Dec, 2011.

2 ROLE AND ORGANISATION OF IBM

The Indian Bureau of Mines (IBM) established in 1948 is a scientific and technical organisation under the Ministry of Mines. It is engaged in the promotion of scientific/sustainable development of all the mineral resources of the country, conservation of minerals, protection of environment in mines, other than coal, petroleum and natural gas, atomic minerals and minor minerals and accomplishes it through a gamut of assigned functions, both statutory and non-statutory.

Role

2.2. IBM's functions are pivotal in the development of Indian Mineral Industry.

The Bureau:

- Promotes conservation and systematic and scientific development of mineral resources of the country through inspection of mines, beneficiation plants and mineral-based industries.
- Approves the mining plans which is a pre-requisite for grant/renewal of mining leases and also approves schemes of mining, mine closure plans, grants recognition to Qualified Persons for preparing mining plans.
- Conducts geological, mining, beneficiation and other related techno-economic field studies and applied research on mining-geological problems.
- Conducts studies on environmental protection and pollution control with regard to the mining and mineral beneficiation operations.
- Implements the Offshore Areas Minerals (Development & Regulation) Act, 2002 and administers the grant of Mineral Concession in offshore areas.
- Prepares mineral maps and the inventory of mineral resources of India.
- Provides technical consultancy services in the field of mining, geology, mineral processing and environment.
- Conducts mineral beneficiation and related technological studies under the departmental programme.
- Disseminates information and data on exploration, prospecting, mines, minerals, mineral-based industries and mineral legislation and publishes bulletins and monographs.

Indira Bhavan - IBM HQ, Nagpur.

- Imparts training to the scientific, technical and other cadres of IBM as well as persons from the mineral industry and other agencies for human resource development.
- Acts as Data Bank on Mines and Minerals.
- Advises the Government on matters related to mineral industry, environmental protection and pollution control, export and import policies, trade, mineral legislation, fiscal incentives and allied matters and conducts market survey on minerals and metals.
- Promotes awareness about conservation, systematic and scientific development of mineral deposits and protection of environment including restoration, reclamation and rehabilitation of mined out areas through exhibitions and audio-visual media.

Promotes and monitors community development activities in mining areas.

Organisation

2.3 IBM has its headquarters at Nagpur and is presently headed by Shri C.S. Gundewar, Controller General.

IBM is organised into six functional divisions, namely:

(i) Mines Control and Conservation of Minerals Division.
(ii) Ore Dressing Division.
(iii) Technical Consultancy, Mining Research and Publication Division.
(iv) Mineral Economics Division.

Modern Mineral Processing Laboratory & Pilot Plant, Nagpur.

(v) Mining and Mineral Statistics Division.

(vi) Planning and Co-ordination Division having two sub-divisions:

a) Administration, Establishment matters (including Training), Accounts with all other administrative and financial matters and;

b) Planning and Co-ordination.

The existing set-up is shown in the organisation chart (as on 31.3.2012).

Modern Mineral Processing Laboratory and Pilot Plant

2.4 UNDP aided Modern Mineral Processing Pilot Plant and Analytical Laboratory of IBM is located at MIDC Hingna, Nagpur. IBM's Environmental Laboratory has the recognition of the Central Government to carry out testing of samples of air, water, soil and other substances specified under the Environmental (Protection) Act, 1986. IBM has been registered by the Department of Scientific & Industrial Research (DSIR) for the purpose of availing Customs Duty exemption to carry out R&D work.

Zonal / Regional /Sub-Regional Offices

2.5 The Mines Control and Conservation of Minerals Division functions through its Zonal offices viz North, Central and South located at Ajmer, Nagpur and Bengaluru respectively and 12 Regional Offices located at Ajmer, Bengaluru, Bhubaneswar, Chennai, Dehradun, Goa, Hyderabad, Jabalpur, Kolkata, Nagpur, Ranchi and Udaipur and 2 sub-regional offices located at Guwahati and Nellore. The territorial jurisdiction of regional offices is shown in the map.

Regional Ore Dressing Laboratories

2.6 The Bureau has two Regional Ore Dressing Laboratories and Pilot Plants at Ajmer and Bengaluru to cater to the mineral beneficiation needs of the neighbouring areas. A Clay Testing Laboratory is also functional at Kolkata for catering the needs of North Eastern Region.

Human Resources in IBM

2.7 The Bureau has a total sanctioned strength of 1477 consisting of 420 Gazetted (Group A – 243 & B – 177) and 1057 Non-Gazetted (Group B – 362, Group C (Tech.) - 191 & Group C –504) posts. Sanctioned strength in various streams is as per the table below:

Sl. No.	Stream	Sanctioned strength
1	Mining Engineers	145
2	Mining Geologists	115
3	Ore Dressing, Chemical & Metallurgical Engineers	224
4	Mineral Economists	53
5	Statisticians	74
6	Administrative & other Technical Personnel	866
	Total	1477

Committee for Review and Restructuring of the Functions and Role of IBM

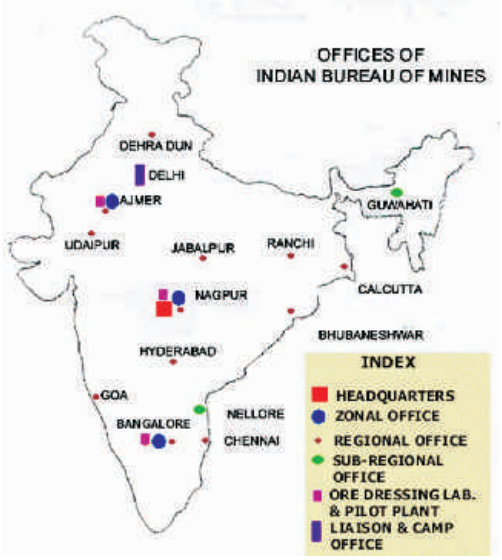
2.8 A Committee for review and restructuring of the functions and role of IBM in terms of the policy directions given in the National Mineral Policy, 2008 had been constituted under the chairpersonship of the Joint Secretary (Mining Legislation) on 23 August 2009, with representatives from Ministry of Environment & Forests, Central Pollution Control Board, State

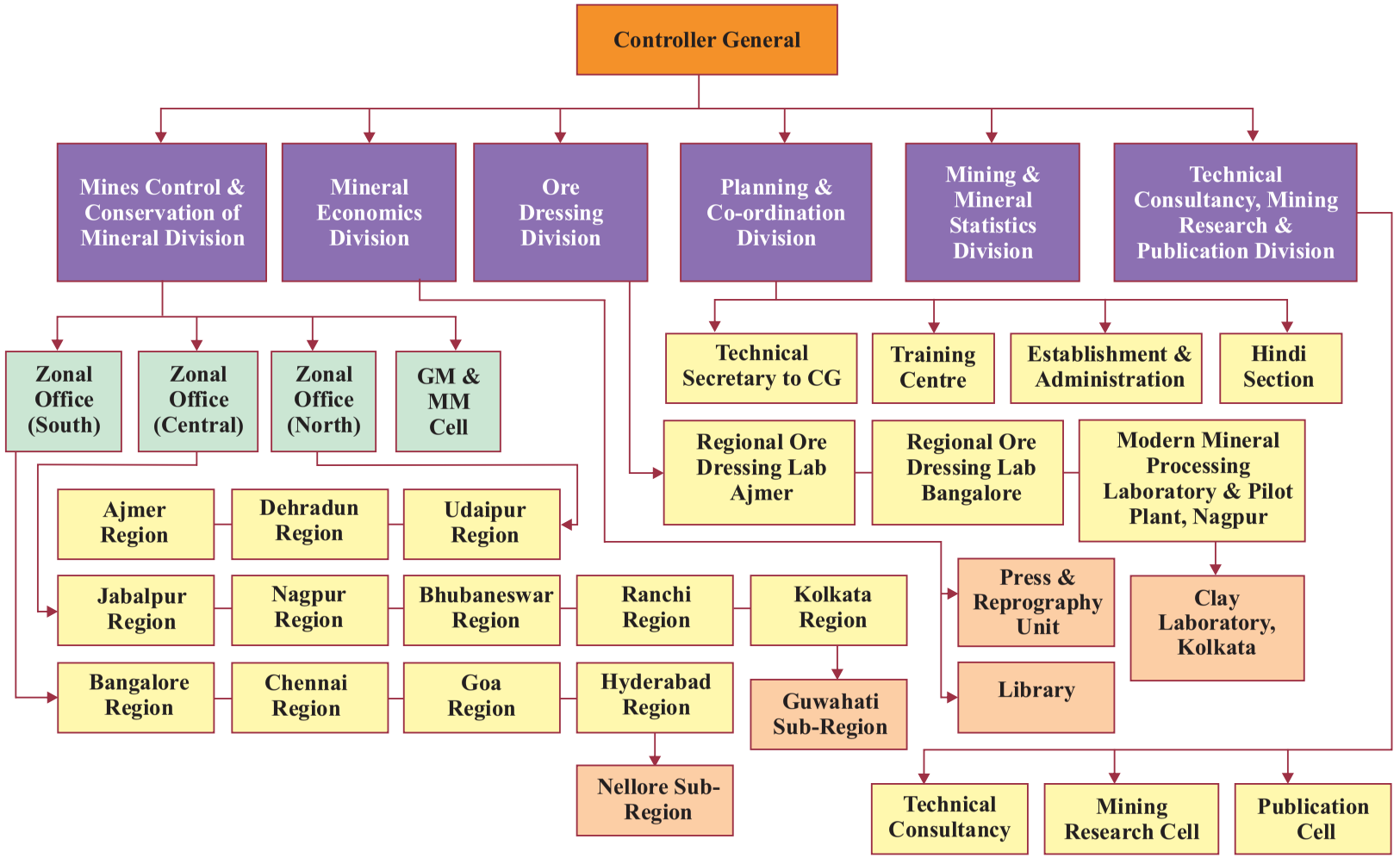
Analytical Laboratory, Nagpur.

Directors of Mining & Geology of Andhra Pradesh & Chhattisgarh, GSI, IBM, ISMU, FIMI, NIC and retired officers of IBM.

2.9 The Draft report of the Committee was uploaded on the website of IBM in September, 2010 inviting suggestions from the stakeholders. To have wider consultations on the draft report, a Stakeholders meeting was held on 20th December 2010 under the Chairmanship of Secretary (Mines). As deliberated in the meeting, 5 separate Sub-Groups and a Peer Committee had been formed **to** examine and finalise the draft Chapters of the Report and to incorporate suggestions received during the Stakeholders meeting. Two meetings of the Peer Committee were held on 21.2.11 & 11.5.11 and Peer Committee submitted its recommendations to IBM Review & Restructuring Committee in its meeting held on 11.5.2011. Based on the suggestions received in the Stakeholders meeting held on 20th December 2010 and recommendations of the Peer Committee, the Report was re-modified in May 2011. Meanwhile in the QPR meeting held under the Chairmanship of Secretary (Mines) on 5th May 2011 it was decided to re-examine the issue of continuation of Ore Dressing Division with IBM and ascertain the prospect of separating it from IBM and converting it into a commercial organisation. The issue was deliberated at length in a subsequent meeting held with industry personnel under the Chairmanship of Secretary (Mines) on 30th August 2011. Based on the decisions taken in the meeting held on 30th August 2011, certain portions of the Report were modified and redrafted. The IBM Review & Restructuring Committee suggested segregating various functions in the field of mineral beneficiation as regulatory, regional, mine and commercial level and it was decided to restrict IBM's role to first two levels. Meanwhile the Ministry of Mines submitted Cabinet Note seeking approval for the Mines & Minerals (Development and Regulation) Bill 2011 on 30th August 2011 and supplementary Cabinet Note was submitted on 13th September 2011. The Mines and Minerals (Development and Regulation) Bill, 2011 was approved by the Cabinet and subsequently introduced in Lok Sabha on 12.12.2011. The Draft bill was later referred to the Standing Committee on Coal & Steel of Parliament for detailed examination. As to detail out the role and function of IBM in the light of the National Mineral Policy and Mines and Minerals (Development & Regulation) Act and Rules framed thereunder was one of the terms of the reference of the Committee, it was felt necessary to modify the IBM Restructuring Report in view of the provisions of the Mines & Minerals (Development and Regulation) Bill 2011. The report was thus modified and the final report was ready for submission by 23rd November, 2011. The modified report was discussed again with Secretary (Mines) and accordingly the report which is in compliance with new provisions of Act was discussed in the Committee's meeting held on 11th April 2012 and was subsequently finalised in the meeting held on 24th April 2012. The report was formally submitted by the Chairman on 4th May 2012.

2.10 The salient features of the report are given at Annexure V.





Present organizational structure of IBM

3 MINES CONTROL AND CONSERVATION OF MINERALS DIVISION

Water harvesting initiatives in mining areas.

The Mines Control and Conservation of Minerals (MCCM) Division is the primary wing of the IBM and is responsible for conservation, systematic and sustainable development of mineral resources of the country and protection of mines' environment through statutory enforcement as well as promotional activities. It is headed by the Chief Controller of Mines at the headquarters. There are 3 Zonal Offices located at Ajmer, Bengaluru and Nagpur and 12 Regional Offices and two Sub-Regional Offices (see para 2.5 and Map). The Zonal Office is headed by a Controller of Mines and Regional Office by a Regional Controller of Mines. The Chief Controller of Mines is assisted by the Chief Mining Geologist. Geological Mapping and Mineral Map Cell is headed by Chief Mining Geologist and is under the overall supervision of Chief Controller of Mines.

3.2 The Division carries out the following activities:

- Inspection of mines for enforcing Mineral Conservation and Development Rules, 1988.
- Approval of Mining Plans/Schemes of Mining/Mine Closure Plans under Mineral Concession Rules 1960, and Mineral Conservation and Development Rules, 1988.
- Granting recognition to the scientific and technical persons to work as Recognised Qualified Persons (RQPs) for the preparation of the statutory mining plans.
- Conducting Regional Mining Geological Studies.
- Holding 'Mines Environment and Mineral Conservation Week' at different mining centres.
- Preparation of Mineral Maps along with forest overlays.
- Revision/updating of Mineral Inventory of minerals under lease holds.
- Allotment of Exploration License in Offshore Areas.
- Attending Parliament Questions and Ministry References.

Inspection of Mines

3.3 During the year 2011-12, IBM carried out 2,563 inspection of mines (including 1046 inspections for examining mining plans/schemes of mining/mine closure plans and 32 Task Force inspections) to administer various statutory

Shri C.S. Gundewar, Controller General, IBM speaking at 22nd Mines Environmental & Mineral Conservation Week 2011-12 organised at Ajmer.

provisions of Mineral Conservation and Development Rules, 1988 in the States as listed below:

Sl. No.	State	Inspection	
		MCDR + MCDR under RMGS	Mining Plan/ Scheme of Mining/ Mine Closure Plans + Task Force
1	Andhra Pradesh	214+26	88
2	Assam	03	0
3	Bihar	11	04
4	Chhattisgarh	32	66+2
5	Goa	30+20	77+10
6	Gujarat	76+22	76
7	Haryana	0	0
8	Himachal Pradesh	23+18	14
9	Jammu& Kashmir	0	0
10	Jharkhand	125+42	50
11	Karnataka	191+6	85
12	Kerala	61	01
13	Madhya Pradesh	79+37	131
14	Maharashtra	29	48
15	Manipur	0	0
16	Meghalaya	22	02
17	Odisha	86+5	113+20
18	Punjab	0	0
19	Rajasthan	69+17	136
20	Sikkim	0	0
21	Tamil Nadu	131+20	115
22	Uttarakhand	69	23
23	Uttar Pradesh	03	10
24	West Bengal	18	**07**
	Total	**1272+ 213**	**1046 + 32**

Year wise details of target and achievement of inspection of mines for enforcement of MCDR 1988 and for approving mining plans during last 5 years are shown below:

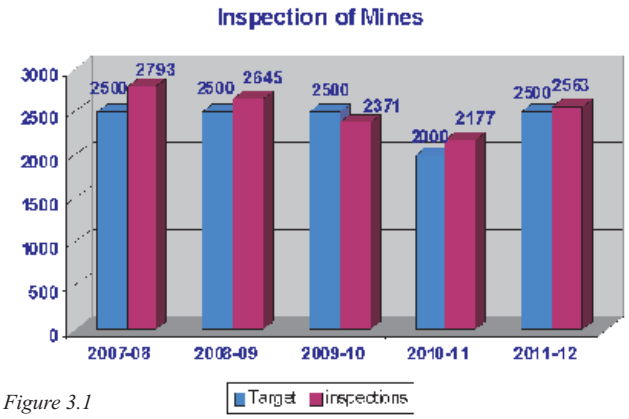


Figure 3.1

Technical Studies

3.4 The Regional Mining Geological Studies (RMGS) have been programmed for the mining geologists of different regional offices under MCCM Division with an object to cover certain cluster of mines/leases in one or two districts of a state to ensure effective follow up action and implementation of the suggestions/violations under MCDR, 1988. It also aims to bring out a comprehensive status report based on the data collected during inspection/study of each mine/leasehold/ mineral belt on the aspects of mineral conservation, scientific development, mining environment, community development etc.

The basic aim of the study is to get a comprehensive picture of a mining belt/ mineral bearing region in terms of the mineral deposit, mine development, infrastructure (existing & required), production potentialities as well as future prospects of development of the mining belt namely, Techno-economics, so as to enable the government/policy makers to chalk out a concrete plan to develop a mining belt or mineral bearing region.

The study also highlights the present status of community development and further scope in terms of infrastructural facilities, economics, health, education, environmental, recreation, etc. and identifies community development problems and issues in the background of scientific mining in the area and prioritising of community development programme as per need of the society within the overall national perspectives.

RMGS STATUS - 2011-12

S. No.	Zone/ Region	Mineral	No. of Mines covered
1	Central/ Bhubaneshwar	Iron Ore	07
2	Central/ Ranchi	Limestone	17
3	Central/ Jabalpur	Bauxite	25
4	Central/ Nagpur	Manganese	10
5	Central/ Kolkata	Iron Ore Manganese	25
6	South/ Chennai	Limestone	20
7	South/ Bengaluru	Iron Ore Manganese Clay	05
8	South/ Goa	Iron Ore	20
9	South/ Hyderabad	Iron Ore	26
10	North/ Ajmer	Iron Ore	17
11	North/ Udaipur	Bauxite	25
12	North/ Dehradun	Limestone	25

3.5 During the inspections/studies, IBM advised the mine owners on adoption of appropriate technology for prospecting and mining; offered suggestions to ensure systematic mining; and guided for utilisation of low grade minerals and rejects and if not found feasible for the present, were advised to stack them separately for future use. On receipt of stoping notices, mines were inspected in detail to examine the scope for further development, feasibility of improved methods for stoping and other ancillary aspects. Environmental problems during and after cessation of mining activities were taken care of. Suitable advices were given to mine owners so that the environmental pollution due to mining could be properly managed by taking appropriate abatement measures.

Mining Plans

3.6 During 2011-12, a total of 284 mining plans were received of which 21 were withdrawn by the parties. Of the mining plans received during 2011-12 and also those received/under processing prior to this period, 181 were approved and 42 not approved during the year.

From the time of introduction of the mining plan in the year 1988 up to March 2012, a total of 15,499 mining plans were received. Out of these, 12,759 mining plans were approved, 1,577 were not approved, 1,021 were withdrawn by the parties, 27 were pending with the parties for modification and 115 were at different stages of processing at IBM.

The status of disposal of Mining Plans during last 5 years is shown below:

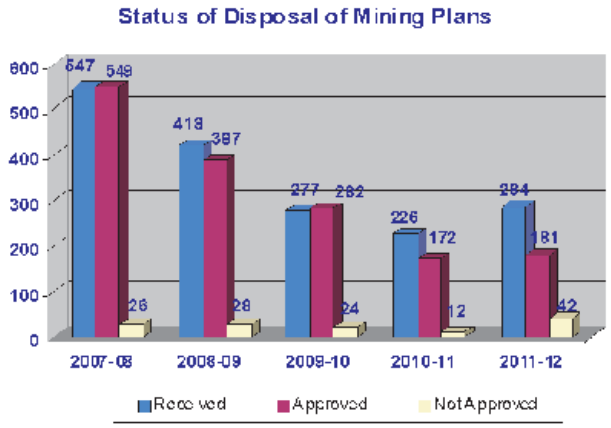


Figure 3.2

Schemes of Mining

3.7 During the year, 709 Schemes of Mining were received of which 34 were withdrawn by the parties. Of the schemes received during 2011-12 and also those received prior to this period, 351 schemes were approved and 79 were not approved during the year.

Since the introduction of Scheme of Mining, 5499 Schemes of Mining were received under Rule 12 of MCDR 1988 up to March 2011. Out of these, 4,251 Schemes were approved, 680 were not approved, 208 were withdrawn by the parties, 70 were pending with parties for modification, and 290 were at different stages of processing at IBM. The status of disposal of Schemes of Mining during

last 5 years shown below:

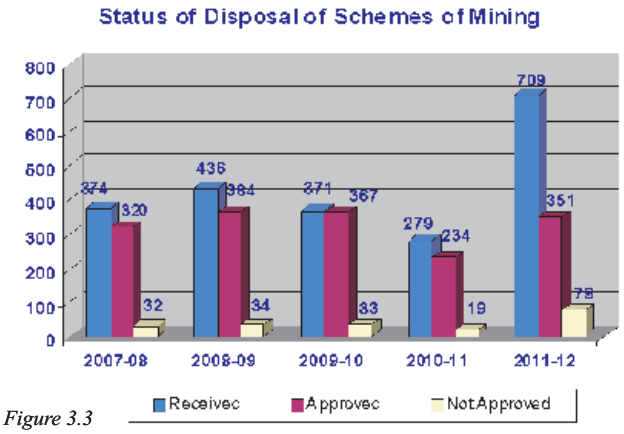


Figure 3.3

Mine Closure Plans

3.8 Mining operations are to be carried out as per the approved mining plan and after extraction of minerals, the mines are required to be reclaimed as per an approved Mine Closure plan. To ensure that the lessee completes the work of mine closure as approved for his mine, he has to submit a valid financial assurance in the form of encashable bank guarantee. So far up to 31 March 2012, Financial Bank Guarantees for a value of Rs.1754568931/- have been collected and after fulfilling the requirements of the FMCP, certificates under rule 29 A of MCR 1960 have been issued for 86 cases of partial or full surrender of lease.

During the year, 71 Final Mine Closure Plans (FMCPs) were received. Of the plans received during 2011-12 and also those received prior to this period, 40 plans were approved and 01 was not approved during the year.

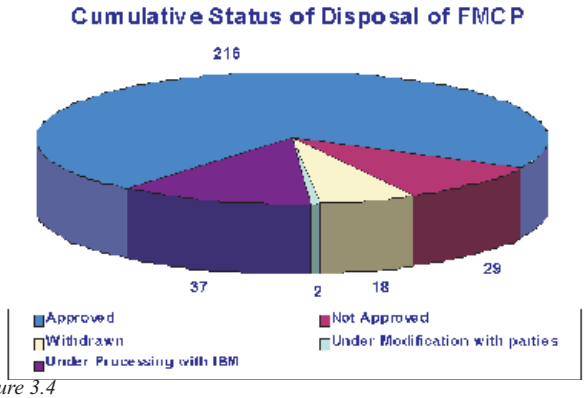


Figure 3.4

Since the introduction of FMCPs 302 plans were received till March, 2012. Out of these, 216 were approved, 29 were not approved, 18 were withdrawn by the parties, 02 were pending with parties for modification, and 37 were at different stages of processing at IBM. Cumulative status of disposal of FMCP is shown below:

Mining Plan Grievances Committee (MPGC)

3.9 The Mining Plan Grievances Committee for the redressal of grievances of entrepreneurs in dealing with IBM for approval of mining plans, constituted in each region comprise representatives of mine owners, RQPs, State Directorates of Geology and Mining, and the Controller of Mines, IBM of the concerned Zone as Chairman. All the MPGCs continued their activities and held one meeting each at 12 Regional Offices during the reporting year.

Meeting with RQPs

3.10 During 2011-12, IBM held meetings with the RQPs at the following places with an objective to provide guidance regarding problems faced by them in preparation of mining plans:

Sl. No.	Region/ Venue	Date	No. of RQPs participated
	CENTRAL ZONE		
1	Ranchi	24.02.2012	19
2	Jabalpur	17.03.2012	52
3	Nagpur	12.03.2012	25
4	Kolkota/ Jamshedpur	12.02.2012	22
5	Bhubaneshwar	21.01.2012	47
	NORTH ZONE		
6	Ajmer	14.10.2011	40
7	Dehradun	17.11.2011	05
8	Udaipur	12.01.2012	12
	SOUTH ZONE		
9	Chennai	06.03.2012	48
10	Hyderabad	21.03.2012	96
11	Goa	19.03.2012	41
12	Bengaluru	25.01.2012	29
Total number of RQP's participated in Meetings			**436**

Grant/Renewal of Recognised Qualified Persons (RQPs)

3.11 Under Rule 22C of Mineral Concession Rules 1960, competent authorities of IBM have been delegated powers to grant/renew recognitions to qualified persons to prepare mining plan. During 2011-12, 46 recognitions were granted, 31 renewed and 01 refused.A total 2,854 recognitions have been granted so far out of which 1102 were valid, on the IBM's record, as on March 2012.

Administration of MCDR, 1988

3.12 While discharging the statutory function of enforcing administration of Mineral Conservation and Development Rules, 1988, during 2011-12, 4,013 violations of different rules and sub-rules were pointed out in respect of 1722 mines and were further followed up for their rectification. A summarised account of status of enforcement of MCDR is tabulated below:

Sr.No	Aspect	No.
1.	Violations pointed out for various Rules & Sub-rules.	4,013
2.	Mines for which violations pointed out.	1722
3.	No. of Violations rectified	1273
4.	Show cause notices issued	856
5.	No. of violations rectified after issue of show cause notices	651
6.	Court cases launched	10
7.	a) Cases compounded b) Total fee received	09 Rs. 73,000/-
8.	a) Cases decided in favour of IBM b) Fine imposed	05 Rs. 34,000
9.	No. of mines where, a) Mining operations suspended b) Suspension orders revoked	 398+17(Task Force) 112

3.13 Principal violations detected during mine inspections are given below:

Rule No.	Subject	No. of violations pointed out
12(3)	Submission of Scheme of mining	496
13(1)	Mining operations in accordance with mining plan / scheme of mining	721
22(1)	Notice of opening of mine	119
23B(2)	Submission of progressive mine closure plan	144
24	Notice of temporary discontinuance of mining operations	112
45(1)(a)	Submission of returns.	1392
Others		1029
Total		**4013**

Disposal of Applications for Grant of Permission under MCDR, 1988

3.14 Details of applications disposed off during 2011-12 for grant of permission under MCDR, 1988 are given below:

Sl. No	Subject	No of cases in which permission	
		Granted	Refused
1	Stoping (Rule 26)	17	01
2	Preparation of plans & sections of Mine working (Rule 27)	24	01

Significant Results of Inspections & Studies

Conservation of Minerals:

1. While scrutinising the Stoping Notice Jungle Lode description of Block J-07, Slice-I between -65mRL to -40mRL of Kathpal Chromite mine of M/s FACOR Ltd, it was observed that:

(i) at -65mRL in Part-2 the width of the stope is proposed to be equal to the width of the ore body which is about 0.5m. Since -65mRL is the drawal level of the broken ore from the stope, the 0.5m stope width would not allow free flow of the broken ore. Therefore, a minimum of 2.5m stope width would be required for free flow of the broken ore. The management was advised to modify the stope design accordingly. The management agreed to redesign the stope by including design dilution. Accordingly, 2133 Mt quantity of designed dilution was added to the stope, which is a salient achievement.

(ii) the reserves of part 2 of stope block has been estimated on the basis of only one x-section whereas the width of the ore body on -40mRLin Part -2 at the western end is much higher. The management was advised to prepare two x-sections at both the ends to understand the variation in the width of the ore body and reassess the reserves of the stope on the basis of these x-sections. Accordingly, the management informed that the revised reserves of the stope increased by about 2000 tonnes. Assuming 80% recovery an additional say 1600 tonnes of ore will be recovered from the stope J-07, Slice –I. In terms of monetary gain, at the rate of PMV Rs.6178/- (as per monthly return for January, 2012), it works out to be Rs.99 Lakhs, which is a salient achievement.

2. While scrutinising the Scheme of Mining of Saruabil- Sukrangi Chromite Mine of M/s O M C Ltd, over an area of 23.243 ha in Jajpur district of Odisha , it was observed that the reserves have been estimated on the basis of bulk density 2.2 t/cum which is very much on the lower side. After pointing out of the same, the reserves were re-estimated with bulk density 3 t/cum which has increased the reserves by more than 36%.

3. As per the mining plan approved of Surjabasa Limestone mine in Singhbhum (W) district, Jharkhand, there was a proposal to either dispatch the sub grade ore blending with the saleable ore or stack them separately if not possible. During the inspection of the above mine on 04/11/2011,it was observed that the sub grade ore is being dumped along with waste for back filling the worked out portion of the quarry. Thus the mining operations in the mine were carried out in contravention of the proposals made in the approved mining plan and violation of the rule.

The violation of rule 13(1) of MCDR, 88 was pointed to the lessee vide letter dated 25/11/2011.In reply to the violation letter, the lessee intimated that some of the sub grade ore being backfilled at the exhausted quarry and in future, ore having calcium percentage less than 35% will be used to backfill the quarry as proposed in the approved mining plan and ore having more than 35% calcium will be kept separately for blending with saleable material. The Lessee has recovered approximately 1000 M.T of sub grade ore which were mixed with waste during backfilling of worked out quarry. Taking an average value of the sub grade ore at half the price of saleable ore which comes to Rs 325/- per tonne, the value of the sub grade recovered stood at about Rs 3,25,000/-.

Outcome of RMGS:

I. CENTRAL ZONE

1. Bhubaneshwar Region: RMGS of Iron Ore mines in Odisha.

Regional Mining Geological Study of Iron ores Mines of Keonjhar District of Odisha: Mines covered: 07, (Bhubaneswar Region)

Towards complete delineation of mineral deposits within leasehold areas, the main bottleneck in exploration and development as identified in remnant mineralised and virgin areas within mining leases is mainly diversion of forest areas within these leaseholds which has attributed short span of life i.e. 13 years with respect to mines covered under study. Further, it is suggested that exploration shall be accomplished at PL stage itself at least at G2 level of UNFC. A concerted R&D efforts are also required for pelletisation after beneficiation of blue dust and fines, use of low grade ore in blast furnace through DRI route, encouragement to smelting process like Romelt & Corex method. The adoption of combination of beneficiation of undersized fraction from ROM and old mineralised dumps simultaneously may be useful for pelletisation and conservation of mineral.

2. Ranchi Region: RMGS of limestone mines in Jharkhand and Bihar states.

Regional Mining Geological Study of limestone

Mines of Jharkhand and Bihar state: Mines covered: 17, (Ranchi Region)

Limestone mines of Bihar covering Rohtas district and Jharkhand covering Ranchi, Ramgarh, Hazaribagh, Bokaro, Palamau and Garhwa districts have been covered. The limestone deposits are of moderate to intricate type. The study reveals that exploration practices are very preliminary in nature like trenching, pitting and DTH drilling in private sector due to financial and marketing constraints together with forest and environmental clearance issues. Therefore, adequate exploration warranted for assessment of resource quality and potential and for compliance of threshold value of mineral rejects. The Limestone belt of Ramgargh and Bokaro area of sedimentary type needs stringent beneficiation efforts to resolve impurities of incipient nature. A bulk sample of about 300 kgs of Limestone from Bokaro district have been forwarded to O.D Laboratory, Nagpur for beneficiation studies.

3. Jabalpur Region: RMGS of bauxite mines of Satna district, MP.

Regional Mining Geological Study of Bauxite Mines of Jabalpur District of Madhya Pradesh: Mines covered: 25, (Jabalpur Region)

Owing to acceptability of low grade ore in cement industry, reworking old dump has been resorted in some of leases by adopting preliminary practices of processing viz sorting and screening for removal of undersized fines. A total of 3.54 million of proved and probable reserves as per UNFC in 25 leaseholds have been assessed. Further, exploration & beneficiation studies are warranted for augmentation of additional resources through modification in exploration schemes and verification regarding persistency of ore in waste generated prior to backfilling by inclusion of such proposals in mining plan and schemes.

4. Nagpur Region: RMGS of Manganese mines in Balaghat district, MP.

Regional Mining Geological Study of Manganese ores Mines of Balagahat District of Madhya Pradesh: Mines covered: 10,(Nagpur Region)

Owing to structurally complex nature of deposit due to tight folding etc, exploration is found inadequate in private leaseholds accomplished normally with trenching, pitting and non-core drilling. The forest clearance factor has also obscured the exploration & development throughputs. Further assessment of grade and tonnage of old dumps on the basis of characterisation studies with adoption of simple practices like sizing and screening etc. is necessary in place of manual operation in practice.

5. Kolkata Region: RMGS of iron ore and Manganese mines in Singhbhum district, Jharkhand.

Regional Mining Geological Study of Iron and Manganese ore Mines of West Singhbhum Distt Jharkhand state: Mines covered: 25, (Kolkata Region)

A critical analysis of exploration carried out within the lease area of these mines reveal that sufficient exploration has been carried out by big companies, but small non-captive and non- working mines require systematic exploration. Violations have been pointed out in 14 mines, which subsequently complied with. As the economically workable iron ore in Jharkhand-Odisha sector are below upper shale unit, it was suggested to explore such areas depicting upper shale in detail by drilling along with litho-structural mapping by Government agencies, to find any possible in situ occurrence of workable iron ore deposit.

II. SOUTH ZONE

1. Chennai Region: RMGS of Limestone mines in Tamil Nadu.

20 limestone mines have been covered under RMGS. In most of the mines, UNFC guidelines have not been followed for estimation of reserves/resources. 18 mines have been advised to submit exploration proposals as per UNFC norms. Geo-cadastral maps as per IBM circular have not been prepared by the lessees. Boundary pilars have not been erected as per CCOM circular. The modified lease agreement as required under Rule 27(3) of MCR, 1960 has not been prepared.

2. Bengaluru Region: RMGS of Iron Ore, Manganese and Clay mines of Tumkur & Chitradurga districts, Karnataka.

Mines covered : 5 nos

Iron Ore: Valuable guidelines have been provided

to the Mine Officials, for further development of the mines, considering Techno-economic aspects as well as nature/behavior of the mineralisation. A significant information has been generated on Sub Grade Ore, Mineral Reject and, Overburden in respect of all the mines covered under the study.

Clay: Characterisation and beneficiation study of Potash-rich Clay around Karekurchi village of Tumkur district, Karantaka.

The State DMG, Karnataka desired to study and indentify potash rich clay in Iron & Manganese mines due to shortage of the mineral for the industry. They indicated availability of same in Karekurchi village of Tumkur district and furnished the analysis result of 5 No. of clay samples which indicate the content of K2O in clay varying from 6.35% to 8.92%. Subsequently IBM also undertook a study of the same terrain and 5 No. of Clay samples from leasehold areas of Tumkur district were collected. In these samples the concentration of K2O was found to be only .07%, which is not Potash rich clay. Meanwhile, the iron & Manganese mines working were banned by hon'ble Supreme Court vide its order of September 2011. Therefore, further study has been suspended.

3. Goa Region: RMGS of Iron Ore mines in South Goa District.

There is a lot of further scope of exploration in the leases covered under the study as around 63% of the leasehold area is still not covered by any subsurface exploration. It is proposed to explore the virgin areas by drilling at 200 x 200m staggered pattern up to a depth of 60m to prove the extension of the existing ore bodies and to explore for new ore bodies. However the implementation of this proposal depends to a great extent on availability of surface right over these areas and required forest clearance from MoEF. It was observed that in some of the leases only the main ore zones have been analysed for their Fe content leaving behind other portions of the core . It is suggested that henceforth lessees should be advised to analyse all the ore zones including the lateritic portions except the waste zone. There is around 1.5 million tonnes of low grade ore stacks of below 52% Fe content in 13 leases. The ore can be upgraded by wet beneficiation technique. But, as the quantity of such ore available is not sufficient enough to sustain a wet beneficiation plant in any of the leases, samples of these low grade ore has not been drawn for any beneficiation studies.

4. Hyderabad Region: RMGS of Iron Ore mines of Cuddapa & Karnool districts, in AP.

During the year 2011-12 Regional Mining Geological Studies of iron ore mines of Kadappa and Kurnool Districts of Andhra Pradesh was undertaken covering 27 leaseholds. During the course of study it is found that the exploration inputs available from almost all Mines is not sufficient to estimate and classify reserves/ resources as per UNFC norms. Inputs of exploration required have been quantified lease-wise. Considering the new threshold value (45% Fe) reserves/ resources of the Mining Leases covered under study have been updated as on 01.04.2011. It is observed that iron ore is of very low grade analysing 30 to 45% Fe (below threshold value), the recovery factor varies from 30 to for float ore and 50% to 90% for reef ore. Sub-grade ore analysing up to 30% Fe are stacked in the mine heads amounts to about 1.35 million tonnes. During the study illegal mining activities observed in the vicinity of mining leases are brought to the notice of Assistant Director, DMG.

III NORTH ZONE

1. Ajmer Region: RMGS of Iron Ore mines in Rajasthan.

17 iron ore mines have been covered under RMGS. The iron ore, in general is of low grade with high silica. For ascertaining the economic viability, bench scale studies should be carried out for individual mines so that low reserves can be utilised. UNFC norms have not been followed for estimation of reserves/resources. In the absence of exploratory data, configuration of ore body has not been deciphered. For establishing depth of mineralisation, core drilling needs to be taken up. While granting LOI the revised condition under Rule 27(3) of 1960 is not followed by State Government. Hence, the reserves/ resources are not akin with UNFC. The geo-reference cadastral maps have not been prepared and submitted with mining plan/mining scheme.

2. Dehradun Region: RMGS of Limestone mines in Himachal Pradesh

25 limestone mines have been covered under

RMGS. All grade limestone produced in the mines are saleable. The depth in the mines has reached up to maximum depth of 100m. Considering complexity of the deposit, exploration for proving of depth continuity needs to be taken up. The waste generated is being utilised for stabilisation of hill slope, maintenance of haul road, retaining walls, parapet walls, check dams etc.

3. Udaipur Region: RMGS for Bauxite mines in Gujarat

25 mines have been covered under RMGS in Jamnagar district. Over the last 5 years, an uptrend in bauxite production has been observed. Considering the nature of the deposit, shallow trial pits as proposed in the mining plan has not been taken up. In order to remove the deleterious constituent in the metal grade ore (reactive silica) and for (chemical grade (Iron and calcium), beneficiation is done in only 7 mines.

Measures for Abatement of Pollution and Environmental Protection

3.15 While approving the mining plans, schemes of mining and mine closure plans, IBM ensures that environment impact assessment studies have been carried out and to that effect environmental management plan has been incorporated for its effective implementation, besides reclamation and rehabilitation of mined out areas. IBM also ensures that mining operations are carried out in accordance with the approved mining plan/scheme of mining.

As a result of follow up for implementation of EMP, extensive afforestation has been undertaken in the mines by the mine owners. During the year 2011-12 , about 3.56 million saplings have been planted over an area of 888 ha in and around mine areas. Thus, so far, 101.23 million saplings have been planted over an area of about 40295 ha with a survival rate of 68 per cent.

Simultaneous reclamation in working mines, and reclamation of abandoned mines are required to be carried out wherever it is feasible. During the year 2011-12, simultaneous reclamation/rehabilitation is being done in 60 working mines covering an area of about 418 ha, taking the cumulative figure up to 1,364 working mines covering an area of about 12,941 ha. So far, 53 abandoned mines covering an area of 660 ha have been reclaimed/rehabilitated.

Mines Environment and Mineral Conservation Week

3.16 IBM plays a key role in fostering greater awareness about the protection and restoration of mine environment with sustainable development and inculcates competitive spirit among the mine owners by organising Mines Environment and Mineral Conservation (MEMC) Week in different mining areas in the country.

The MEMC week held under the aegis of different Regional offices of IBM during 2011-12, in which a total of 945 mines participated, as listed below:

REGION	Period	No of Mines participated
CENTRAL ZONE		
Ranchi	16.01.2012 to 22.01.2012	64
Jabalpur	20.02.2012 to 26.02.2012	79
Nagpur	20.11.2011 to 01.12.2011	60
Kolkota	16.01.2012 to 21.01.2012	32
Bhubaneshwar	02.01.2012 to 08.01.2012	85
Guwahati	21.03.2012 to 26.03.2012	13
NORTH ZONE		
Ajmer	09.01.2012 to 15.01.2012	108
Dehradun	09.01.2012 to 13.01.2012	53
Udaipur/ Rajasthan	12.12.2011 to 18.12.2011	75
Udaipur/ Gujarat	16.01.2012 to 22.01.2012	75
SOUTH ZONE		
Chennai	12.02.2012 to 18.02.2012	78
Hyderabad	05.12.2011 to 11.12.2011	89
Goa	09.01.2012 to 15.01.2012	100
Bengaluru	19.02.2012 to 24.02.2012	34
TOTAL MINES PARTICIPATED in MEMC WEEK		**945**

Plantation at Limestone mine of M/s Binani Cement Ltd in Sirohi district.

Removal of Top soil in progress at Gurdari Bauxite mine of M/s HINDALCO Industries Ltd.

Plantation in the backfilled/reclaimed area at Gurdari Bauxite mines of M/s HINDALCO.

An another view of plantation on slop of waste dump at Rampura Agucha lead zinc mine of M/s HZL in Bhilwara district.

Reclaimed area by spreading of top soil after backfilled the mined out area at Indawar china clay mine of Shri Hapuram in Nagaur district.

The celebration of MEMC Week continued to receive wide publicity and popularity. It gives immense pleasure to say that a positive response towards mineral conservation and protection of mine environment has been noticed, particularly in mechanised mines. A healthy sign has also been observed amongst small mine owners towards achieving the goal of conserving mineral and protecting the mines environment.

Threshold Values of Minerals- Incremental increase in mineral reserves

3.17 The threshold value defines the limiting content of the valuable constituent in an ore zone above which the excavated material will attract the provisions of rule 16 and 18 of MCDR 1988. Under this provision, the lessee is required to stack and preserve unsaleable sub-grade ore, which are generated during mining. In the interest of systematic development of mineral deposits and conservation of minerals, Controller General, IBM issued directives under Rule 54 of MCDR, 1988 notifying threshold value of minerals vide Notification No. T-45031/ CGBM/2007 (PF) dated 16 October, 2009, for general information and immediate compliance by the mine owners. Subsequently, circulars highlighting the procedure to be followed for exploration within the leaseholds in respect of which the threshold values have been significantly changed i.e. for iron ore, chromite, bauxite, limestone & dolomite, wollastonite and magnesite were also issued for reassessing the reserves/resources.

Regional offices have been instructed to start with important minerals like Iron ore, Manganese ore etc, for updation of reserves/resources based on the revised threshold values. In Bengaluru region, incremental increase of 128.76 million tonnes of reserves/ resources have been noted from six iron ore mines. In Kolkata region, incremental increase of 60.33 million tonnes of reserves and 17.55 million tonnes of resources have been noted from 3 iron ore mines. In Bhubaneswar Region, incremental increase of 166.13 million tonnes of reserves has been noted from 4 iron ore mines. In Dehradun Region incremental increase of 49.02 million tonnes of reserves has been noted from one Limestone mine.

Grant of Exploration Licence in Offshore Areas

3.18 Offshore Areas Mineral (Development and Regulation) Act has come into force with effect from 15.01.2010. The Controller General, IBM has been appointed as Administering Authority as well as authorised officer for the purpose of the Offshore Areas Mineral (Development and Regulation) Act, 2002 vide order dated 11.02.2010. Subsequently, the Controller General, vide notification dated 7.06.2010 has notified total 62 blocks (26 mineral bearing Offshore blocks in Bay of Bengal and 36 mineral bearing Offshore blocks in Arabian Sea). In response to the above notification, a total 377 applications have been received till the last date, i.e. 14 Sept, 2010 stipulated for the purpose. Based on the recommendations of the Screening Committee, Exploration Licences were granted to 16 applicants for 62 mineral bearing blocks in the offshore waters of Bay of Bengal and Arabian Sea on 5th April 2011.

Further progress in executing the Exploration Licence is stalled as the matter is sub judice. All subsequent actions have been therefore kept in abeyance. Meanwhile, process for framing of UNFC Guidelines in Offshore Mining is in progress.

Commencement of offshore exploration will set a new benchmark in the achievement of Indian Mining industry hitherto unheard of and India will join the elite club of select few nations in this pioneering feat.

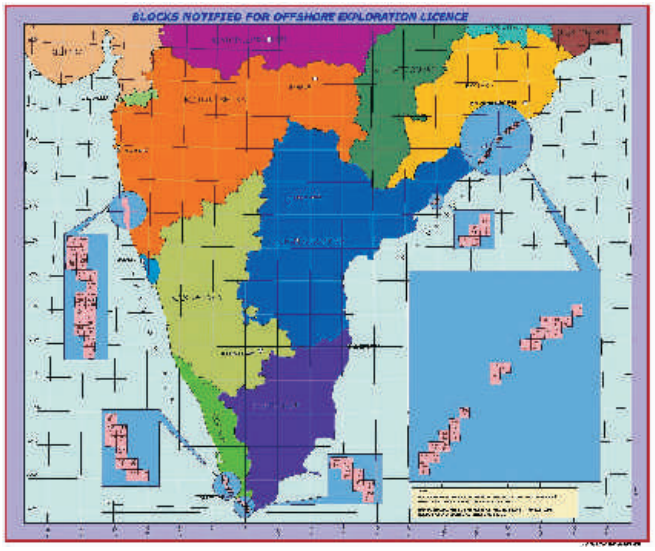


Figure 3.5 : Mineral bearing blocks in Offshore areas

Mineral Concession Approval System (MCAS)

3.19 The Web-based Mineral Concession Approval System is operational in the Ministry of Mines and is being used to monitor the progress of applications received in the Ministry, recommended by the State Governments in favour of a particular applicant in respect of RP, PL, ML for major minerals specified in the first schedule of MMDR Act, 1957. The system is being extended to capture the post approval activities.

Measures to Curb Illegal Mining

3.20 While the issue of prevention of illegal mining is not covered within the functioning of IBM, it has been associated with state government and its law enforcement agencies to curb illegal mining activities.

The Ministry of Mines have formulated a three-pronged strategy for prevention of illegal mining viz, constitution of Task Force by the state governments at State and District level having a representative of IBM, framing of rules under Section 23C of the MMDR Act, 1957 and furnishing of quarterly returns on illegal mining for review by the Central Government.

With rigorous follow-up made by IBM with various States, 20 State Governments have constituted Task Force namely, Andhra Pradesh, Assam, Chhattisgarh, Goa, Gujarat, Haryana, Himachal Pradesh, Jharkhand, Karnataka, Madhya Pradesh, Maharashtra, Manipur, Mizoram, Nagaland, Odisha, Punjab, Rajasthan, Tamil Nadu, Uttarakhand & West Bengal and 17 states have framed the rules under section 23C of MMDR Act 1957 namely Andhra Pradesh, Bihar, Goa, Gujarat, Haryana, Himachal Pradesh, Jammu & Kashmir, Jharkhand, Karnataka, Madhya Pradesh, Maharashtra, Nagaland, Odisha, Rajasthan, Uttar Pradesh, Uttarakhand & West Bengal so far. The function of the Task Force is to review the action taken by member departments for checking the illegal mining activities in their respective jurisdiction. Further, whenever IBM detects illegal mining during the course of routine MCDR inspection, the same is reported to the State Government concerned to take suitable action and report the compliance to IBM.

The Ministry of Mines has directed the state governments to conduct special drive to increase awareness on the issue of illegal mining by organising "Pakhwara' (Fortnight Programme) in liaison with the office of IBM in the state. Accordingly, IBM has initiated the action on the matter and nominated one officer each from the regional offices of IBM for the event.

Besides, IBM has nominated Nodal Officers for every zonal/regional office to monitor the work on prevention of illegal mining activities in the respective region/states mainly for surfacial deposits of major and minor minerals. They will co-ordinate with the state governments for timely submission of quarterly returns on illegal mining; liasoning with state government for framing of rules under section 23 C of MMDR Act 1957 and constitution of Task Force; participation in the regular Task Force meetings, coordination in organising Pakhwara for prevention of illegal mining; attending all the references pertaining to illegal mining and submission of report/comments thereof, referring the cases of illegal mining noticed during MCDR inspections to the state government and action taken by the states and other related issues.

In compliance of the direction of the Ministry, IBM has constituted Special Task Force for inspection of mines in endemic areas by taking help of Satellite imageries. The Task Force inspection were conducted during the period from December 2009 to December, 2011 in the States of Andhra Pradesh, Chhattisgarh, Goa, Gujarat, Jharkhand, Karnataka, Madhya Pradesh, Maharashtra and Odisha. In all, 454 mines relating to minerals like iron ore, manganese ore, dolomite, limestone, bauxite etc. were inspected by the Task Force.

Mining operations were suspended in 155 mines under rule 13(2) of MCDR, 1988. Suspension orders were subsequently revoked in 97 mines after ensuring rectification of violation(s). In 10 cases (Gujarat-02, Karnataka-04, Maharashtra-01 and Odisha-03) recommendation to terminate the leases under rule 27(1) (u) and 27 (5) of MCR 1960 have been communicated to the concerned state governments.

During the year 2011-12, 25 state governments have submitted the quarterly returns on illegal mining up to the quarter ending March 2012. Annualised quarterly return on illegal mining for the year 2011-12 is given in Annexure IX.

The Ministry of Mines has further directed all the state governments to start the process of registration of end users, constitution of Special Cell under State Police, use of satellite imagery to track down illegal mining, hologram-marking/bar-coding of transport permit etc. The state governments are also planning to set up special camp at sites and deployment of Border Home Guards in the areas where there have been complaints about illegal mining.

Implementation of amended Rule 45 of Mineral Conservation and Development Rules 1988

To handle the problems of illegal mining, the Central Government has taken steps to keep accounts of mineral flow from mine to end. Therefore, the Government of India has notified amendment in Rule 45 of Mineral Conservation and Development Rules, 1988, vide G.S. R. No. 75(E) published in Part-II, Section-3, Sub-Section (i) of the Gazette of India Extraordinary dated, 9th February, 2011, which stipulates mandatory registration of miners, stockists, traders, exporters and end-users of minerals and stringent reporting norms for ensuring end-to-end accounting of the mineral produced. In this system it is mandatory for the miners, traders, exporters, and end-users of the minerals to also send a copy of the reports to State Government. The State Governments have also been advised to ensure that any automation in the reporting system developed at their level should be compliant with the amended Rule 45 of the MCDR. Accordingly, IBM in association with NIC has developed online registration form and statutory monthly and annual returns form. The first phase of online system of submission of statutory returns was inaugurated by Hon'ble Minister of State for Mines (IC) Shri Dinsha J. Patel on 29 March 2012 at New Delhi.

The Central Government has developed on-line system for registration and on-line reporting systems to facilitate the submission of monthly returns for iron ore.

The on-line registration system has already commenced in the IBM and so far up to March, 2012, 4409 lease holders, 2300 traders, 472 exporters, 1020 stockiest and 1635 end-users have registered their details.

Broadly, the reporting system is divided into two parts. Part-I covers the general information in addition to the employment details. Part-II of the monthly reporting system deals with the grade-wise production, dispatch, stock and justification for increase/decrease of production and sale price of minerals. The Part-II of reporting system requires the registration number of the consignee and purpose of sale, whether for domestic consumption or export. In case of domestic consumption, whether it is made for captive consumption/sale/transfer has to be reported.

In order to facilitate tracking of mineral from mine to end-use, the reporting system requires indicating the registration number of supplier from whom the mineral is procured. The reporting system will have details of approved mining plan production proposals to compare the same with the actual production from the mine. All the State Government will be able to access the system to check the data reported in the returns and can initiate action in case of wrong reporting of data, evasion of royalty, etc.

The amended Rule 45 of MCDR, 1988 specifies penal action against defaulting mine owners and empowers the Central Government to order for suspension of all mining operations and may revoke the order of suspension after ensuring proper compliance, take action to initiate prosecution and recommend for termination of mining lease. The Rule further specifies that in case of defaulters engaged in trading or storage or end use or export of minerals, the State Government is empowered to order for suspension of trading license, all transport permits issued, storage license for stocking minerals and permits of end use industry, etc.

In future, the system will be linked to Railways and Ports Authority to check the correctness of the reporting made under the Rule for which a separate project/scheme has been proposed by IBM.

During the year 2011-12, 25 state governments have submitted the quarterly returns on illegal mining up to the quarter ending March 2012. Annualised quarterly return on illegal mining for the year 2010-11 is given in Annexure IX.

The Ministry of Mines has further directed all the state governments to start the process of registration of end users, constitution of Special Cell under State Police, use of satellite imagery to track down illegal mining, hologram-marking/bar-coding of transport permit etc. The state governments are also planning to set up special camp at sites and deployment of Border Home Guards in the areas where there have been complaints about illegal mining.

Implementation of amended Rule 45 of Mineral Conservation and Development Rules 1988

To handle the problems of illegal mining, the Central Government has taken steps to keep accounts of mineral flow from mine to end. Therefore, the Government of India has notified amendment in Rule 45 of Mineral Conservation and Development Rules, 1988, vide G.S. R. No. 75(E) published in Part-II, Section-3, Sub-Section (i) of the Gazette of India Extraordinary dated, 9th February, 2011, which stipulates mandatory registration of miners, stockists, traders, exporters and end-users

Pre Mining And Post Mining Land Use in Gypsum mine of M/s RSMM Ltd In Bikaner district.

Geotextile method adopted for plantation on slop of waste dump at Rampura Agucha lead zinc mine of M/s HZL in Bhilwara district.

Garland Drain along the waste dump road at Rampura Agucha lead zinc mine of M/s HZL in Bhilwara district.

Water trough constructed by Wolkem for wild life in Sirohi district.

Water sprinkling at haul road at Rampura Agucha lead zinc mine of M/s HZL in Bhilwara district.

Water channels constructed at wollestonite mine of m/s Wolkem for irrigation.

Artificial nest & feeding tray to propagate bird population by Wolkem for wild life in Sirohi district.

Systematic mining, Afforestation carried out along the lease boundary in Seethainagar limestone mine in Dindigul district in Tamilnadu State.

Kankar screening plant to remove silica in Marvarperungudi limekankar mine of M/s Madras Cement Limited, R.R. Nagar in Tamilnadu State.

Systematic mining and plantation carried out in Sivalarpatti Limestone mine of Madras Cements Ltd., in Tuticorin district in Tamilnadu State.

Plantation on Stabilized dump.

Check Dam Constructed on a mine site.

4 GEOLOGICAL MAPPING AND MINERAL MAP CELL

Shri Dinsha J. Patel, Minister of Mines and Shri Vishwpathi Trivedi, then Secretary (Mines) visited the Indian Bureau of Mines stall at the 50th CGPB meeting held at New Delhi in Feb 2012. Shri C.S. Gundewar, Controller General, IBM, apprise the Minister on publications displayed at the stall.

GEOLOGICAL MAPPING CELL

Geological Mapping (G.M.) Cell is engaged in the scrutiny of updated NMI (as on 1.4.2010) for private sector leasehold mineral deposits received from various Regional Offices of IBM and also maintaining RP/PL database.

Achievements

4.2 Administration of RP is covered under Rule 3A to 3E of MCDR 1988. For effective implementation of these rules, 79 violations were issued to the defaulting RP holders during 2011-12. This has helped to regulate and streamline reports/ returns/data submission from these RP holders. During the year, 261 such documents were received from RP holders, which were scrutinised and documented for further follow-up action. Quarterly status report on RPs in India for the quarter ending March, June, September and December 2011 were furnished to Ministry and also hosted on IBM website.

4.3 As on 31 March 2011, out of 392 RPs (including 20 in 2011-12) granted, covering an area of 5,12,739 Sq Kms, 310 RPs were relinquished/surrendered/abandoned and of which 15 were granted PLs.

MINERAL MAP CELL

4.4 Mineral Map (M.M.) Cell prepares multi-mineral leasehold maps (MMLM) depicting distribution & disposition of mining leases of various minerals found in a region, along with other relevant details about infrastructure, physiography, resources, forest cover and other geophysical details. It is equipped with AUTO CAD 2004, AUTO CAD MAP 2008, MICRO STATION V8 and GEOMEDIA PROFESSIONAL. Lease details from mining plans and scheme of mining, forest density maps from Forest Survey of India and details of regional geology from published maps of Geological Survey of India are used in preparation of mineral maps. These maps have been found useful for policy planners and to facilitate development of mineral deposits. Besides, these maps also serve as authentic references for resolving mining and mineral related issues.

The various maps prepared by MM Cell are:

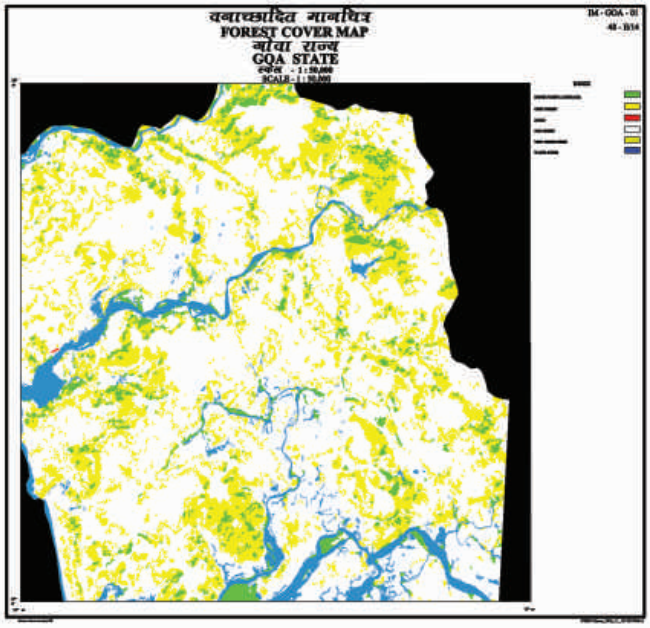
(i) Index Map: The index map incorporates the

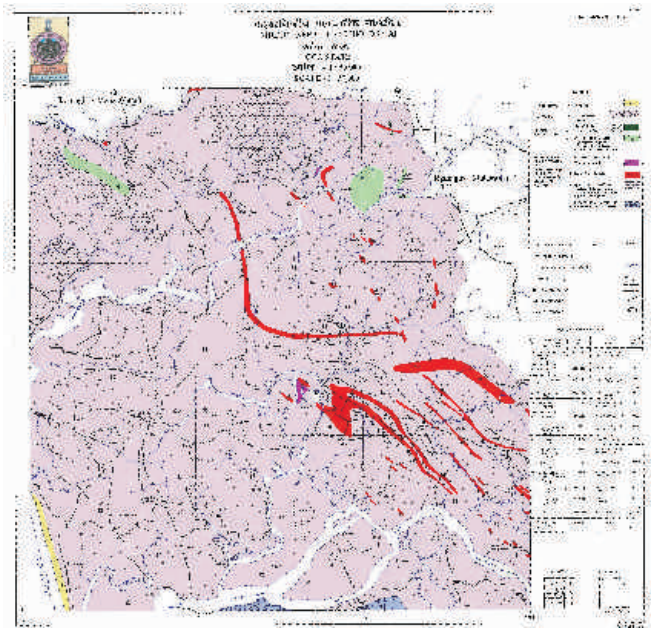
distribution of mining leases, regional geology, physiography and infrastructure available in the area. These maps are prepared on 1:50,000 scale.

(ii) Forest Overlays: The forest overlays are prepared for the corresponding index maps on 1:50,000 scale and they incorporate forest cover as obtained from Forest Survey of India (FSI).

Achievements

4.5 During the year 2011-12, 60 multi- mineral leasehold maps along with corresponding forest overlays of Jammu & Kashmir, Himachal Pradesh, Haryana, West Bengal, North Eastern States, Kerala & Goa were prepared on 1:50,000 scale. During the year, a revenue of Rupees 45,000/- was generated through sale of multi-mineral leasehold maps.





Shri S. Vijay Kumar, then Secretary, Mines and Shri S.K. Srivastava, Additional Secretary, Mines being appraised about the publications released at the 49th CGPB meeting held at New Delhi on 24th August, 2011.

5 ORE DRESSING DIVISION

Shri C.S. Gundewar (right), Controller General, IBM at XII International Conference on Mineral Processing Technology (MPT 2011).

The Ore Dressing Division undertakes test work on beneficiation of low grade ores and minerals to develop suitable process flow sheet on bench-laboratory scale and pilot plant scale. It has a Modern Mineral Processing Laboratory and Pilot Plant at Nagpur and two Regional Ore Dressing Laboratories at Ajmer and Bengaluru. Ore Dressing Division is headed by Director (Ore Dressing). The Modern Mineral Processing Laboratory and Pilot Plant at Nagpur is headed by Chief Ore Dressing Officer. The Regional Ore Dressing Laboratory and Pilot Plants at Ajmer and Bengaluru are headed by Superintending Officer (Ore Dressing). This Division has a strong R&D base for mineral beneficiation and these studies are carried out on various low grade of ores/minerals, waste/rejects viz ferrous, non-ferrous, sulphide minerals and industrial minerals except atomic minerals on charge basis as well as on promotional basis as a part of the conservation studies being carried out by the MCCM Division.

5.2 The Modern Mineral Processing Laboratory and Pilot Plant at Nagpur is well equipped with most sophisticated equipment and is regarded as "Centre of Excellence" in the field of Mineral Beneficiation. This is a core centre to cater to the needs of the country for beneficiation test work. The pilot plant has flexible capacity ranging from 0.5 to 2.0 tonnes/hour for conforming the process evolved in the laboratory as well as to generate additional data before commercial application and also to produce adequate quantity of concentrate, if needed, for end use testing.

5.3 The Analytical Laboratory located in the premises of Modern Mineral Processing Pilot Plant houses the Chemical Laboratory, the Mineralogical laboratory and the Environmental Laboratory. The Environmental Laboratory is a recognised laboratory by the Central Pollution Board of Ministry of Environment & Forests (MoEF), Government of India.

5.4 The Bureau has region-wise facilities in mineral testing and beneficiation with regional ore dressing laboratory and pilot plants at Ajmer and Bengaluru which are also well equipped with sophisticated equipment. A 'Clay Laboratory' has also been established at Kolkata to cater to the needs of the north-eastern region exclusively.

5.5 The most important function of this Division is to conduct R&D work with an objective of developing a suitable process flow sheet for

beneficiation of low grade ores and minerals for commercial application; chemical analyses by conventional as well as instrumental methods; mineralogical studies and physical characterisation of ores and minerals and ore dressing products; preparation of pre-feasibility reports; in-plant studies and plant audit; environmental studies of mine waste effluents; trouble shooting jobs at site for commercial plants; and providing consultancy services in fields of mineral processing, chemical analyses and mineralogy. This Division also imparts training to the scientists of mining industry in the specialised fields of ore dressing.

Performance

5.6 During the year 2011-12, 65 ore dressing investigations, chemical analyses in respect of 49,139 radicals, 2,408 mineralogical examinations and 01 in-plant study were carried out. Out of these achievements, 15% of the Ore Dressing Investigations, 90% of the Chemical Analyses and 38% of the Mineralogical Examinations were on promotional basis and the remaining were on charge basis. A revenue of Rs. 102.27 lakhs was generated during the year. Laboratory-wise break-up of work carried out and revenue generated is as follows:

Table 1

Sl. No.	Item	Target/Achievements during 2011-12							
		Ajmer		Bengaluru		Nagpur		Total	
		T	A	T	A	T	A	T	A
	Ore Dressing investigations	12	8.50	24	25.75	34	30.75	70	65
2	Chemical Analyses	6,000	7,163	10,000	8,853	34,000	33,123	50,000	49,139+
	At Clay Testing Laboratory Kolkata								134
3	Mineralogical Examinations	400	470	600	605	1,300	1,333	2,300	2,408
	In-plant Study	-	-	-	-	-	01	-	01
5	Revenue Generated (Rs. Lakhs)	-	17.56	-	33.28	-	51.42	-	102.27

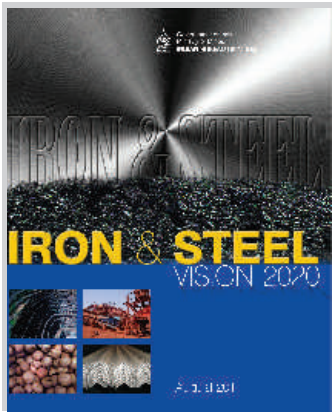
In case of promotional work, IBM conducts test work on the samples mainly collected during inspections of mines and R&D support provided towards fulfilling regulatory functions of IBM for systematic and scientific mining, which are prime importance from conservation and environmental aspects.

The charge basis samples are received from the public and private sector mines and also from exploratory agencies such as GSI, MECL etc. Annexure II furnishes the list of laboratory and pilot scale investigations completed during the year 2011-12.

Mineral-wise breakup is given in Table 2:

Preparation of Status Paper on Beneficiation of Iron Ore

5.7 In order to encourage the zero-waste mining, it is essential that all the ROM ore mined is utilised. In this direction the role of mineral beneficiation is critical and important. Iron ore is important mineral of our country. However, the most of the iron ore is being exported without value addition. In this context, to give policy inputs on incentivisation of



beneficiation and pelletisation, the Indian Bureau of Mines brought out a vision document viz, "Iron & Steel Vision 2020" during 2011.

The publication discusses need of enhancement in iron ore reserves, beneficiation of low grade ores, agglomeration, use of pellets in iron making, conservation of limited high grade iron ore lumps. The book attempts to steer a pathway to the future.

Table 2

Sl. No.	Mineral	Charge Basis	Non-Charge Basis	Total
1.	Baryte	03 (1.50)	-	03 (1.50)
2.	Copper	01 (1.0)	-	01 (1.0)
3.	Clay/ China clay	05 (2.75)	-	05 (2.75)
4.	Feldspar	02 (2.0)	-	02 (2.0)
5.	Fly ash	03 (0.75)	-	03 (0.75)
6.	Gold	01 (1.0)	-	01 (1.0)
7.	Iron Ore	49 (30.25)	03 (3.0)	52 (33.25)
8.	Limestone	10 (7.75)	02 (2.0)	12 (9.75)
9.	Manganese	04 (1.0)	-	04 (1.0)
10.	Kyanite	01 (1.0)	-	01 (1.0)
11	Rock Phosphate	02 (2.0)	05 (5.0)	07 (7.0)
12.	Silica Sand/Sand	06 (3.0)	-	06 (3.0)
13.	Red ochre	01 (1.0)	-	01 (1.0)
	TOTAL	88 (55.0)	10 (10.0)	98 (65.0)

( ) Equivalent No. of full scale investigations

Salient Results

5.8 Salient results of the important investigations are as follows:

IRON ORE

1. Beneficiation studies on an iron ore sample from SBK Mines, Bellary for M/s Swastik Steels (Hospet) Private Limited:

An iron ore sample assaying 50.30% Fe(T), 0.53% FeO, 12.85% SiO2, 8.03% Al2O3, 6.02% LOI was received from SBK Mines, Bellary, Karnataka sent by M/s Swastik Steel (P) Ltd at Regional Ore Dressing Laboratory, Indian Bureau of Mines, Bengaluru. The party desired to develop a process so that iron concentrate produced assayed +62% Fe(T). By adopting various techniques viz, crushing, screening, tabling and magnetic separation, an iron ore concentrate assaying 63.71% Fe(T), 2.58% SiO2, 2.31% Al2O3 with recovery of 61.1% Fe(T)(Wt% yield of 48.6) could be obtained. The concentrate may find application in iron industry.

2. Order of Magnitude equipment sizing for sub-grade Iron Ore beneficiation Project from Sandur-Hospet Area, Bellary distt. Karnataka for M/s V.S. Lad & Sons (Anil), Sandur:

M/s V.S. Lad and Sons (Anil), Bengaluru and RODL, IBM, Bengaluru mutually agreed (1) To prepare a material – metallurgical balance flow sheet producing (a) High grade +65% Fe concentrate (Conc. 1). (b) Medium grade +62% Fe conc. (Conc.II) (c) Sub-grade +50% Fe concentrate (Conc. III) based on earlier test work carried out in RODL, IBM, Bengaluru on sub-grade iron ores of the party from Hospet – Sandur area, Bellary distt. Karnataka vide IBM/OD/BNG/R.I. Nos. 564, 568, 645 & 646. The process should consume minimum water/tonne of feed, minimum land requirement and generate low iron, less quantum tails/tonne of feed (2) Size the equipment for designated throughput using normal order of magnitude method and catalogues supplied by the party. Compare the size recommended by vendors and offer logical comments.

100 tph and 150 tph plant equipment were sized for 80% availability. The 100 tph and 150 tph plants are scheduled to yield -62% and 1 million ton concentrate per year respectively with 0.5m3/t water, -25 Kwh/t power, 0.8kg/t steel, 0.06kg/t flocculent, 5x10-5 m2/t screen and filter cloth at peak operating load. The minimal area required for the plant is 15 acres. The minimum manpower required is 60.

The energy cost reduced by about 2 Kwh/t if phase II conc. I and II grinding and dewatering to pellet plant requirements is not considered.

3. Upgradation of a Low grade Iron Ore from Bellary Hospet, Karnataka for M/s V.S. Lad and Sons (Anil), Sandur:

A low grade iron ore sample was received from M/s V.S. Lad and Sons (Anil), Sandur, Hospet, Bellary distt. Karnataka at RODL, Bengaluru. The as received sample assayed 56.16% Fe(T), 9.10% SiO2. 4.29% Al2O3, 5.07% LOI. By adopting gravity operation and magnetic separation, a composite concentrate assaying 64.22% Fe(T), 3.43% SiO2, 1.80% Al2O3, 2.58% LOI with 64.3% Fe(T) recovery (wt% yield 57.3) was obtained.

The concentrate meets the specification stipulated by the party.

4. Upgradation of dumped Iron Ore from GMIL, Bangalore:

An Iron Ore sample from GMIL dumps was sent by M/s Greentex Mining Industries Ltd, Bengaluru for bench scale beneficiation studies at RODL, IBM, Bengaluru with an objective to upgrade the sample for Iron content with maximum possible recovery and reducing the gangue contents(SiO2 + Al2O3).

The as received sample assayed 42.65% Fe (T), 10.65% SiO2, 13.72% Al2O3, 11.77% LOI. Various beneficiation techniques like washing and screening, gravity separation, dry and wet magnetic separation were adopted for upgradation of this dump ore. It was observed that an usable iron concentrate with +61% Fe content and low value of SiO2 + Al2O3 content could be obtained both by gravity as well as low intensity magnetic separation. However, the iron recovery was low from 25 to 30%.

5. Upgradation of Iron Ore sample from M/s P.S.L. Holding Pvt. Ltd:

An iron ore sample collected by RCOM, Ajmer from M/s P.S.L. Holding Pvt. Ltd from Thakuro Ki Dhani, Jaipur Distt. Rajasthan assayed 50.25% Fe(T), 11.07% FeO, 62.14% Fe2O3, 2.26% Al2O3 and 7.98% SiO2. The object of the investigation was to find the bulk density and amenability test of the sample so as to produce marketable grade iron concentrate.

An iron ore concentrate assaying 67.51% Fe(T), 0.92% Al2O3 and 0.40% SiO2 with 89.1% Fe recovery (Wt% yield 65.3%) could be achieved by subjecting the sample to wet low intensity magnetic separation followed by gravity separation at minus 100 mesh size.

The bulk density of the sample was found to be 2.53 tonnes per meter cube.

The beneficiation studies indicate that sample is amenable to beneficiation.

6. Order of Magnitude Equipment sizing for Sub-grade Iron Ore beneficiation project for M/s Swastik Steel Hospet Private Limited, Hospet:

M/s Swastik Steel Hospet Private Limited, Hospet (SSPL) requested RODL, IBM, Bengaluru (1) To prepare a material/metallurgical balance flow sheet producing either/ and +62% Fe powdery concentrate suitable for pelletisation and /or -20 + 5mm chips +58% Fe concentrate for sponge industry if it meets Tumbler and Abrasion index values, based on earlier test work carried out in RODL, IBM, Bengaluru on sub grade iron ores of the party from MML dumps, Sandur, Bellary district, Karnataka. The process should consume minimum water/tonne of feed, minimum land requirement and generate low iron, less quantum tails/tonne of feed. (2) Size the equipment for designated throughput using normal order of magnitude method and catalogues supplied by the party.

The detailed study was carried out. The 250 tph plant is scheduled to yield ~ 1 million per year (tpy) concentrates (0.6 million tpy sponge grade concentrate and 0.4 million tpy pellet grade) 0.5m3/t water, 20 Kwh/t power is consumed. Enhancement of capacity by 20% could reduce energy by 2 Kwh/t only.

There is possibility of utilising a part of tails in other industries like cement. Detailed feasibility and design project report preparation followed by design engineering is recommended. There is scope for reducing the cost as some of the drives and machines are over designed.

7. Upgradation of a sub-grade iron ore fines from Chitradurga, Karnataka for M/s Gem Laboratories Pvt. Ltd, Bengaluru.

A sub-grade iron ore sample from Chitradurga Karnataka sent by M/s Gem Laboratories Pvt. Ltd, Bengaluru assayed 56.74% Fe, 6.97% SiO2, 5.97% Al2O3, 0.38% TiO2, 0.17% Alkali, 0.07% P2O5 and 5.40% LOI. The sample was sent with a view to see the amenability of the samples to sizing, gravity and magnetic concentration.

Both generic conventional process and the non-conventional no grind process consisting of screening, dry rare earth high force high intensity magnetic separation of screen over size grinding of non-mag and screen undersize fractions to -48 mesh followed by desliming and tabling yielded a composite concentrate assaying 64.54% Fe, 2.21% SiO2, 2.71% Al2O3, 0.35% TiO2 and 3.17% LOI with 55.2% Fe recovery (wt% yield 49.1%).

This concentrate meets the party's specification required for pellet grade. Detailed continuous pilot scale test are recommended for conceptual design data and process improvement as this sub grade sample is amenable to beneficiation.

8. Magnetic separation studies on Iron ore sample from beneficiation plant on BMM ISPAT Ltd:

Two iron ore samples (feed to HGMS and HGMS matrix choked material) from beneficiation plant of BMM Ispat Ltd was sent at RODL, Bengaluru by BMM, Ispat Ltd with an objective:

i) to carry out limited magnetic separation test to optimize the grade and recovery of iron without getting trapped inside the magnetic separator and choking the machine, thus reducing the machine capacity,

ii) observe whether the introduction of MIMS would lower the load on HGMS and avoid choking of matrix element.

After conducting tests, it was concluded that coarse material may be used in HGMS to avoid choking as finer matrix at 3600 gauss choked the machine. Hence, introducing MIMS before HGMS may not solve choking problem. It was also observed that choking in the machine is due to plus 65 mesh material that is not screened. After screening the feed to HGMS, the iron content could be increased from 53.79% Fe (T) to 59.56% Fe(T) with 73.8% Fe(T) recovery (wt% yield 66.9). The grade and recovery of iron being maximum and machine not getting choked. It is inferred teething problem can be solved by the introduction of screen size of 65 mesh (212 microns) before feeding to HGMS alternately.

9. BMQ exploratory sample from Mincheri Forest, Vuravakonda Mandal for M/s Loh Processors & Traders, Bellary:

A BMQ exploratory sample from Mincheri Forest, Vuravakonda Mandal, Rayadurga Taluk, Ananthpur district, A.P. sent by Loha Processors & Traders, Bellary assayed 35.85% Fe (T), 6.58% FeO, 40.58% SiO2, 1.45% Al2O3 and 2.93% LOI. The objective of the investigation was to upgrade the iron content as much as possible by gravity separation. After grinding the as received sample to -48 mesh, and subjecting it to gravity separation, a iron concentrate assaying 65.58 Fe(T), 5.45% SiO2, 0.28% Al2O3 with 59.6% Fe(T) recovery (wt% yield 32.1) could be obtained. The exploratory sample may be taken for full bench scale investigation, so that it finds industrial utility.

10. An Iron Ore sample from M/s P.S.L. Holding Private Ltd, Thakhuro Ke Dhani, Jaipur Distt., Rajasthan:

An iron ore sample from M/s P.S.L. Holding Pvt. Ltd, Thakhuro Ke Dhani, Jaipur distt.,Rajasthan was sent by RCOM, IBM, Ajmer and RODL, Ajmer to study the amenability of the sample, so as to obtain iron concentrate by reducing phosphorous content to the desired level. The sample as received

assayed 50.25% Fe(T), 11.07% FeO, 62.14% Fe2O3, 2.26% Al2O3, 7.98% SiO2,1.58% P and 0.05% S. Wet low intensity magnetic separation followed by gravity concentrate and refining the gravity concentrate by wet low intensity magnetic separation at -100 mesh yielded a composite magnetic concentrate assaying 69.91% Fe(T), 1.07% SiO2, 0.68% Al2O3, 0.13% P with 75.9% Fe(T) recovery (wt% yield 54.1). This concentrate meets the specification required for the steel industry. Further, when non-magnetic products is subjected to flotation, a phosphate concentrate assaying 18.46% P2O5, 2.58% Fe(T), 1.13% SiO2 and 0.68% Al2O3 with a P2O5 recovery of 73.4% (wt% yield 27.7) could be obtained. This phosphate concentrate is found to be suitable for direct application to soil and for pig iron industry.

In addition, above 15% by weight of mica (-100 + 200 mesh) can also be recovered from the non-magnetic tails sample. Thus, the phosphate concentrate and mica as side products recovered from non-magnetic tails may be conserved and utilised for industrial application.

LIMESTONE

1. Upgradation of Low grade Limestone sample:

A limestone sample assaying 36.65% CaO, 2.23% MgO, 20.66% SiO2, 1.69% Fe2O3, 4.34% Al2O3, 32.12% LOI was sent by M/s Prism Cement (Limestone Mines) Ltd Satna, M.P. at Modern Mineral Processing Laboratory and Pilot Plant, Nagpur. The objective of the investigation was to upgrade the CaO values by dry, wet or combination of dry and wet process. However, dry scrubbing following by wet screening at -12 mm could not yield the desired concentrate.

By adopting flotation route a concentrate assaying 45.03% CaO, 2.12% MgO, 1.06% Fe2O3, 9.86% SiO2, 2.49% Al2O3 and 38.1% LOI with 90.1% CaO recovery (wt% yield 73.4) could be obtained. The concentrate obtained meets the requirement of the party and may find industrial utility.

2. Production of a Limestone concentrate for cement industry on a sample sent by M/s Birla Cement Works, Chittorgarh, Rajasthan:

A limestone sample was received from M/s Birla Cement Works, Chittorgarh, Rajasthan at RODL, Ajmer. The as received sample assayed 41.42% CaO, 1.80% MgO, 18.04% SiO2, 1.39% Fe2O3, 32.95% LOI with 73.93% total Carbonates. Flotation route was adopted to achieve the desired concentrate. Flotation at 94% - 200 mesh grind produced a limestone concentrate assaying 47.24% CaO, 9.68% SiO2, 37.98% LOI, 84.36% CaCO3 (TC) with 83.1% CaO recovery (wt% yield 73.6).

The concentrate obtained meets the requirement of the party and may find industrial utility.

3. Beneficiation studies on two Limestone samples namely Dolomitic and Silicious to obtain a suitable concentrate for utilisation in Cement Industry from Bhagabhalag Limestone Mines of Jaypee Himachal Cement Plant:

The Regional Controller of Mines, IBM, Dehradun sent two limestone samples from Bhagabhalag Limestone Mines of Jaypee Himachal Cement Plant to RODL, IBM, Ajmer with an objective to obtain a suitable limestone concentrate for utilisation in cement industry.

The first sample labeled as siliceous Limestone assayed 35.12% CaO, 0.91% MgO , 26.75% SiO2, 2.11% Fe2O3, 3.0% Al2O3 and 29.85% LOI. By adopting flotation technique, a second cleaner concentrate assaying 45.60% CaO, 12.71% SiO2 and 36.84% LOI with a CaO recovery of 82.4% (wt% yield 65.5) could be obtained. This concentrate meets the requirement of cement industry.

The other sample labeled as dolomitic Limestone assayed 30.12% CaO, 10.37% MgO, 19.90% SiO2,1.13% Fe2O3, 0.93% Al2O3 and 35.90% LOI. By adopting flotation technique, a concentrate assaying 34.17 CaO, 10.55% MgO, 9.74% SiO2 and 40.64% LOI with 84.9% CaO recovery (wt% yield 73.9) could be obtained. This concentrate is not suitable for cement industry.

However, this above concentrate may find utilisation in cement making after blending with other high grade concentrate obtained after beneficiation of siliceous limestone sample in the ratio of 40 : 60. The composite limestone concentrate would assay 43.05% CaO, 11.59% SiO2, 2.83% MgO and 37.81% LOI with a CaO recovery of 80.8% (wt% yield 62.4). This concentrate may find utility in cement industry.

ROCK PHOSPHATE

Upgradation of below threshold value of Rock Phosphate sample from M/s MECL for industrial application:

M/s MECL, Nagpur requested IBM, to explore the possibility of beneficiating the low grade sample from Dhol-ki-Pati block, Tickhi Project, Udaipur Rajasthan. Accordingly, a team of IBM officers from RODL, Ajmer visited Tickhi Project, Udaipur. The original sample assayed 2.13% P2O5, 7.84% CaO, 1.76% MgO, 3.05% Fe2O3, 3.47% Al2O3, 74.04% SiO2, 79.47% A.I. and 5.95% LOI.

By adopting flotation route, a phosphate concentrate assaying 15.72% P2O5 and 18.99% A.I. with P2O5 recovery of 66.6% (Wt% yield 8.8) could be obtained. By subjecting the above concentrate to WHIMS and further leaching the non-mag concentrate with 8% dilute acid, a phosphate concentrate assaying 20.05% P2O5, 38.14% CaO, 0.36% MgO, 20.18% SiO2, 21.58% A.I. with P2O5 recovery of 62.8% (Wt% yield 6.5) could be obtained.

The investigation revealed that phosphate sample assaying 2.1% P2O5 which is lesser than the threshold value of minerals for implementation (<5% P2O5) can be beneficiable up to 18-20% P2O5 with P2O5 recovery of 63-67% (Wt% yield: 6.5-7.5). The feed to concentrate enrichment ratio is -10. The concentrate may find application in the iron and steel industry which utilises 15-18% P2O5 in the production of high phosphorous pig iron. It can be utilised for the direct application to the soil.

SILICA SAND

Beneficiation studies on a silica sand sample from Allahabad for M/s Mangalore Minerals (Pvt.) Ltd, Mangalore:

A Silica sand sample received from Allahabad from M/s Mangalore Minerals (Pvt.) Ltd, Mangalore assayed 98.48% SiO2, 0.23%Fe2O3, 0.53%Al2O3, 0.044%TiO2, 0.02%K2O and 0.40% LOI. The objective of the investigation was to develop a suitable process flow sheet to produce a silica sand concentrate in the size range of -30+150 mesh assaying 98.5% (min.) SiO2, 0.01 to 0.06% Fe2O3 , < 1% Al2O3 , < 0.03%TiO2 and < 0.3% LOI.

Various routes i.e. screening, attrition scrubbing and magnetic separation were adopted to achieve the desired grade and the following composite concentrates could be obtained.

i. -30+150 mesh composite concentrate assaying 99.41% SiO2, 0.059% Fe2O3 , 0.093% Al2O3 , 0.01%TiO2 and 0.024 % LOI with wt% yield 93.9.

ii. Alternative route by grinding the -10+30mesh sample to all -30 mesh and screening over 150 mesh followed by attrition scrubbing and magnetic separation, a non mag. concentrate assaying 99.46% SiO2 , 0.036% Fe2O3 , 0.090% Al2O3 with wt% yield 76.1.

The concentrates produced meet the specification of silica sand laid down by the party.

BARYTES

Process development studies on low- grade barite dumps of Mangampet area, Cuddapah district, Andhra Pradesh (for M/s Gimpex AP Barites Beneficiation Pvt. Ltd, Chennai.):

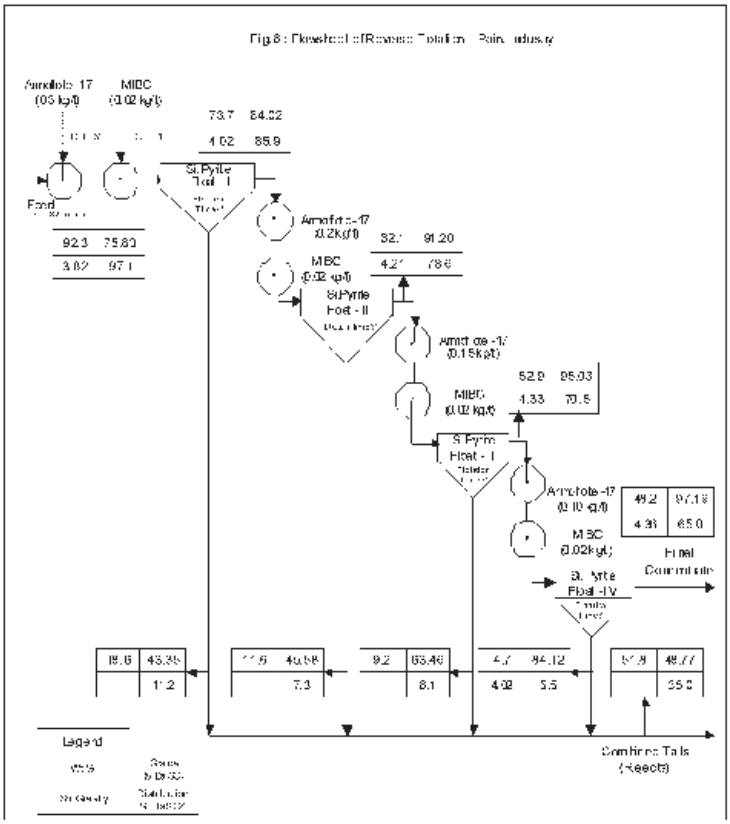
A low-grade barite sample from M/S GIMPEX AP Barite Beneficiation Pvt.Ltd, Chennai., assayed 71.70 % BaSO4, 15.63 % SiO2, 3.92% Al2O3,4.88 Fe2O3, 3.05% Fe(T), 0.42% CaO, 0.72% MgO, S(T)10.22% and 1.93% L.O.I. The sample consisted mainly barite, an economic mineral and cherty quartz, clay(dark shale) and pyrite were the main gangue minerals.

a) By manual sorting followed by direct flotation yielded a concentrate assaying 96.77% BaSO4

and 1.30 %SiO2 with 73.9% barite recovery (The weight per cent yield was 55.1).

b) By manual sorting followed reverse flotation, a high grade concentrate thus assayed 97.19% BaSO4, 1.34% SiO2.The weight per cent yielded 48.2%, barite recovery of 65%.The specific gravity is 4.36.

c) The above circuit produced a very high-grade and fine barite concentrate that all passing 325-mesh size for paint industry, which is used after roasting, followed by chemical leaching to improve whiteness to about 97%.



Shri H.M. Nerurkar, Managing Director, Tata Steel Ltd Releasing the Manual of Procedure for Chemical and Environmental Samples on the occasion of KhanijDiwas at the IBM headquarters. Controller General, IBM Shri C.S. Gundewar, MOIL MD Shri K.J. Singh are seen.

Shri S. Vijay Kumar, then Secretary, Mines (second from right) releasing Iron & Steel Vision -2020, a publication brought out by IBM in New Delhi. (From left)Shri Anjali Srivastava, Joint Secretary & Financial Advisor, Shri S.K. Srivastava, Additional Secretary, Shri C.S. Gundewar, Controller General, IBM are seen.

6 TC, MINING RESEARCH AND PUBLICATION (TMP) DIVISION

Sampling work is in progress at sarlank laterite study area.

The Technical Consultancy, Mining Research and Publication Division is headed by the Controller of Mines. It offers technical consultancy services to the mining industry, undertakes scientific, techno-economic, research oriented studies and brings out monographs and bulletins on topical interest.

Technical Consultancy

6.2 Technical consultancy services are offered on charge basis to the mining industry within the country and abroad in the fields of surveying, exploration, geology, mining and environment related issues. It offers consultancy services to large as well as small mine owners. Small mine owners are offered services at a concessional rate. It helps the mine owners in systematic development of their mines, formulation of their production plans, better utilisation of mineral resources available in the areas, to take investment decisions for implementation of new projects and obtain financial assistance from the financial institutions. The services offered are:

6.3 Survey and Geological Services

- Topographic survey of mineral properties.
- Preparation of geological plan as per MMR-61 and MCDR 1988.
- Preliminary geological appraisal of mineral deposits.
- Formulation of scheme of exploration and preparation ofdetailed exploration reports.
- Geo-statistical evaluation of mineral deposits.
- Collection of bulk samples from mineral deposits/mineralised dumps for laboratory and pilot plant investigation.

6.4 Mining Services

- Preparation of mine development scheme of opencast and under-ground mines.
- Preparation of mining feasibility reports of opencast and under-ground mines.
- Evaluation of feasibility reports for financial institutions.
- Financial analysis of mining projects.
- Remodeling of old mines for introduction of advanced mining technology.

6.5 Environmental Studies

- Preparation of Solid waste management plan.
- Generation of environmental base-line data.
- Preparation of Environmental Impact Assessment (EIA) & Environmental Management Plan (EMP).

6.6 Specialised Services

- Productivity study of opencast and underground mines.

- Techno-economic survey of mineral properties.
- Production planning and grade control on given process parameters.

6.7 Advanced computer facilities like Surpac 2000 computer system along with latest software on mine planning and designing, map making etc, highly sophisticated, sensitive and accurate survey equipment like Differential Global Positioning System (DGPS), Electronic Total Station, Electronic Distance Meter, Laptop Computer with software suitable for processing of survey data, available in this division provide necessary sophisticated backup to these services.

6.8 Achievements

During the year 2011-12, six assignments comprising four geological and two survey assignments were completed. A total amount of Rs 15,43,011/- which includes charges for assistance in court case which is Rs.2,06,539/- was received as consultancy fee during the year. Surveyors of TC Cell attended Survey Work of "Court Case No. CCCNo. 220-04-2009 CW 2043/09 in the matter of MSPL vs. Smt. Shantha Lakshmi Jayaram before H.C. of Karnataka at Bangalore".

6.9 Assignments completed

The details of consultancy assignments completed during the year 2011-12 and salient features of these assignments are as follows:

(1) Preparation of Status report on laterite areas in Sarlanka village (270.44 ha) -East Godavari District of Andhra Pradesh for M/s Maheshwari Minerals, Kakinada, East Godavari district (AP).

M/s Maheshwari Minerals, Kondaiahpalem, Gangeyulu Vari Street, Kakinada, Dist. East Godawari (Andhra Pradesh), approached Technical Consultancy Division of Indian Bureau of Mines, Nagpur for availing geological services for assessing potential of laterite occurrences over an area of 270.44 ha, in village Sarlanka, Tehsil Sankavaram, District:-East Godavari, Andhra Pradesh.

Based on the analysis results of eighteen samples drawn from the area it is revealed that the area appears to be potential and worth for proving of laterite/bauxite ore deposit. The existence of in situ laterite and bauxite exposures and the sample analysis report from the area shows a positive indication for proving the ore reserves in the area. Based on the findings of this investigation, it is suggested that the area needs to be explored further for establishing the commercial deposit of laterite and bauxite ore. The resources, thus estimated for the area works out to be 5.11 million tonnes for Ferruginous laterite (with -20% Al2O3%), 5.3 Million Tonnes for Aluminous Laterite (with + 20% Al2O3% & - 38% Al2O3%) and 4.27 Million tonnes for Bauxitic ore (with + 38% Al2O3%). These resources are categorised under "334" under UNFC classification. For upgrading these resources under higher degree of certainty and for classifying them under different reserves category.

2) Preparation of report on Preliminary Geological Appraisal (PGA) of Manganese Ore over an area of 4.8 ha near village Sonegaon, Garraghatrange, District: Balaghat (MP) in favour of Shri. Vijay Singh Saraswar.

Shri Vijay Singh Saraswar Nagpur approached Technical Consultancy Division of Indian Bureau of Mines, Nagpur for availing geological services regarding preparation of Preliminary Geological Appraisal report for assessing the potentiality of manganese ore over an area of 4.80 ha in village Sonegaon, Dist. Balaghat, Madhya Pradesh.

The ore available in the area, as can be seen from the analysis of the samples drawn, is of medium grade in manganese content with low phosphorous. In the area, five discontinuous manganese ore bands were identified which are varying in length from 5m to 88 m. The width of bands ranges between 0.8 m to 4.06m (Avg. 1.77m). The manganese ore is of high grade with low phosphorus, Manganese content ranges between 40.55 to 48.24% (Avg. 45.47%) and Phosphorus varies between 0.9 to 0.39% (Avg. 0.17%) . The resources are estimated at 5559 tonnes and placed under UNFC Code 333.

3) **Preparation of Status report on laterite areas in Sarlanka village (190.0 ha) -East Godavari District of Andhra Pradesh for M/s Maheshwari Minerals, Kakinada, East Godavari district (AP).**

Party has approached Technical Consultancy Division of Indian Bureau of Mines, Nagpur for availing geological services for assessing potential of laterite occurrences over an area of 190.0 ha, in village Sarlanka, Tehsil Sankavaram, District, East Godavari, Andhra Pradesh. Existence of in situ laterite & bauxite exposer and samples analysis report from the area shows positive indications for proving ore reserves in the area. Area needs to be explored further for establishing for commercial deposits of laterite & bauxite ore. Resources estimated for the area workout to be 1.75 million tonnes for ferruginious, 7.6 million tonnes for aluminious laterite & 1.71 million tonnes for Bauxite Ore.

4) **Preparation of Status report on laterite areas in Sarlanka village (243.75ha) -East Godavari District of Andhra Pradesh for M/s Maheshwari Minerals, Kakinada, East Godavari district (AP):**

Party has approached Technical Consultancy Division of Indian Bureau of Mines, Nagpur for availing geological services for assessing potential of laterite occurrences over an area of 243.75 ha, in village Sarlanka, Tehsil Sankavaram, District, East Godavari, Andhra Pradesh. Existence of in situ laterite & bauxite exposer and samples analysis report from the area shows positive indications for proving ore reserves in the area. Area needs to be explored further for establishing for commercial deposits of laterite & bauxite ore. Resources estimated for the area workout to be 4.9 million tonnes for ferruginious, 6.8 million tonnes for aluminious laterite & 2.3 million tonnes for Bauxite Ore.

5) **Joint survey of Excavation measurement at Vastan Lignite mine of M/s Gujarat Ind. Power Co. Ltd, Surat Gujarat.**

The survey work was completed and the report submitted to the party.

6) **Joint survey of Excavation measurement at Mangrol lignite mine of M/s Gujarat Ind. Power Co. Ltd, Surat, Gujarat.**

The survey work was completed and the report submitted to the party.

6.10 Assignments in progress

Four assignments were at various stages of completion.

Mining Research Cell

6.11 The Mining Research Cell carries out applied mining research on various mining aspects with a view to help the industry in systematic development of mines, improvements in productivity and to achieve sustainable development by adopting state-of-the-art environmental management systems. Besides undertaking assignments on promotional basis, it undertakes industry sponsored assignments on environmental and geo-technical aspects, on charge basis.

Achievements

6.12 During the year 2011-12, eight assignments were completed including two consultancy assignment of Environmental monitoring and six ground vibrations monitoring. Besides, two assignments on ground vibrations monitoring were under pipeline.

During the year, total revenue generation from consultancy services was Rs.13,22,198/- (which includes Rs. 1,23,002/- service tax).

Projects completed

6.13 The details of assignments completed during the year 2011-12 and salient features of these assignments are as follows:

(i) **Environmental Monitoring at Copila Gaichem Paul (Shigao) Iron Ore Mines of M/s Fomento Industries (P) Ltd, Goa, for the year 2009-10.**

Survey work in progress Mangenese bearing area of Sonegaon, Garraghatrange, study area District:- Balaghat (MP).

Sampling work in progress at Manganese bearing Sonegaon, Garraghatrange, study area District:- Balaghat (MP).

The study on environmental quality monitoring at Copila Gaichem Paul (Shigao) Iron Ore Mines of M/s Fomento Industries (P) Ltd, Goa, has been carried out for all the four seasons for 2009 -10 to monitor environmental parameters such as air, water, soil and noise at the mines. The study has indicated that all the environmental parameters monitored are well within the prescribed limits as per MoEF standards. The study thus helped the mine management to develop proper mitigation measures. The final report is submitted to the party.

(ii) Environmental Monitoring at Saniem Iron Ore Mines of M/s Fomento Industries (P) Ltd, Goa, for the year 2009-10.

The study on environmental quality monitoring at Saniem Iron Ore Mines of M/s Fomento Industries (P) Ltd, Goa, has been carried out for all the four seasons for 2009-10 to monitor environmental parameters such as air, water, soil and noise at the mines. The study has indicated that all the environmental parameters monitored are well within the prescribed limits as per MoEF standards. The study thus helped the mine management to develop proper mitigation measures. The final report is submitted to the party.

(iii) Blast Vibration Study at Metmangrur Stone Quarry in Umred Tehsil, Nagpur District (Maharashtra) of M/s Shri Praveen Natthalal Thakkar, Mumbai, Maharashtra,

On the request of M/s Shri Praveen Natthalal Thakkar, a study of Ground Vibrations due to blasting at their Metamangrur Stone Quarry, Umred Tehsil, District Nagpur, Maharashtra, over an lease area 6.80 ha, was carried out to study the impact of blast induced ground vibrations on the nearby structures, human settlement and to suggest control measures to minimise the adverse impact of the same. Under this study, total 7 nos. of blasts at Metamangur Stone Quarry site were carried out and monitored at 2-3 different points in the area.

In Metamangur Stone Quarry, the charge weight per delay is less than 25.0 kg. The observed Peak Particle Velocity (PPV) for charge weight of 25.0 kg. for a distance of 2100.0 m is 1.11 mm per second which is well within the safe limit. The structures belonging to the owner which are at a distance of 900 m and 1100 m, the calculated PPV is 3.33 and 2.57 mm per second respectively for a maximum charge per delay of 25.0 kg, which is also well within the safe limit. During the study, it has been found that the frequencies below 8 Hz are 'NIL'. The air over pressure (sound level) is also well within the safe limit. For further minimising the vibration effects and fly rocks due to blasting, control measures have been suggested in the report.

(iv) Public Interest Litigation Writ No.13/2010 filed by the court on its own motion Vs. The State of Maharashtra and others, regarding preservation of Gadmandir at Ramtek.

The Executive Engineer, Construction Division (Special Project), Nagpur had approached the Indian Bureau of Mines, Nagpur to take up the study

for impact on Gadmandir, Ramtek due to surrounding mining specially to blasting in mines with reference to Public Interest Litigation, filed by the court on its own motion Vs. the State of Maharashtra and others, regarding preservation of Gadmandir at Ramtek.

The Controller General, Indian Bureau of Mines nominated an officer of TMP Division on this committee.

During the visit, it is found that Munsar (Underground) Manganese Mines of MOIL is the nearest working mine at a distance of 4.0 kms. from Gadmandir (Ramtek) having production of more than 5000 tonnes per month. It was decided by the committee to study the impact of blasting and induced ground vibration on Gadmandir (Ramtek) as per the directives of High Court.

The study was carried out to know the effect/impact of blasting in mines, 15 number of blasts at Munsar Underground Manganese Mines in the different faces which are in the direction of Gadmandir-Ramtek monitored. Total 10 nos. of blast were monitored on surface in the direction of Gadmandir-Ramtek, all the blast readings were taken after a gap of few days so that true picture should come out.

Since the frequency level observed during the monitoring is more than 57 Hz, the threshold limits of PPV is taken as 5.0 mm/sec considering higher factor of safety.

As per the regression analysis for these blasts, the value of peak particle velocity (PPV) for the Gadmandir (Ramtek) is only 0.301 mm/ sec.

For other structures which are not belonging to MOIL, the PPV arrived is also well within the safe limit even for a charge weight of 15 kg. There will be no adverse effect due to ground vibrations, as the resultant net PPV arrived is only 0.868 mm/sec even for the nearest structures Archaeological Excavation Site (Near Rock Garden of MOIL) which are at a distance of 800 m only. All these PPV values arrived at are well within the limits of DGMS standards of 5.0 mm/sec.

(v) Blast vibration studies at Venkatesh Stone Quarry (2.76 ha) (Khasra No. 416/1 & 416/2) at Pachgaon in Tehsil Umred, Distt Nagpur (Maharashtra) of M/s Venkatesh Minerals (Owner-Shri. Shayam Lalaram Jaiswal):

The study was carried out to study the impact of blast induced ground vibrations on the nearby structures, human settlement and to suggest control measures to minimise the adverse impact of the same. During this study, total 10 nos. of blasts at Venkatesh Stone Quarry site were carried out and monitored at 2-3 different sites in the area.

The calculated peak particle velocity for the charge weight of 25.0 kg, for a distance of 3000.0 m is 3.12 mm/sec, which is well within the safe limit. The ground vibration intensity estimated for even maximum charge weight per delay of 50 kg which is presently not in practice, is also well within the safe limit.

Air Monitoring by Respirable Dust Sampler at Goa.

Dust fall apparatus used to measure dustfall at Goa Iron ore mines.

It is suggested that the present blasting practice may be continued as there is no damage to nearby structures by this charge weight of 25.0 kg per delay and even for calculated charge weight of 50 kg.

(vi) Blast vibration studies at Pachgaon Stone Quarry (2.40 ha) (Khasra No. 451/2 & 451/4) in Umred tehsil, Distt. Nagpur (Maharashtra) of M/s Sidheshwar Infrastructure India Limited (Director-Shri. Shayam Lalaram Jaiswal):

The Study was carried out to know the impact of blast induced ground vibrations on the nearby structures, human settlement and to suggest control measures to minimise the adverse impact of the same. During this study, total 11 nos. of blasts at Pachgaon Stone Quarry site were carried out and monitored at 2-3 different sites in the area.

The monitoring data revealed that the structures like Quarry Office/Stores situated at a distance of 60 m from blasting sites are not within the zone of safe limit i.e. 50 mm /sec. Even for the maximum charge weight per delay of 15 kg, the calculated ppv at this structure arrived as 53.9 mm/sec. These structures have to be shifted to the safer distance i. e. beyond 60 m in accordance with the prevailing blasting pattern, considering higher safety factor or to bring these structures under the zone of safe limit, the charge per delay should not be exceeded 12.9 kg as calculated. During the study, it has been found that the frequencies below 8 Hz are 'NIL'. For further minimising the vibration effects and fly rocks due to blasting control measures have been suggested in the report submitted to the party.

(vii) Blast vibration studies at Shrivarad Stone Quarry (1.33 ha) Khasra No. 77/3 M/s Shrivarad Industries, Near Tip Top Convent, Survey Nagar,District:- Nagpur –(Maharashtra) (Owner :-Shri. Sachin S. Pitale)

The study was carried out to know the impact of blast induced ground vibrations on the nearby structures, human settlement and to suggest control measures to minimise the adverse impact of the same. During this study, total 12 nos. of blasts at Shrivarad Stone Quarry site were carried out and monitored at 2-3 different places in the quarry area.

It has been observed that during blasting operation, in Shri Warad stone quarry normally the charge weight per delay is kept less than 35.0 kg. Considering factor of safety, the vibration limit for nearest structure (Not belonging to owner) situated at Surgaon (Undri) village is 10 mm/sec at a frequency 8-25 Hz. Even with the charge weight of 35 kg per delay, at a distance of 1200 m is calculated to be 3.19 mm/sec, which is well within the safe limit in view of DGMS Standards.

For further minimising the vibration effects and fly rocks due to blasting some control measures have been suggested in the report.

Charging of Holes at Venkatesh Stone Quarry of M/s Venkatesh minerals.

Minitoring on Surface in Munsar Mangnese Mine lease area of MOIL.

Monitoring near Vijaya Stamb Chitthorgarh.

Survey work on Chittorgarh Fort.

Initial Setting of Instruments at Chittorgarh Fort.

Monitoring at Jai Surjana Pit of BCW.

Monitoring at village road near BCW mine.

Setting of Instruments at Fort wall of Chittorgarh Fort.

(viii) Report on impact of blast induced ground vibrations on Chittorgarh fort due to working of limestone and China clay/red ochre mines situated within radius of 10 km.

As per the direction Honourable High Court, Rajasthan while disposing D. B. Civil Writ Petition (P.I.L.) No.6591/2011 filed by Bhanwar Singh & others v/s Union of India and others, pertaining to the mining activities in the surrounding area of Chittorgarh Fort requesting a ban on the Mining activities in the nearby area of the fort, to protect it from any possible impact of blasting being carried out in these mines, the Mining Engineer, Directorate of Geology and Mining Chittorgarh, Rajasthan had approached the Indian Bureau of Mines, Ministry of Mines, Government of India, Nagpur to undertake the study the impact of blasting in mines and its effect on the Chittorgarh Fort. Accordingly, Mining Research Cell of IBM has undertaken study to monitor the ground vibrations due to blastings carried out in the surrounding mines in 4 clusters

(1) Birla Cement Limestone Mines Block-C (Jai-Surjana) of M/s Birla Cement Works Chittorgarh.

(2) Group of Manpura Stone(Farshi/Khanda) Quarries

(3) 16 Limestone(burning) Mines of near Bheiron Singh Ji Ka Khera area (Minor mineral) &

(4) China Clay & Red Ochre – Major Mineral Mine of M/s Waris Ali (Not carrying deep hole blasting

(1) Impact of blast induced vibrations on Chittorgarh fort due to the working of Birla Cement Limestone Mines Block-C (Jai-Surjana) and Block-B (Bherda)

During study period a total number of 16 blasts were monitored and total 49 events were recorded.

A regression analysis for peak particle velocity v/s scaled distance was carried out using all 49 events. It is evident that maximum charge 300 kg per delay will dissipate at a distance of 1005 m from the blast site for ppv 5 mm/sec having frequency range 8- 28 Hz. Since no blast events recorded less than 8 Hz frequency for ppv 2 mm/sec corresponding to maximum charge 300 kg per delay. However, regression analysis for frequency range 8-28 Hz shows that the propagation of ground vibration waves will dissipate at a distance of 1697 m. The shortest distance of mining area (Block-C Jai-Surjana) from Fort is 4.0 kms. Monitoring was also done on Fort near Ratan Mahal, Vijay Stambha, Kirti Stambha and on Fort Wall which is nearest to the ML area. No vibration was recorded in all the mentioned locations of Chittorgarh Fort.

(2) Impact of blast induced vibrations on Chittorgarh fort due to the working Group of Manpura Stone Quarries

Manpura Stone Quarries are in North direction from the Chittorgarh Fort at a distance of 1.25 km from the Chittorgarh Fort wall. The quarry licence owners are quarrying limestone in shape of Fershi, Khannda manually. During study period a total number of nine blasts were monitored and total 22 events were recorded. The details of data on ground vibration measurements recorded at various monitoring stations indicating distances from blast sites to monitoring location with maximum charge per delay. Manpura stone Quarries are using maximum charge 0.125 kg/delay. From the data analysis, it is evident that the ground vibration will dissipate considering the lowest value 2 mm/sec at a distance of 325 m considered to be safe for the protection of Chittorgarh fort. The shortest distance of mining area (Manpura Quarry Area) from Fort is 1.25 kms. Monitoring was also done on Fort foot hills, between Manpura quarry area and Chittorgarh fort.

(3) Impact of blast induced vibrations on Chittorgarh fort due to the working of the Limestone (Burning) mines near Bhairon Singh Ji Ka Khera area.

"Bhairon Singh Ji Ka Kheda" area is located towards east from the Chittorgarh Fort. There are cluster of 18 minor mineral mining leases granted for limestone (Burning), near Bhairon Singh Ji Ka Kheda, area varying between 1.0 ha to 3.0 ha area granted under minor mineral, located about 1.2 to 1.4 km. Out of the 18 mining leases only 16 mining leases covered under the present study. The mining is done by opencast method, manually. During study period, a total number of 68 blasts were monitored and total 96 events were recorded.

The Mines of Bhairon Singh Ji Ka Kheda Area are using maximum charge 0.125-0.250 kg/delay. As per the data analysis, it is evident that the ground vibration will dissipate considering the lowest value 2 mm/sec at a distance of 489 m considered to be safe for the protection of Chittorgarh fort. Monitoring was also done on Fort foot hills, between Bhairon Singh Ji Ka Kheda and Chittorgarh fort and the instrument did not trigger for recording of blast event minimum set for 0.2 mm/sec and confirms it is lower than 0.2 mm/sec.

(4) Impact of blast induced vibrations on Chittorgarh fort due to the working of the China Clay & Red Ochre – Major Mineral Mine of M/s Waris Ali (Not carrying deep hole blasting)

China clay mine of M/s Waris Ali, near to Bhairon Singh Ji Ka Kheda cluster of mines have also approached IBM for conducting the Blast induced ground vibration, through Mining Engineer, DMG, Chittorgarh-Rajasthan. The mine is at a distance of about 1.45 kms from the Chittorgarh Fort in the east direction situated in the 10 kms radius of Chittorgarh Fort.

This mining operation is yet to be commenced for mining of China clay. It is a barren land granted under M L. However, blasting was carried out in out crop rocks i.e., in overburden for the study purpose and monitoring were done in the direction of the Fort.

Total 3 nos. of blasts were carried out in outcroping rocks for monitoring of ground vibration. Vibration was recorded less than 1 ppv beyond a distance of 100 m. using maximum charge per delay 2.75 kg. Instruments placed on Fort near Surajpole and Victory Tower, did not

trigger when set on minimum least count of the instruments from 0.2 mm/sec. in all cases.

Projects in Progress

6.14 One study on ground vibration was in progress and two proposals were under negotiations.

Assignments outside Annual Programme

6.15 Preparation of guidelines on "Environmental aspects on quarrying Minor Minerals – Evolving Model Guidelines" for (i) Mining framework of Minor Minerals, (ii) Framework for cluster of mining and (iii) Guidelines for reclamation and rehabilitation" – Minor Mineral Framework Committee:

The Ministry of Mines assigned the work of the preparation of guidelines on "Environmental aspects on quarrying Minor Minerals – Evolving Model Guidelines" for (i) Mining framework of Minor Minerals, (ii) Framework for cluster of mining and (iii) Guidelines for reclamation and rehabilitation" to Indian Bureau of Mines, Controller General, IBM, constituted a committee of 4-members under the chairmanship of Dr. B.P. Sinha, COM(TMP). The said committee prepared a draft of model guidelines and submitted to the Ministry of Mines. As per the directions of Ministry of Mines, draft model guidelines prepared by the committee have been uploaded on IBM Website and comments were sought from stakeholders and State Governments. After due consideration and incorporation of the comments the finalised model guidelines on all the three topics have been sent to Ministry of Mines.

6.16 Preparation of Background note and draft Guidelines for lifting ban on grant & renewal of Asbestos leases:

A brief note on "Status of asbestos mining in India", with reference to lifting of ban on asbestos mining has been prepared and sent to the Ministry of Mines. In the meeting convened by the Ministry, to discuss the various issues with various stakeholders relating to lifting of ban on grant and renewal of asbestos mining leases for crysotile asbestos. It has been decided to prepare a note on status of asbestos mining in India. Accordingly note has been prepared considering the earlier studies carried out by this division and information received from regional offices and other division of IBM. The guidelines on crysotile and amphibolite group of mines have also been included for consideration of committee and proposal for mechanism for monitoring schedule for presence of asbestos fibers in work environment and also the health aspects of workers.

Publication Cell

6.17 The Publication Cell brings out Monographs on individual minerals under the series Mineral Facts and Problems, and Bulletins of topical interest.

During the year, the activities of this cell were discontinued as the services of technical staff and officers were diverted to other divisions on priority jobs due to acute shortage of manpower.

7 MINERAL ECONOMICS DIVISION

Shri Vishwapathi Trivedi, then Secretary, Mines releasing Indian Minerals Yearbook – 2010 during the visit to the IBM headquarters in Dec 2011. Shri C.S. Gundewar, Controller General, IBM, Shri G. Srinivas, then Joint Secretary, Mines and senior officers of IBM are seen.

The Mineral Economics Division (ME) provides information support and advisory services to the Government and Mineral Industry specially on issues like marketing, specifications and uses of minerals, mineral legislation, inventory of mineral resources mining leases and taxation etc. Moreover, it disseminates latest information on mineral industry, collected through statutory as well as non-statutory sources through its flagship publication, `Indian Minerals Year Book' and number of other publications. This Division is headed by Chief Mineral Economist (CME). The IBM's Library and Publication Section also function under this Division.

Performance

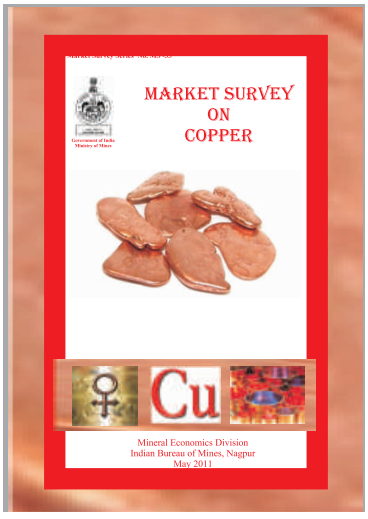
7.2 National Mineral Inventory (NMI)

Quinquennial updating of NMI as on 01.04.2010 as per UNFC and its computerisation in respect of all the 70 minerals, including five new minerals was completed during 2011-12. Analytical note in respect of 70 minerals depicting changes in resource position in comparison to the previous inventory as on 01.04.2005 was also completed. In the NMI, resources are classified according to the end use grade of mineral. A publication entitled, "National Mineral Inventory at a Glance" was completed and uploaded on IBM's Website in June 2012. Preparation of a handbook entitled "National Mineral Inventory-An Overview (As on 01.04.2010)" is in progress and will be completed by March, 2013.

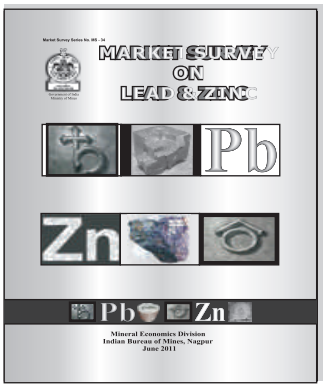
The NMI is based on the principles of UNFC System. The inventory is useful for the investors – foreign and domestic – in making decision on investments in exploration and mining. The NMI based on UNFC system also has wide ramifications in policy formulation and in decisions concerning not only minerals but allied fields as well.

7.3 Market Survey on Minerals and Metals

This publication comprise of market survey reports on minerals and metals of topical interest. These reports provide comprehensive analysis of resource availability, uses, consumption pattern and holistic approach to the future demand-supply projections. The survey also highlights various problems faced by the mineral



consuming industries and their probable solutions. These reports are found useful for the entrepreneurs, researchers, planners, traders and others.



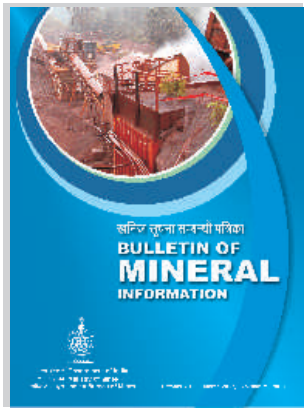
The following market survey reports were released during 2011-12:

1. Market Survey Report on Copper
2. Market Survey Report on Lead & Zinc

A Market Survey Report on Manganese Ore has been taken up and the same is under progress.

7.4 Bulletin of Mineral Information (BMI)

Bulletin of Mineral Information viz BMI is a half yearly Bulletin Published by IBM, a sole publication in the country in its nature. It disseminates information on court orders concerning mineral legislation, trade policy on minerals & metals; trends in mining lease and prospecting licences along with R/P granted for mineral-based industries in the country; the month-wise production of various mineral-based products and highlights status of mineral and mining industries, both in domestic & foreign sector. The BMI has found extensive use among mine owners and mineral industry.

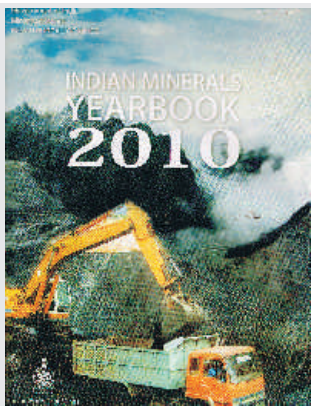


In a nutshell, this publication provides concise & synthesised knowledge and information on mining of various metallic/ industrial minerals of the country, explored through its respective mines.

During the period 2011–2012, three issues of BMI viz. April 2010 – September, 2010; October 2010–March 2011 and April 2011 – Sept 2011 were released.

7.5 Indian Minerals Year Book (IMYB)

IMYB is the flagship publication of IBM. It consists Part I having as many as 11 General Chapters and Part II consisting 69 Mineral Reviews. This publication covers information on minerals and mineral-based commodities, their development, production, resources/reserves, consumption, trade and policy. It also includes world scenario. IMYB provides a status report of Mining and Mineral Industry in India on an annual basis. This publication has wide readership - both National and International.



For IMYB 2010 (data 2009-2010), a total 80 general/mineral reviews were prepared, technically edited and sent to Publication Section for final editing and formatting after consolidation of all chapters with the statistical data. The IMYB 2010 was released in December, 2011.

For IMYB 2011, (data 2010-2011) about 3,000 letters/questionnaires were issued for capturing of data. Nearly 510 receipts from various mineral-based industries, Central/State Government Departments, Central/State Undertakings, National Laboratories etc. were received during the period under review. End-use mineral consumption tables (data 2010-2011) in respect of 50 minerals were completed. Reviews of IMYB 2011 are at various stages of drafting/technical editing and general editing.

7.6 Directory of Mining Leases

Updating of mining lease information based on consolidated Annual returns from State

Governments and Union Territories under statutory provisions of rule 57(2) of MCR, 1960 was continued. Based on these data, an All India basis Annual Directory depicting the distribution of mining leases granted/executed for different states are generated.

During the year 2011–2012, the Directory of Mining Leases in India as on 31/3/2011 was released.

A sum of Rs. 34,600 was realised on sale of Mining Lease information during the year.

7.7 Bulletin of Mining Leases and Prospecting Licences

The Bulletin of Mining Leases and Prospecting Licences is the only publication which contains information on mining leases, prospecting licences as well as reconnaissance permits. The bulletin provides the distribution pattern of mining leases spread over 28 states with its break-ups, into state-wise, district-wise, mineral-wise and sector-wise (Public and Private) information demarcating high, medium and low mineral potential bearing districts. Exhaustive information on mining leases abridged concisely for easy assimilation will suit the convenience of readers/entrepreneurs or policy makers.

Bulletin on Mining Leases and Prospecting Licences, 2010 was released.

7.8 Mineral Information and Advisory Services

During the year, 57 Parliament Questions, 37 Central Government references, four State Government references and 14 private and other inquiries were attended. These were related to mineral resources, availability and utilisation, reservation of mineral-bearing areas, mineral trade, policy, mineral legislation etc. Two draft speeches & six technical papers were prepared.

7.9 World Mineral Intelligence

During 2011-12, 03 parliament questions, 17 Ministry references, were attended. These were related to mineral Trade, bilateral co-operation in Mining and Mineral sector.

A computer generated data on country–wise production for the year 2007, 2008 & 2009 in respect of 60 minerals was prepared. The data on country-wise reserve and resources for the year 2010 was also generated.

7.10 Mineral Legislation

The Mines and Minerals (Regulation and Development) Bill, 2011

The Mines and Minerals (Development and Regulation) Bill, 2011 prepared by the Ministry of Mines to replace the existing Mines and Minerals (Development and Regulation) Act, 1957 has been approved by the Cabinet. The Bill has been introduced in Lok Sabha on 12th December, 2011, and the same has been referred to Parliament Standing Committee on Coal & Steel. The Bill has been prepared after several rounds of consultation and workshop with all the Stakeholders. The Bill seeks a complete and holistic reform in the mining sector, with provisions to address issues relating to sustainable mining and local area development, especially families impacted by mining operations. The Bill also aims to ensure transparency, equity, elimination of discretions, effective redressal and regulatory mechanisms along with incentives encouraging good mining practices, which will also lead to technology absorption and exploitation of deep seated minerals.

Group to Evolve Model Guidelines on Environmental Aspects of Quarrying of Minor Minerals

Ministry of Environment & Forests had constituted a Group of State Secretaries of Environment and Mining Departments of major states under the chairmanship of Secretary (E&F), Government of India to evolve model guidelines on environmental aspects of quarrying of minor minerals. IBM represented Ministry of Mines as a member of the Group. The Group submitted its report in March 2010. As a follow up of the recommendations of the Group, on the direction of Ministry of Mines, Controller General, IBM constituted a Committee to draft the documents on (i) Mining framework for

minor minerals, (ii) Framework for cluster of mines and (iii) Guidelines for reclamation and rehabilitation. Report of the committee has been submitted to the Ministry and uploaded on the IBM's website for perusal of stakeholders and State Governments to seek their views/comments. Taking into consideration the feedback received from stakeholders and State Governments the draft was modified by the Committee and modified guidelines have been submitted to the Ministry.

7.11 Study Group on Revision of Rate of Royalty and Dead Rent

In order to review the royalty rates and dead rent, the Ministry of Mines had on 13th September 2011 constituted a Study Group on revision of rates of royalty and dead rent for minerals (other than coal, lignite and sand for stowing) and to make appropriate recommendations to the Government. Chief Mineral Economist represented IBM in the Study Group.

7.12 Central Library

The Central Library of Indian Bureau of Mines, Nagpur comes under the category of "Special Library" and is dedicated to specialised subjects like Mining and Geology. The library has a rich collection of valuable publications on mineral economics, geo-economics, mineral processing, mining research and environmental engineering. Some of the books dates back to as early 1948 and have found wider interest among the users from various divisions of IBM. The exhaustive collection includes all information forms such as published and unpublished reports of various ministries, organisations, industrial houses banking sector, records, bulletins, maps, atlases, symposium/ seminar proceedings, CD ROMs etc. The gazette notifications and administrative collections are also well maintained for the benefit of users. Central library acts as knowledge hub by maintaining "OPEN ACCESS SYSTEM" for users for free and unrestricted search.

The total collection of books and publications has crossed 85000. During for 2011–12, 4211 publications, including gazettes, annual reports and periodicals were received at the library on subscription as well as exchange/complimentary basis.

As on 31 March 2012, 408 readers borrowed various publications in 2011-12. Academicians, research scholars, students and executives from other institutions also utilised library facilities.

For the benefit of its users, Library compiled subject-wise bibliographies, provided index for all technical subjects for all IBM publications, Annual Reports, Gazette Notifications and Administrative matters. Also, it helped readers by providing paper

A view of Central Library.

copies, including copies for outsiders on payment basis and information on reference enquiries.

Every year Library Committee Meeting is held for procurement of library publications such as Technical Journals, Administrative as well as Hindi publications. The committee members are nominated from different divisions of Indian Bureau of Mines headquarters.

Activities and Services

- Library provides following services-

- ❖ Issue of publications to the IBM borrowers on a time limit (after being member)
- ❖ Reference/information/ documentation service.
- ❖ Indexing of articles from technical journals.
- ❖ Current Awareness Service a) News Clipping File (marking and compilation of news items from news papers). b) GEM – Current Content (Compilation of front page and content page of technical journals.)
- ❖ Reprographic Service
- ❖ E-cataloguing the available and select books and uploading it to the library server with the help of library software, "Libsys."
- ❖ Facility of referring publications to non-members of IBM such as academicians, research scholars, students and executives from institutions/ organisations .

Libsys LAN version 4.0 is installed on library server with the network of Server-Client Infrastructure. About 316 books and 230 articles have been entered through LibSys software during the year. The total entries in the database include 33595 book entries and 17662 journals article entries.

The On Line Public Access Catalogue (OPAC) is available for easy search of references/ publications.

Recently, the old Library Rules framed in 1977 had been modified as Library Regulations October 2011 to achieve following main objectives.

- ❖ To accommodate new changes which were developed during the past years.
- ❖ To curb the habit of losing the valuable publications by borrower and thereby preventing Government loss.
- ❖ To make available publications to all users instead of use by few hands.
- ❖ To restrict the unauthorised visitors in the library.
- ❖ To observe discipline in library.

7.13 Publication Section

The Publication Section more or less functions as a full-fledged Publishing House of IBM operating within the precincts and responsibilities of the Bureau.

IBM disseminates the data/information on mines and minerals through its publications. The Publication Section of IBM constitutes Editorial, Production & Printing and Binding units. The functions include editing, designing & formatting and publishing of technical literature in the form of Indian Minerals Year Book and various other periodicals, technical bulletins, monographs and others.

The Section is also responsible for complimentary distribution and sale of publications, signing of agreements with organisations in India and abroad for formal exchange of publications. Thus, Publication Section fulfils the designated function of producing and disseminating information as chalked out for it in the Charter of Functions of the IBM through its in-house Press.

The Section continued to provide editorial and in-house printing services for the Department's publications. The in-house Press printed approximately 10.15 lakhs page impression for various publications, reports, publicity brochures etc. during the year ended 31st March 2012. A list of publications released during 2011-12 is placed at Annexure VII.

It generated a revenue of Rs 5,67,418/- through sale of publications in 2011-2012.

8 MINING AND MINERAL STATISTICS DIVISION

Shri K.Thomas (right), Deputy Director General (Statistics) and other dignitaries at the Statistics Day celebration held at the IBM headquarters.

The Mining and Mineral Statistics (MMS) Division function as the Nation's Data Bank on Mines and Minerals. The Division is responsible for collection, compilation, analysis, interpretation and dissemination of statistical information on various economic activities on mines and minerals. It caters to the needs of the Central and State Governments, Planning Commission, Central Statistical Organisation, research and educational institutes, United Nations, other foreign organisations and private agencies. As per the Special Data Dissemination Standards laid by IMF, this Division supplies monthly index of mineral production to Central Statistical Organisation (CSO) for computation of index of industrial production in the country. This division is headed by Deputy Director General from ISS Cadre and comprises of officers/officials of ISS & SSS Cadre and supported by Ministerial staff from IBM. During the year 2011-12, the following work was carried out:

Database Management and Computerisation

8.2 Mines Cum Production (MCP) Database

MMS Division receives monthly, annual and explosive returns in 16 prescribed formats under rule 45 of MCDR, 1988 from about 3000 mines regularly. During 2011-12, data entry and verification of 2431 Annual Returns received under MCDR for the year 2010-11 was completed. Outputs for the year 2009-10 and 2010-11 relating to labour, production, stocks and value were generated. Computerisation of monthly returns for the year 2011-12 was taken up. Data entry and verification of data received in 29262 monthly returns were completed and provisional monthly statements generated for the year 2011-12. The Directory of Mines as on 31.03.2011 now contains 2246 reporting mines. A number of application software packages using SQL were developed to generate outputs from the MCP database.

8.3 External Trade Database

Data on external trade are collected from the Directorate General of Commercial Intelligence and Statistics (DGCI&S) in accordance with Indian Trade Classification based on Harmonised Commodity Description and Coding System. The data is collected annually in respect of more than 1300 commodities which cover minerals, metals and selected mineral based products. Export and Import data of minerals, metals and selected mineral based products received from DGCI&S for the year 2010-11 was processed and about 400

statements were generated.

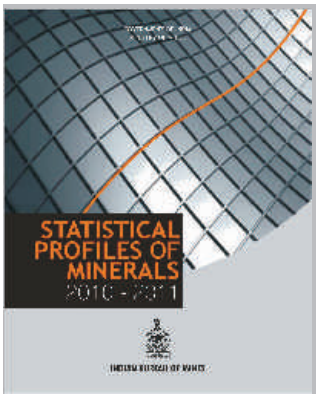
Publications

8.4 Monthly Statistics of Mineral Production (MSMP)

This monthly publication MSMP contains information like Index of Mineral Production, state-wise mineral production and value, average sale price of minerals by grades etc. During the year, 13 issues of the publication for the months of October 2010 to October 2011 were released.

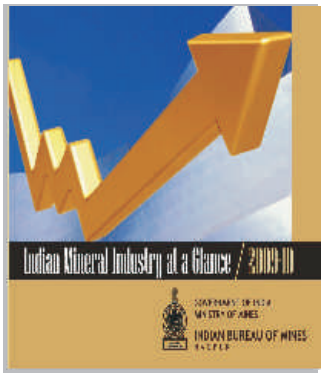
8.5 Statistical Profiles of Minerals (Annual)

This publication gives a bird's eye view of most of the vital aspects of major minerals (except fuels and atomic minerals) produced in India. It contains information on production, value and stocks of minerals, labour employment and number of reporting mines for the current year. Besides, data on reserves, mining leases, life index of mineral resources, export and import of minerals are incorporated for the latest available year. The issue for 2009-10 has been released and printing of 2010-11 issue is under progress.



8.6 Indian Mineral Industry at a Glance (Annual)

It is a pictorial publication providing time series data on production of minerals, metals and mineral based products, consumption of minerals, labour employment and external trade. In addition, detailed information on mining machinery, consumption of explosives, mining leases and afforestation in metalliferous mines are also presented for the latest year. The issue for 2008-09 has been released, 2009-10 issue is under printing and 2010-11 issue is under preparation.



8.7 Indian Minerals Yearbook (annual)

Statistical tables with reviews on national income, production, stocks, labour, exports, imports and prices covering major minerals, fuel minerals, minor minerals and metals along with detailed figures at the district and state level were prepared for incorporating in the IMYB 2011 issue.

Statistical Reports and Data Dissemination

8.8 Reports on estimated value of monthly mineral production for March, 2011 to February, 2012 were sent to the Ministry of Mines for preparation of Monthly Cabinet Review Note on mineral industry.

8.9 Press Note on Monthly Mineral Production for February, 2011 to January 2012 was prepared and sent to the Ministry of Mines.

8.10 Material for answering 44 Parliament Questions giving information on various parameters like production, value, number of mines, labour, dispatches, stocks, exports, imports, etc; was prepared and supplied to other divisions/Ministry.

8.11 Ex-mine prices of 19 mineral grades for the months of February, 2011 to January 2012 were sent to the Ministry of Commerce and Industry, for computation of Wholesale Price Index.

8.12 Finalisation of state wise average sale price for specified minerals for which royalty is chargeable on advalorem basis and not linked to any international bench mark prices. LME prices for the period up to October, 2011 (upto January 2012 for

iron ore) were sent for hosting in IBM's website.

8.13 MMS Division is also engaged in collection, compilation and dissemination of production details of fuel minerals, minor minerals and ferrous and non-ferrous metals and also prices of minerals and metals in the domestic as well as in the international market.

8.14 Data on different aspects of minerals and metals were provided to the Central and State Governments, Central Statistical Organisation, MMTC, Railway Board, private agencies and foreign organisations like U.S. Geological Survey, Virgina, U.S.A. International Industry Association, Paris, France and Austrian Federation, Ministry for Economic Affair.

8.15 Information on production, value, stocks, dispatches, number of mines, index of mineral production, etc. was supplied to CSO, for inclusion in their publication namely: Statistical Abstract, Monthly Abstract of Statistics, Compendium of Environment Statistics, Directory of Statistics, India in Figures, Statistical Pocket Book, etc. Data on input cost was also sent to CSO for computation of National Income in respect of mining & quarrying sector for the year 2008-09 and 2009-10.

8.16 Mineral-wise deductible rates of all minerals for 2008-09 and 2009-10 were provided to all the States Government for computation to State Domestic Product. Information on district-wise and mineral-wise number of mines, production and value was also sent to all the state Governments for the year 2007-08 and 2008-09.

8.17 Growth in mining & quarrying sector

The total value of mineral production (excluding atomic mineral) during 2011-12 (estimated) was Rs. 210334.55 crore, showing a decrease of 102 per cent over that of the previous year. The fuel minerals accounted for Rs. 143498.21 crore or 68.22 per cent, metallic minerals Rs 41954.50 crore or 19.95 per cent, non-metallic minerals (including minor minerals) Rs 24881.84 crore or 11.83 per cent of the total value. This was mainly due to low production of natural gas, chromite, iron ore, manganese ore, diamond, gypsum, magnesite, silica sand and steatite. However, the production of some important minerals like lignite, petroleum (crude), bauxite, gold, lead concentrate, zinc concentrate, dolomite, kaolin, limestone, phosphorite have increased marginally during the year.

The index of mineral production (base 2004-05=100) for the year 2011-12 was 128.44, which shows a negative growth of 2.00% over that of 2010-11.

Ancillary Statistics

8.18 External Trade

Export and import data of minerals, metals and selected mineral-based products for the year 2010-11 was collected from the Directorate General of Commercial Intelligence & Statistics. The data thus collected were processed and above 400 statements were generated.

8.19 Minor Minerals

Information on quantity and value of production of minor minerals was collected on non-statutory basis from all the States and Union Territories. Data in respect of 24 minor minerals for the year was processed and finalised.

8.20 Fuel minerals

Data on monthly production of coal and lignite was collected from the office of the Coal Controller, Kolkata and similar data for petroleum (crude) and natural gas was collected from the Ministry of Petroleum & Natural Gas. These data were used for computation of index of mineral production and also for inclusion in the IMYB and other publications of IBM.

8.21 Statistics Day-Year 2011

"Statistics Day" was celebrated on 29 June 2011 as declared by Government of India on the occasion of birth anniversary of (Late) Prof. P. C. Mahalonabis at

IBM, Nagpur. Shri K.Thomas, Deputy Director General (Statistics) presided over the function and addressed the gathering and highlighted the importance of statistics in the field of mining. Shri Saji George, Joint Director and Shri Junaid Farooqui, Joint Director also spoke on the occasion. A quiz competition was conducted on the occasion and prizes were given to the winners. Shri R.Kumar, Deputy Mineral Economist conducted the proceedings and proposed a vote of thanks. The function was attended by all officials of MMS Division.

9 PLANNING AND CO-ORDINATION DIVISION

Shri Vishwapati Trivedi, then Secretary, Mines addressing a meeting of the senior officers of Indian Bureau of Mines during his visit to the headquarters in Dec 2011. Then Joint Secretary, Shri Srinivas, Controller General Shri C.S. Gundewar are seen.

The Planning and Co-ordination Division (P&C) comprises two sub-divisions namely, (i) Planning and Co-ordination; (ii) Administration Establishment (including Training) Matters, Accounts with all other administrative and financial matters. This division is headed by Controller of Mines (Cordination) assisted by Technical Secretary and Chief Administrative Officer/Head of Office.

9.2 The Controller General, IBM is assisted by COM (Cordination) as well as Technical Secretary (TS) in important technical and administrative matters. In this process, they draw up, in consultation with the Divisional Heads, Five Year Plans, Annual Programme, Annual Action Plans, Performance Review of activities in IBM, Preparatory work for IBM Advisory meeting and other important meetings regarding plan proposals, reviews, performance, etc., in IBM as well as in the Ministry and take follow up actions. Material for inclusion in the Annual Report, Outcome Budget and Demands for Grants of the Ministry of Mines are also prepared. A brief account of activities carried out during the year is as follows.

Plans/Proposals of IBM

9.3 Following documents regarding plans/ proposals were furnished to the Ministry:

i) XII Plan 2012-17 and Annual Plan, 2012-13.
ii) Annual Action Plan, 2012-13.
iii) Outcome Budget, 2012-13.
iv) Material in respect of IBM for the Annual Report of Ministry of Mines, 2011-12.
v) Material in respect of IBM for the Annual Action plan of Ministry of Mines, 2011-12.
vi) Result Framework Document (RFD) for IBM for 2011-12.

Parliament Questions & Ministry References

9.4 Coordinated issuance of replies to the Ministry of Mines on 143 Parliament questions and 391 other Ministry references.

Comments/notes/reports furnished by TS Section to the Ministry were as follows:

(i) Monthly Progress Reports on the Activities of IBM for March 2011 to February 2012.
(ii) Quarterly Performance Reports of IBM for the quarter October-December 2010, January-March 2011, April-June 2011.

(iii) Furnishing information on Plan Schemes of IBM for the Demands for Grants for 2011-12 & 2012-13 for Standing Committee on Coal & Steel, Preparing Action taken on the recommendations contained in the 17th Report of the Standing Committee on Coal & Steel in connection with the Demands for Grants for 2011-12 of Ministry of Mines.

(iv) Preparation of agenda papers for meeting of the Consultative Committee of Ministry of Mines on "SDF".

(v) ATR and draft proposals for 8th JWG meeting of Indo-Australian Joint Working Group.

(vi) Concept paper for Joint Working Group with Chile and Columbia.

(vii) Presentation during the 2nd JWG regarding a proposal on visit of IBM delegation to Uzbekistan's Gold and Copper mines to study deep seated mining.

(viii) Training proposals to Malawi officials on four different aspects for Indo-Malawi Joint Working Group.

(ix) Proposal for reconstitution of IBM Advisory Board.

(x) Agenda papers and power point presentation for consultative Committee meeting of the ministry of Mines on the issue of SDF.

(xi) Modified Crisis Management Plan.

(xii) Material for inclusion in the Finance Minister's Budget Speech for 2012-13, Year End Review 2011 to highlight important Decision and Initiatives.

Drafting of Sub-legislation under proposed MMDR Act, 2011

9.5 Earlier, an Internal Committee was constituted in the Ministry of Mines under the chairmanship of joint Secretary (M&R) for drafting Sub-legislation in terms of draft MMDR Bill, 2011 with representation from IBM.

Meeting of the internal Committee for drafting sub-legislation was held on 13th October, 2011 under the chairmanship of Joint Secretary (Mines) at Shastri Bhavan, New Delhi. In this meeting, the chairman stressed the drafting of the rules to be done under the new MMDR Bill, 2011 which was approved by the cabinet on 30th September, 2011. Accordingly, seven sub-groups were constituted to accelerate the drafting of sub-legislation under the Provisions of draft Rules for MMDR Bill, 2011 in 7 heads namely 1.Mineral Concession (Grant and Management) Rules. 2. Scientific Mining and Sustainable Development Rules. 3. Mineral Royalties and Cess Rules. 4. District Mineral Fund Rules. 5. Mining Regulatory Authority Rules. 6. Mining Tribunal Rules and 7.Mines and Minerals (Special Courts) Rules.

After preparation of the draft sub-rules by respective sub-groups, Controller General, IBM had formed three committees for examining the same and modified draft sub-rules were submitted to Ministry in a review meeting held under the chairmanship of Joint Secretary (Mines) at New Delhi on 29.3.2012.

International Co-operation

9.6 Indian Delegation to Geneva:

As a member of the Indian Delegation led by Shri G. Srinivas, Joint Secretary (Mines) to Geneva (Switzerland), Shri R.N. Meshram, CME attended a meeting on UNFC and participated in the 2nd session of UNECE Expert Group on Resource Classification during 05-09 April 2011.

9.7 Indian Mining delegation to Chile and Colombia:

As a member of the Indian Mining Delegation led by Hon'ble Minister of State for Mines (I/c) Shri Dinsha J. Patel, Shri C.S.Gundewar, Controller General, IBM visited Chile and Colombia from 27 April to 05 May 2011 for bilateral discussions and related field visits, mine visits and signing of Memorandum of Understanding (MoU) with Colombia.

9.8 Indian Mining Delegation to Australia

An Indian Mining Delegation under leadership of Secretary (Mines) visited Australia from 16-24 May 2011 for bilateral discussions and to attend 7th meeting of the India-Australia Joint Working Group on Energy & Minerals. Shri Panigrahi, RCOM, IBM was one of the members of the Mining Delegation.

9.9 Indian Delegation to Norway

As a member of the Indian Delegation, Dr. B. P. Sinha, COM was deputed to attend the 18th Plenary Meeting of ISO/TC 207 (Environment Management) organised by the International Organisation for Standardisation at Oslo, Norway from 25 June, 2011 to 01 July, 2011.

9.10 Indian Delegation to 22nd World Mining Congress & Expo

As a member of the Indian Delegation led by Shri A. K. Patney, Deputy Secretary (Mines), Shri P. N. Sharma RCOM attended 22nd World Mining Congress & Expo held at Istanbul, Turkey during 11-15 Sept., 2011.

9.11 Indian Delegation to China Mining (Congress & Expo)

Shri C.S. Gundewar (right), CG, IBM at China Mining Congress & Expo 2011.

As a member of the Indian delegation led by Secretary (Mines), Shri C.S.Gundewar, CG, IBM attended China Mining Congress & Expo 2011 held at Tianjin, China during 05 -11 Nov., 2011 and also visited the Palletisation Plants and Aluminum Smelter.

9.12 Indian Delegation to PDAC

As a member of the Indian Delegation led by Secretary (Mines), Shri C.S.Gundewar, CG, IBM attended Annual Convention & Trade Show of Prospectors & Developers, Canada (PDAC-2012) held at Toronto from 04 to 07 March, 2012.

9.13 Indian Delegation to Mozambique

As a member of the Indian delegation led by Shri S. K. Srivastava, then Additional Secretary (Mines), Shri S. K. Adhikari, Suptdg. Mining Geologist attended 1st Meeting of the India-Mozambique Joint Working Group on Mineral Resources and Related Fields at Mozambique between 28 Feb. and 02 March, 2012.

Shri Dinsha J. Patel, Hon'ble Minister of State (I/C) for Mines launches On-Line Reporting System of Mineral Transaction

9.14 The Indian Bureau of Mines has developed On-Line Registration and Reporting System under Rule 45 of Mineral Conservation and Development Rules 1988 to facilitate the submission of monthly returns of iron ore. The Hon'ble Minister of State for Mines (Independent Charge) Shri Dinsha J. Patel launched the first phase of the Online Reporting System of mineral transaction on 29th March 2012 at New Delhi. Speaking on the occasion, the Minister said that initially the focus will be on submission of monthly returns for iron and manganese ore mines throughout the country. All other minerals would be covered by September 2012. He further said that in future, the system will be linked to Railways and Ports Authority to check the correctness of the reporting made under the Rule.

Those who were present during the inaugural functions were included then Secretary, Ministry of Mines, Shri Vishwapati Trivedi, Shri S.K.Srivastava, then Additional Secretary, Ministry of Mines, Shri C.S.Gundewar, Controller General, IBM along with senior officers of the Ministry of Mines and IBM.

In the present system of mineral administration, the onus of the mineral is with the State Governments. The Ministry has a limited authority except the administration of Mineral Conservation and Development Rules, 1988 (MCDR) through Indian Bureau of Mines. Over a period of time, it has come to the knowledge of the Ministry that malpractices in mining sector have increased due to poor governance at State level leading to number of cases of illegal mining. The mineral thus produced, came into mineral market by trading,

stocking, procurement by end-users or exporting. This situation has necessitated the Government to take stringent measures for monitoring the mining and mineral transaction in order to control malpractices in this sector.

The Government amended Rule 45 of MCDR, 1988 specifying penal action against defaulting mine owners and empowers the Indian Bureau of Mines to suspend all mining operations. The suspension may be revoked after ensuring proper compliance, otherwise take action to initiate prosecution and recommend for termination of mining lease. The Rule empowers the State Government to order for suspension of trading license, all transport permits issued, storage license for stocking minerals and permits of end use industry, etc. in case of defaulters engaged in trading or storage or end use or export of minerals. The reporting system is designed to generate violation letters automatically and issue the same to the defaulters who fail to submit the returns by the stipulated date of 10th of every month. In order to ensure tighter implementation, State Governments would be partnered for compliance of traders, stockist, exporters and end-users.

A reporting system has been developed to facilitate in submitting the returns on-line. IBM will allot and record registration numbers which will be used for all reporting and correspondence connected to mining, trading, stocking, end use or export of mineral. All the State Governments will be able to access the system to check the data reported in the returns and can initiate action in case of wrong reporting of data, evasion of royalty, etc.

The on-line registration system has been commenced in IBM and so far 4898 lease holders (covering 9390 mines), 2345 traders, 476 exporters, 1033 stockist and 1653 end-users have registered their details. Further, IBM has suspended operations in 1560 mines for non-compliance as per provisions of Rule 45 of MCDR, 1988. Out of the total 1560 Mines, the IBM has recommended the State Governments to terminate mining leases of 21 Mines.

9.15 Oral evidence on the Marble Development & Conservation Rules, 2002 and Offshore Area Minerals Concession Rules, 2006

Shri C.S.Gundewar, Controller General, IBM accompanied by S/Shri Ranjan Sahai, COM and M. Sengupta, SgMG attended the Oral evidence on the Marble Development & Conservation Rules, 2002 and Offshore Area Minerals Concession Rules, 2006 held at Parliament House Annexe, New Delhi on 20 July, 2011.

9.16 Consultative Committee meeting on Sustainable Development Framework for Mineral Sector

The Consultative Committee attached to the Ministry of Mines conducted its meeting that discussed "Sustainable Development Framework (SDF) for Mineral Sector" on 07 Sept., 2011 at Parliament House Annexe, New Delhi.

Hon'ble Minister of State for Mines (Independent Charge) Shri Dinsha Patel, chaired the Meeting. Hon'ble Members of Parliament Shri Raman Deka, Shri Sohan Potai, Shri Madhu Kora, Shri Kameshwar Baitha, Shri Amarnath Pradhan and Shri Deoraj Singh Patel were among the august assembly of members who attended the meeting.

The Hon'ble Minister of State for Mines and the Chairman of the Meeting, Shri Dinsha Patel in his opening address informed that as a sequel to the recommendations of the High Level Committee, constituted under the Chairmanship of Shri Anwarul Hoda, the then Member, Planning Commission to review National Mineral Policy, 1993, the Government had adopted National Mineral Policy 2008. The National Mineral Policy 2008 provided for evolving a framework for sustainable development and accordingly, the Ministry has brought out a Draft Sustainable Development Framework (SDF) document for Mineral Sector. He informed that the SDF incorporated not only regulatory requirements, but also goes beyond those and recommends practices and best in class aspects to address the challenges of sustainable development. It provides a path towards achieving sustainable development aided by guidance measurable outcomes and reporting assurance.

The Chairman was sanguine that the SDF would reduce environment and social conflicts in mining areas; ensure clarity for stakeholders on risk level in mining lease areas, reduce delays in obtaining clearances, cluster small operators to become more competitive and compliant, result in strong monitoring and assurance system and ensure reporting on governance and ethical practices. The Chairman sought valuable suggestions and guidance of the members to enable the Government to finalise the SDF for the mining sector of the country.

The Meeting also witnessed a presentation on the "Sustainable Development Framework for Mineral Sector" by Shri Y.G.Kale, Regional Controller of Mines. The presentation delved upon the concept of sustainable development, SDF related provisions in the National Mineral Policy 2008, important environment related Acts applicable to mining industry in the country, the existing statutory provisions for safeguarding the environment, preparation of SDF for mineral sector indicating its principles and likely outcome of SDF. The presentation also showed some of the photographs of best practices in environmental management and community development.

An interactive discussion on the issues such as the illegal mining and theft of minerals, peripheral development of mining areas, inclusion of social aspects in the SDF, poor state of reclamation and rehabilitation of the abandoned mines in the State of Jharkhand etc was held at length. The questions raised by the Hon'ble members were attended to by the senior officers of the Ministry and IBM.

The august assembly comprised distinguished members from the Ministry and IBM. Prominent among them were Shri S. Vijay Kumar, then Secretary (Mines) Shri S.K.Srivastava, then Addl. Secretary (Mines), Shri G.Srinivas, then Joint Secretary, Smt Anjali Srivastava, then Joint Secretary & Financial Advisor, Shri Suresh Kishnani, Director, Shri Chandramani Sharma, Director, Shri R.K.Malhotra, Director, Dr. H.M.S. Prakash, Director (Technical) Shri Puneet Kansal, PS to MoS, Shri A.K.Patney, Dy.Director, Shri Anil Subramaniam, Under Secretary and Smt Vijayalaxmi, Information Officer, PIB. The delegation from IBM headed by the Controller General, Shri C.S.Gundewar, included Shri Ranjan Sahai, COM and Y. G. Kale, RCOM&TS.

9.17 Zonal/Regional Heads Meeting

A meeting of the Zonal/Regional Heads of MCCM Division was held at IBM HQ under the chairmanship of Controller General, IBM on 12-13 May 2011 and 02 March 2012 at Nagpur to review the performance of Regional and Zonal Offices of MCCM Division. Accordingly, performance of Zonal/Regional offices for the year 2011-12 was reviewed. Besides, various issues related to processing of mining plan/scheme of mining/mine closure plan, illegal mining, compliance of amended Rules 42 & 45 of MCDR 1988, data entry in the MCCM database and MCAS, and other technical and administrative matters were discussed and necessary guidance was provided. Apart from the Zonal/Regional Heads, all Divisional Heads, Regional Mining Geologists of Zonal Offices and Officers in-charge of Regional Ore Dressing Laboratories attended the meeting.

9.18 Foundation Day of Indian Bureau of Mines

The Indian Bureau of Mines (IBM) was established on 01 March, 1948 in pursuance to the recommendations of the Mineral Policy Conference held on 10 & 13 January, 1947 at New Delhi. To mark the IBM foundation day, it has been decided to observe 01 March of every year as "Khanij Diwas". Accordingly, this year's 'Khanij Diwas' was observed on 1st March, 2012 at IBM Headquarters. The new precedent is to stay for the coming years, as it has been decided to observe the Foundation Day as Khanij Diwas on 1st March every year.

The Khanij Diwas held on 1st March 2012 received a good response from the serving and retired employees of IBM. The main function was held at the auditorium in which Shri H. M. Nerurkar, Managing Director, Tata Steel Ltd participated as Chief Guest and delivered a lecture on 'Sustainable Development'. Shri K. J. Singh, Chairman-cum-Managing Director, MOIL Ltd was the Guest of Honour.

Speaking on the occasion, Shri C S Gundewar,

Controller General, IBM said that as a regulator of Indian Mineral Industry, the IBM efficiently discharged its duty to promote systematic and scientific development of mineral resources. The Bureau was committed for the conservation of minerals and protection of environment through enforcement of rules and guidelines regulating the industry.

In his address, Shri Nerurkar emphasised on greater coordination between the government and the private sector for Sustainable Development in the Mining Sector.Officers and employees of IBM were present.

On the occasion, Shri Nerurkar released an IBM publication, Manual of Procedure for Chemical and Environmental Samples (Revised Edition) jointly authored by the Controller General Shri Gundewar and senior officers of Ore Dressing Divison of IBM. Later a cultural programme was organised for the IBM employees. A short film on the establishment of IBM and Controller General's who headed the IBM since 1948 was screened.

A health check-up camp was also organised for the officers and staff of the IBM.

FIMI Convention & Trade Show

9.19 A Mining Exploration Convention & Trade show was held at Bengaluru International Exhibition centre at Bengaluru from 5 – 7 Sept. 2011. Shri N P Haran, DODO, IBM, Bengaluru was nominated to attend the convention. IBM showcased its role and functions in regulating the Mining industry by putting up a stall in the Trade Show. The Bureau's publications were also kept for sale during the 3-day expo. Two officers from Publication Section and officers and staff of RODL, IBM, Bangalore participated in the exhibition. Smt G. Aruna Kumari, Honurable Minister of Mines, Govt. of Andhra Pradesh and Shri S K Srivastav, then Addl. Secretary Ministry of Mines visited IBM Stall and appreciated the work carried out by IBM. Shri C.S.Gundewar CG, IBM chaired a session and inaugurated the IBM Stall.

INTERNATIONAL FAIR STONA 2012 - 10th International Granites and Stone Fair

9.20 IBM participated in the STONA 2012 held at BIEC, Bengaluru during 1-4 Feb 2012. The IBM stall in the exhibition was inaugurated by Shri Viswapati Trivedi, then Secretary to Government of India, Ministry of Mines. IBM displayed charts regarding the functions and activities of the Bureau. Various publications of IBM were kept for sale on the occasion.

The 10th International Granites and Stone Fair (STONA 2012) is an exhibition showcasing the

Shri Vishwapathi Trivedi, then Secretary, Mines inaugurating the IBM stall at the Stona 2012, the 10th Granites and Stone Fair held at Bengaluru. Shri R.K. Sinha, Controller of Mines, Shri Haran, Deputy Ore Dressing Officer are seen.

Shri H.M. Nerurkar, MD, Tata Steel Ltd, and Shri K.J. Singh, MD, MOIL lighting the lamp to inaugurate the Khanij Diwas organised at the IBM headquarters at Nagpur on March 1, 2012. (right) Retired and serving officers and employees of IBM at the programme.

unique range of colorful, eye-catching natural stones from across the world. It is also a platform that helps in demonstrating the capabilities, capacity and the most modern and latest techniques in the craft of stone working.

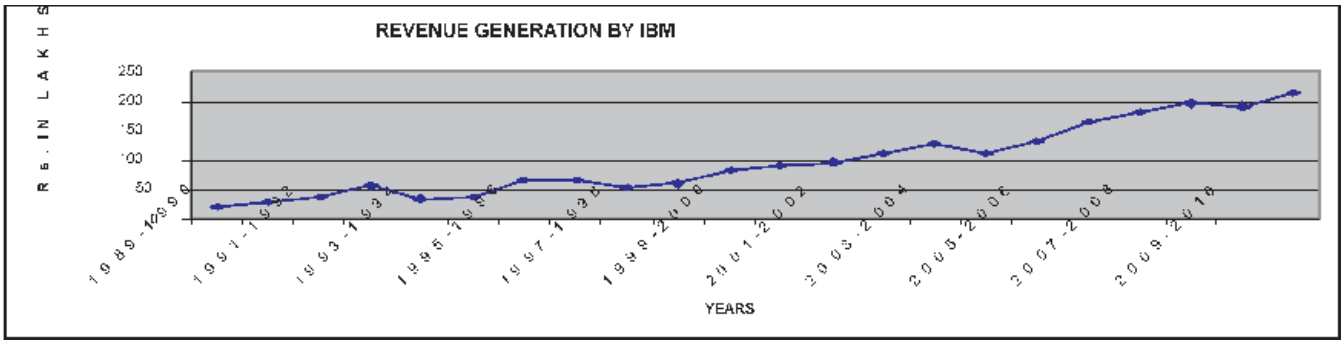
STONA 2012 was organised by All India Granites & Stone Association. The Expo witnessed participation by both national and international exhibitors and visitors. It provided an excellent and unique opportunity to showcase products in an increasingly competitive environment and interact with industry people from Italy, China, Turkey, Egypt, Japan, Korea & other European countries.

Generation of Revenue in IBM

9.21 The Indian Bureau of Mines generates revenue against the following activities:

- Beneficiation studies on low grade ores and minerals including mineralogical and chemical analysis on sponsored samples from other organisations and analysis of environmental parameters of air, water and soil.
- Technical Consultancy to Mining Industry on mining, geological, environmental and geo-technical assignments.
- Fee for processing of mining plans and scheme of mining.
- Compounding of offences under Mineral Conservation and Development Rules (MCDR) 1988.
- Sale of IBM's technical and statistical publications, mineral inventory data sheets, mineral maps and other data.

Status of revenue generated during last two decades is furnished below:



FINANCIAL YEAR	REVENUE IN LAKH RS.
1989-1990	20.33
1990-1991	28.84
1991-1992	37.06
1992-1993	55.3
1993-1994	33.34
1994-1995	37.86
1995-1996	64.81
1996-1997	65.42
1997-1998	53.05
1998-1999	59.42
1999-2000	82.84
2000-2001	90.68
2001-2002	95.55
2002-2003	111.2
2003-2004	126.21
2004-2005	109.83
2005-2006	131.27
2006-2007	163.79
2007-2008	180.26
2008-2009	196.17
2009-2010	191.65
2010-2011	214.70
2011-2012	**157.52**

Shri C.S. Gundewar, Controller General, IBM opening the IBM stall at the FIMI Convention and Trade Show organised by the Federation of Indian Mineral Industry at Bengaluru. Shri R.K. Sinha, Controller of Mines and others are seen.

Shri Y.G. Kale, RCOM & Technical Secretary presenting a paper at the MineTech'11 Seminar organised by the Indian Mining and Engineers Journal at Raipur in Chhattisgarh.

10 TRAINING CENTRE

Shri C.S. Gundewar, Controller General, IBM delivers presidential address at a Training Programme on Chemical Analysis of Ores & Minerals organised by the Training Centre, IBM at the Ore Dressing Laboratory at Hingna, Nagpur. Supertending Ore Dressing Officer Shri Mohan Ram, Director, Training & RCOM Shri Arun Prasad are seen.

The Training Centre of IBM is headed by the Director (Training)/Regional Controller of Mines. It is under the overall supervision of Controller of Mines (Planning & Co-ordination). It conducts in-house training programmes for its employees and also for persons engaged in mining industry from India and overseas with the objective to provide them adequate orientation and updation in their fields of work.

10.2 During the year 2011-12, 12 training programmes comprising 06 in-house and 06 training programmes for industry personnel, including 03 for the North-Eastern personnel, were conducted. A total of 95 IBM employees and 293 industry personnel plus 40 from North-Eastern States were benefited. A revenue of Rs. 19.35 lakhs was realised from the training programmes conducted for the industry personnel. The details of the courses conducted are as given below:

10.3 Training Programmes for IBM Personnel

(i) In-house training programmes on Annual Performance Appraisal Report (APAR) Writing was organised from 30-31 May 2011 at Nagpur in which 22 officials from IBM participated.

(ii) In-house training programmes on Preventive Vigilance to improve awareness amongst the employees was organised on 10 June 2011 at Nagpur in which 18 officials from IBM participated.

(iii) A workshop-cum-training programme on Use of Various Software like CAD/AUTOCAD etc. was organised from 08-09 Dec., 2011 at Nagpur in which 25 personnel from IBM participated.

(iv) Workshop-cum-Training programme on United Nations Framework Classification (UNFC) for the personnel from Indian Bureau of Mines (IBM) was organised between 15-16 Feb, 2012 at Nagpur in which 21 personnel participated.

10.4 Training Programme for Industry Personnel

(i) Workshop-cum-training programme on Preparation of Mining Plan, Scheme of Mining, Mine Closure Plan and Financial/Economical Aspects of Mining Projects was organised from 13-15 July, 2011 at Goa in which a total of 89 personnel from Industry participated.

(ii) Workshop-cum-training programmes on Statutory Returns under MCDR, 1988 was

organised from 11-12 August, 2011 at Ranchi, in which 66 personnel from Industry participated.

(iii) Workshop-cum-training programme on Statutory Returns under MCDR, 1988 was organised from 21-22 Sept., 2011 at Jabalpur, in which 52 personnel from Industry participated.

(iv) A Training Programme on United Nations Framework Classification (UNFC) for the officers of Directorate of Geology and Mining (DGM) was organised from 14-15 Dec., 2011 at Hyderabad, in which a total of 18 personnel from DGM and 02 personnel from Andhra Pradesh State Mineral Development Corpn. Ltd (APSMDC) participated.

(v) Workshop-cum-Training programme on Chemical Analysis of Ores & Minerals was organised from 01-02 March, 2012 at Nagpur, in which 66 personnel from Industry participated.

10.5 Training Programme for NER Personnel

(i) Workshop cum Meeting under North Eastern Special Assistance Programme was organised from 26-27 May 2011 at Imphal, Manipur in which 15 senior officers of DGMs of North Eastern States participated.

(ii) Workshop-cum-training programme on Statutory Returns & Notices under MCDR 1988 under NER Special Assistance Programme of IBM was organised from 14-15 Nov., 2011 at Itanagar (Arunachal Pradesh), in which a total of 15 personnel from NER participated

(iii) Training programme for development of Mineral Resources in North Eastern States was organised from 17-19 Jan., 2012 at Bengaluru, in which a total of 13 personnel from North Eastern States participated.

10.6 Lectures

As faculty member, Shri R.N. Meshram, CME attended a training programme on UNFC organised by GSI on 12 May 2011 at Jaipur.

Shri Mohan Ram, Superintending Ore Dressing Officer speaking at a training programme organised for the officers and staff of Ore Dressing Division at the Modern Mineral Processing and Pilot Plant at Hingna, Nagpur. (right) The participants in the training programme.

11 NORTH EASTERN REGION ASSISTANCE PROGRAMME

North Eastern States have initiated programmes to search for mineral resources and to establish mineral-based industries. Therefore, the feasibility of the development of mineral resources needs to be studied. As per the directives of the Government,10% of the allotted plan budget of IBM is being spent for the development of North-Eastern Region/States. For closer interaction with the NE States, a Sub-regional office of IBM is functioning at Guwahati since April 1998.

11.2 The IBM will continue to look after the conservation and development of mineral resources of NE States. The draft report of the Committee for Review and Restructuring of the Functions and Role of IBM has recommended to upgrade the Guwahati sub-Regional Office into a full-fledged Regional office. This will boost the mineral developmental activities in the NE States.

11.3 IBM carried out the following activities in North Eastern States in 2011-12:

1. Inspection of mines for enforcing systematic and scientific mining.
2. Imparting training to the personnel of mining industry, State Governments of NE States.
3. Taking up of consultancy assignments in mining, geology, beneficiation, environmental aspects.
4. Providing Instruments/ Equipment to the State Governments of North Eastern States to strengthen their capabilities for development of mineral resources in their states.
5. Other related assignments as and when required related to mineral development.

Sub-regional office of IBM at Guwahati continued to undertake inspection of mines/studies on development of resources of the North-Eastern region.

11.4 During the year 2011-12, 27 Mines /areas inspected for enforcement of MCDR/disposal of mining plans. Chemical analyses of 20 rock samples for 260 radicals completed for the Directorate of Commerce & Industries, Manipur.

Besides, 40 officials of NE Region were benefited from following workshop-cum-training programmes viz. (i) Workshop-cum-meeting on North Eastern Special Assistance Programmes at Imphal (ii) Workshop-cum-training programme on Statutory Returns & Notices under MCDR 1988 under NER Special Assistance Programme at Itanagar, Arunachal Pradesh and (iii) Training programme for development of Mineral Resources in North Eastern States at Bengaluru, conducted by IBM exclusively for NE personnel. Equipment/Instruments like Diamond Saw Rock Cutting Machine, Digital specific gravity Balance, Digital Theodolite, Core Cutting & Grinding Machine etc. worth Rs 12.40 Lakhs have been supplied to NER States.

12 GENERAL ADMINISTRATION

The General Administration under Planning and Coordination Division deals with the establishment matters related to recruitment, budget, finance and accounts, purchase of stores, disbursement of salary and other claims and internal audit.

12.2 It is organised into the following sections: 1. Establishment (i) Gazetted and (ii)Non-Gazetted 2.Budget 3.Cash, Accounts& Contingent Expenditure 4. Stores 5.General Administration 6.construction work of Office & residential buildings and maintenance thereof 7. Internal Audit and 8.Vigilance. It is headed by the Chief Administrative Officer under the overall supervision of Controller of Mines (P&C).

12.3 Sanctioned vis-a-vis filled Strength of IBM as on 31.3.2012.

Sr. No	Group	Sanctioned strength	Filled	Vacant
1	Group 'A'	243	162	81
2	Group 'B' (Gaz.)	177	142	35
3	Group 'B' (Non-Gaz.)	362	286	76
4	Group 'C' (Tech)	191	123	68
5	Group 'C'	504	417	87
	Total	**1477**	**1130**	**347**

12.4 During the year 2011-12, 53 new appointments, 83 promotions, 45 retirement cases were dealt. Vigorous efforts were continued to fill the vacancies reserved for Scheduled Castes and Scheduled Tribes and 10 vacant posts of OBC were notified to respective SSC.

12.5 Budget Estimates, Revised Estimates vis-à-vis Actual Expenditure for 2011-12 are as under:

Scheme-wise Financial Performance of IBM during 2011-12 is as follows:

(Rs. in lakhs)

Sl. No	Name of the Scheme / Programme	BE 2011-12	RE 2011-12	Actual Expenditure
1	Scheme No. 1: Inspection of Mines for Scientific and Systematic mining, mineral conservation and mines environment.	674.20	839.20	797.58
2	Scheme No. 2: Mineral Beneficiation Studies utilisation of low grade and sub-grade ores and analysis of environmental samples	473.70	473.70	460.31
3	Scheme No. 3: Technological upgradation and Modernisation	337.90	337.90	316.77
4	Scheme No. 4: Collection, processing, dissemination of data on mines and minerals through various publications	190.20		185.73
5	Scheme No. 5: Computerised Online Register of Mining Tenements System	150.00	150.00	96.81
6	Tribal Area Sub-Plan Tribal Welfare Fund	88.00		0.00
7	Capital Expenditure (Works Outlay)	1.00	1.00	0.86
8	Motor Vehicles	15.00		0.00
9	Machinery & Equipment	50.00	105.00	53.78
	Capital Outlay (NER)	**55.00**	**0.00**	**0.00**
	Lump-sum Provision for NER	165	0.00	0.00
	Total Plan	**2200**	**2200**	**1911.84**
	Non-Plan	**3855**	**4275**	**4261.53**
	Construction (MOUD Budget)	**100.0**	**100.0**	**0.00**

Noted activist Rekha Deodhar (second from left) at a seminar organised as part of International Women's Day at the IBM headquarters at Nagpur. Dr M.N. Gaikwad,DODO, Dr Sandhya Lal, Smt Varsha Gharote, Mineral Officer, Bhavika Ramteke, Deputy Ore Dressing Officer are seen.

12.6 All India IBM Sports Meet

The 22nd All India IBM Sports Meet 2011-12 was held at Rani Taal Stadium, Jabalpur, Madhya Pradesh during 08-10 February 2012. About 150 participants from all the Zonal/Regional offices, Regional Ore Dressing Laboratories and IBM headquarters participated in the Sports Meet. Volley Ball, Table Tennis, Badminton, Carrom, Chess and Track and Field events were conducted. Shri C.S. Gundewar, Controller General, IBM, who was the chief guest inaugurated the Sports Meet. In the concluding function, prizes were distributed and the team from Nagpur (HQ) emerged overall champion.

Redressal of Grievances & Welfare Measures

Work Done Concerning Women (Perspective Plan for Women)

12.7 Indian Bureau of Mines works on the principle of equal opportunity to all. Based on this, out of a total strength of employees, women employees constitute about 9.25 per cent. Training is imparted to women employees in the field of technical as well as administrative matters. Women employees are also actively participating in various cultural and extracuricular activities organised by IBM from time to time.

International Women's Day in IBM

12.8 Under the National Policy for Women, a two day programme to celebrate International Women's Day was organised at IBM Headquarters, Nagpur on 13 & 14 March, 2012. A workshop on "Assertive Training for Women" was organised on 13 March 2012. A Series of lectures by eminent personalities were also arranged during the two-day programme on subjects related to all round development of women as well as women's problems. Large number of women employees attended the lecture programme.

Committee to redress complaint regarding sexual harassment of women in the workplace

12.9 To ensure a safe, secure and healthy environment for women at the workplace, as per directions of Hon'ble Supreme Court, a complaint committee has been constituted in IBM. Committee functions to redress the complaints made by the victims of sexual harassment at work place in a time bound manner.

Dr.(Mrs.) M.N.Gaikwad, Deputy Ore Dressing Officer, Indian Bureau of Mines has been nominated as Chairperson of the committee. Contact address of Dr.(Mrs.) M.N.Gaikwad is as given below:

Shri C.S. Gundewar, Controller General, IBM addressing the gathering at the International Women's Day celebration organised at the IBM headquarters at Nagpur. (right) A section of the gathering.

Dr.(Mrs.) M.N.Gaikwad ,
2nd Floor, 'B' Block,
Indira Bhavan,
Civil Lines,
Nagpur - 440 001.

Telephone Nos.
0712-2565024
0712-2565500-PBX
Extn. 1224
Fax.: 0712 2562631

Measures for persons with Disabilities

12.10 IBM is strictly following the various instructions of the Government from time to time regarding reservation of vacancies for persons with physical disabilities. As on 31.3.2012, 17 physically handicapped persons were under employment in IBM of which 04 are visually handicapped 02 is hearing handicapped and 11 are orthopaedically handicapped.

Liaison Officer for SC/ST/OBC and PWD

12.11 Shri G.S.Bihari, Senior Mining Geologist has been nominated as Liaison Officer for SC/ST/OBC and PWD to look after the welfare measures. Contact address of Shri G.S.Bihari, Liaison Officer for SC/ST/OBC and PWD is as given below:

Shri G.S.Bihari,
1st Floor, 'A' Block,
Indira Bhavan,
Civil Lines,
Nagpur - 440 001.

Telephone Nos.
0712-2565794
0712-2565500-PBX
Extn. 1106

Redressal of Public Grievances

12.12 There is a Public Grievances Cell in IBM for taking care of Grievances of service matters of employees and also public. Shri A.M.Kamble, Regional Mining Geologist, Indian Bureau of Mines, is nominated as Director of Grievances. Contact address of Shri A.M.Kamble, Director of Grievances is as follows:

Shri A.M.Kamble,
7th Floor, 'D' Block,
Indira Bhavan,
Civil Lines,
Nagpur - 440 001

Telephone Nos.
0712-2562143
0712 2565496
2560544-PBX
Extn. 1702
Fax. 0712 2562143
E- mail mmcell_ibm.gov.in

At the beginning of the year, 05 grievance cases were pending. During the year 2011-12, one case was received, one case was disposed off and remaining five cases are under processing. Online facility for Registration for Public Grievances has already been provided by linking IBM website with the Grievance Portal of DoPT "Central PGRAMS".

Vigilance cases

12.13 During the year 2011-12, 20 complaints were received of which 15 were brought to the logical conclusion and closed after investigation. Four complaints were sent to administration for necessary action and remaining one case was under investigation. 265 Vigilance Clearance Certificates and 179 Integrity Certificates were issued in favour of officers and staff in this period.

12.14 Vigilance Awareness Week was observed in the IBM HQ at Nagpur and in all the Regional Offices

The members of IBM Employees Association discuss the Union's issues with Shri Vishwapathi Trivedi, then Secretary, Mines during the latter's visit to the IBM headquarters at Nagpur. Controller General Shri C.S. Gundewar, then Joint Secretary, Mines G. Srinivas are seen.

during 31 Oct 2011 to 05 November 2011. During the Week, essay and debate competitions on vigilance awareness were conducted.

National Integration (Quami Ekta) Week

12.15 As per directions of Government of India, 19th November, Birthday of Late Prime Minister of India, Mrs Indira Gandhi was observed as National Integration (Quami Ekta) day. The employees took a pledge of National Integration. A number of programmes were organised from 19.11.2011 to 25.11.2011 on the themes of National Integration, Minority welfare, Weaker Section, Cultural Unity, Women & defence etc.

Right to Information Act, 2005

12.16 Consequent to the enactment of the Right to Information Act, 2005, IBM has been receiving various requests under RTI Act which are timely responded to. At the beginning of the year 2011-12, 127 applications were pending and during the year, 484 applications were received. 470 applications were disposed off within the stipulated time frame and out of this, 53 applications for information were rejected. Similarly, at the beginning of the year, 19 first appeals were pending and during the year fresh 72 first appeals were received. 70 first appeals were disposed off within the stipulated time frame and out of this, 10 were rejected.

13 COMPUTERISATION IN IBM

Shri Dinsha J.Patel, Minister of Mines chairing a meeting during a programme to launch the Computerised Online Register of Mining Tenement System at New Delhi. Shri Vishwpati Trivedi, then Secretary,Mines, Shri S.K. Srivastava, then Additional Secretary, Shri C.S. Gundewar, Controller General, IBM, Shri Ranjan Sahai, Controller of Mines, Shri Y.G. Kale, TS & RCOM are seen.

Historical Background of Computerization in IBM

The history of computerisation in IBM can be traced back to early seventies of the last century. The computerisation in IBM started with a small punch card system under the control of the Mineral Statistics Section of the erstwhile Mineral Economics Division. The work of this erstwhile division grew many folds and a Mineral Statistics section was upgraded to Mineral Statistics Division.

13.2 Development of MRIS Database

After this era, the better version of computers and system software was introduced into the computer centre and working on client-server architecture was commenced through the local area network (LAN). During those days IBM had National Mineral Inventory (NMI), Mining Lease (ML), Mine-cum-Production (MCP), External Trade (ET), Mineral Consumption (MC) and World Mineral Intelligence (WMI) database modules.

13.3 Establishment of TMIS Database

The MCCM module was designed and developed as per the provisions of Mineral Conservation & Development Rules, 1988. The already existing database modules of the erstwhile MRIS were modified and the new relational database management system was developed under client-server architecture. This new system was named as Technical Management Information System (TMIS). There are seven databases in TMIS database system.

TECHNICAL MANAGEMENT INFORMATION SYSTEM (TMIS): Under TMIS project, the then existing database were upgraded to higher version of software. These databases are:

1. National Mineral Inventory (NMI)
2. Mines-cum-Production (MCP)
3. Mining Leases (ML)
4. Mineral Consumption (MC)
5. External Trade (ET)
6. World Mineral Intelligence (WMI)
7. MCCM Database.

1. National Mineral Inventory (NMI) Database: It is a database of mineral deposits. It contains inventory information of 65 mineral commodities. It covers about 16000 deposits including free-hold and lease-hold areas.

2. Mining Leases (ML)Database: This is a database of mining leases and prospecting licences. It covers information on mining leases for major minerals. The database is based on the data received from the State Directorates of Geology and Mining.

3. Mineral Consumption (MC) Database: This database contains data pertaining to consumption of mineral raw material in different industries. Data is useful for projection of future demands, formulation of industrial policy, identifying priority areas for exploration, monitoring consumption norms, R&D activities in the field of substitution, etc. Mineral consumption data is collected from about 3000 consuming plants on non-statutory basis annually.

4. World Mineral Intelligence (WMI) Database: It contains information on foreign trade, mineral production, consumption, mineral resources of various countries. Each record of WMI database includes information on commodity name, country, exports, imports, prices, production, consumption, reserves, resources, beneficiation plant, source of information, etc.

5. Mines-cum-Production (MCP) Database: This database is maintained by MMS Division. This database maintains the information received, in the form of monthly, annual & explosive returns from 3000 mines in pre-specified formats, under Rule 45 of the MCDR, 1988. Data received are processed for input of various publications namely, Monthly Statistics of Mineral Production (MSMP), Statistical Profiles of Minerals, Indian Mineral Industry at a Glance, Indian Minerals Year Book (IMYB) & Mine Directory.

6. External Trade (ET) Database: Data received from DGCIS Kolkata, is compiled on Indian Trade Classification based on Harmonised Commodity Description and Coding System (ITC(HS)), exports and imports for about 1300 commodities for minerals, metals and selected mineral-based products. Generation of various output for import-export in respect of minerals, metals and selected mineral-based products.

7. MCCM database is designed & developed to administer the MCDR'88 for monitoring the Mining activities of the country through MCCM division.

The main components of MCCM database are data contained in Prospecting License, Mining Plan, MCDR Inspection. In addition, data generated through MCDR Inspection and information received through Statutory Notices and also the main aspect of activity of IBM officers (individual activity) and offices (collective results) are included in MCCM database.

Under TMIS, all these databases on mines and minerals are maintained and IBM website and Web portal are regularly updated.

13.4 Website

A new Web Portal of IBM, www.ibm.gov.in was designed by National Informatics Centre (NIC) as per the guidelines of Government of India and hosted on its server in July, 2010. Information regarding IBM's history, functions, organisation, divisions of IBM and its activities, jurisdiction of regional & zonal offices, services offered by IBM, Mining Plans – guidelines/formats/circulars thereof, RQPs - guidelines/formats thereof, UNFC guidelines, Mining Laws, Mineral Information like mineral reserves, value, royalty and dead rent, details of reconnaissance permits, threshold values, notices & returns under MCDR,1988 Mining Leases distribution data, Indian Mineral Year Books, Bulletin of Mining Leases & Prospecting Licences, Bulletins of Mineral Information, Offshore Mineral Concession Rules, Notification & Form G thereof, Tenders, RTI information, Photo gallery, etc., have been displayed on the web portal. There is also provision for online submission of vigilance complaints and Grievances.

13.5 Computerised Online Register of Mining Tenements System

A scheme on Computerised Online Register of Mining Tenements system was taken up by the IBM during the programme year 2009-10.

The objective of the Scheme is to develop an online National Mineral Information System for investors by linking Central and State organizations engaged in administration of mineral resources in the country. The project comprised of GIS and Registry parts. The approved funds will be utilised for implementation of the project in mineral rich states i.e. Andhra Pradesh, Chhattisgarh, Goa, Gujarat, Jharkhand, Karnataka, Kerala, Maharashtra, Madhya Pradesh, Odisha, Rajasthan and Tamil Nadu.

The MTS has been envisaged by the Government to automate the various processes associated with the mineral concession regime. This would not only give an impetus to the decision making process but is also expected to meet the ends of transparency and openness. The MTS will not only enable online filing of applications but it will also be possible to identify online the areas for various types of mineral concessions. This would involve integration of web-based technology services with Geographical Information System (GIS), so that information could be shown spatially in the form of maps. IBM has been nominated by the Ministry as the Nodal Implementing Agency for the project.

The project for preparation of DPR has been formulated and the consultant for DPR preparation was appointed in May 2011. The inception report covering As-is-study of Ministry and IBM is complete and approved by the Ministry.

The MTS will be implemented in a phase-wise manner. Initially, it will be implemented in 12 mineral-rich States viz, Andhra Pradesh, Chhattisgarh, Goa, Gujarat, Maharashtra, Madhya Pradesh, Odisha, Jharkhand, Karnataka, Kerala, Rajasthan and Tamil Nadu.

The Project will be implemented in three phases. In phase I, the registry component of Central Database will be developed covering aspect of registration, returns, revision, inspection, mining plan approval and mine closure plan approval. The state specific registry components would be developed in phase II and phase III will be devoted for GIS component. Some parts of GIS components can be taken up simultaneously along with development of Phase I and Phase II. Draft MOU has been prepared by M/s E&Y and is under examination.

An umbrella software will be developed for all States. The project will be implemented by adopting the cafeteria approach wherein the system is developed for pilot locations and latter other States are free to choose the software package as per their requirements. As per the individual need and strategy of each State, the services can be opted and payment can be done for the limited package opted by the State. The project DPR is ready and RFP is under finalisation for selection of vendor.

13.6 IBM has implemented "IT Infrastructure Security Policy (version 1.0 of 2006)" with a view to implementing Information Security to safeguard information infrastructure from possible attack through Internet or corruption, compromise of data etc.

Mineral Concession Approval System (MCAS)

IBM module of MCAS developed by NIC is related to data on RP/PL/ML areas as a part of the extension of existing mineral concession approval system, which is in operation at Ministry of Mines. This module covers data pertaining to letter of intent (LOI) MP/SOM, grant of concessions and renewals by State Government, filing returns, etc. This online mineral concession system is mainly developed for monitoring the status of Mineral Concession granted/renewed by the Ministry of Mines. This system has already gone online from 2010 and can be accessed at www.mcas.nic.in.

This Module is an online database which has to be logged in with appropriate user name & password and data has to be entered into certain sub modules. The main IBM Module comprises:

i) Add Concession (LOI)

ii) Update concession (extension of LOI, etc,)
iii) MP/SOM/PMCP/FMCP
iv) Grant of concession/renewals (RP/PL/ML)
v) Update grant/renewal
vi) Commencement of mining operation
vii) Annual returns (RP & PL)
viii) Current status of the Mineral Concession granted/ renewed

IBM report Module was also developed to see the various outputs generated by the data entry made under this Module:

i) MP/SOM Status
ii) PL/RP status
iii) LOI status reports
iv) Status of a concession/mine

IBM has already directed all its Regional Offices that "after disposal of mining plans/ modified mining plans, the necessary entries should invariably be made in the Mineral Concession Approval System (MCAS) database before it is issued to the respective applicant". Henceforth, all mining plan details including approvals, modifications, rejections etc. will be available in the portal.

14 हिन्दी अनुभाग

भारतीय खान ब्यूरो के अयस्क प्रसाधन प्रभाग के एम.आय.डी.सी. हिंगणा स्थित कार्यालय में आयोजित हिन्दी पखवाड़ा में अध्यक्षीय भाषण देते हुए महानियंत्रक श्री सी.एस.गुंडेवार तथा उपस्थित अन्य गणमान्य अधिकारी.

भारत सरकार की राजभाषा नीति के कार्यान्वयन में भारतीय खान ब्यूरो सतत प्रगतिशील पथ पर अग्रणीय है । ब्यूरो का मुख्यालय ख क्षेत्र में स्थित है । क क्षेत्र में 5 कार्यालय तथा शेष कार्यालय ग क्षेत्र में स्थित हैं। जहां तक क क्षेत्र का सवाल है वहां सभी कार्यालयों द्वारा राजभाषा विभाग द्वारा निर्धारित लक्ष्य के अनुसार पत्राचार किया गया एवं हिंदी के प्रचार एवं प्रसार के लिए अन्य विविध कार्यक्रमों का आयोजन किया गया । ख क्षेत्र मुख्यालय में भी हिंदी से संबंधित अनेक कार्यक्रम आयोजित किए गए तथा हिंदी पत्राचार का लक्ष्य लगभग प्राप्त कर लिया गया है । उल्लेखनीय है कि भारतीय खान ब्यूरो के क एवं ख क्षेत्र स्थित सभी कार्यालय नियम 10(4) के अंतर्गत अधिसूचित हैं । ख क्षेत्र स्थित कार्यालय में भी सरकार द्वारा निर्धारित लक्ष्य के अनुसार हिंदी में पत्राचार किया तथा अन्य हिंदी से संबंधित गतिविधियां जैसे हिंदी पखवाड़ा आदि का आयोजन किया गया । ग क्षेत्र में ब्यूरो के दो कार्यालयों को छोड़कर सभी कार्यालय नियम 10(4) के अंतर्गत अधिसूचित हैं । वर्ष 2011–12 के दौरान हिंदी से संबंधित प्रगति का विवरण निम्नवत है।

1. मुख्यालय में विभागीय राजभाषा कार्यान्वयन समिति की बैठक – दिनांक 6.6.2011 को महानियंत्रक, भारतीय खान ब्यूरो की अध्यक्षता में 86वीं राजभाषा कार्यान्वयन समिति की बैठक का आयोजन किया गया। इस बैठक में पिछले बैठक के कार्यवृत्त की पुष्टि की गई । इस दौरान मुख्यालय एवं ब्यूरो के सभी अधीनस्थ कार्यालयों की हिंदी की प्रगति संबंधी 31 दिसंबर 2010 एवं 31 मार्च 2011 को समाप्त हिंदी प्रगति रिपोर्टों की समीक्षा की गई ।

इसी प्रकार दिनांक 28.3.2012 को राजभाषा कार्यान्वयन समिति की 87 बैठक का आयोजन महानियंत्रक भारतीय खान ब्यूरो की अध्यक्षता में किया गया ।इस बैठक में समिति द्वारा पिछली बैठक के कार्यवाही की पुष्टि की गई साथ ही अन्य महत्वपूर्ण विषयों जैसे हिंदी प्रगति रिपोर्ट की समीक्षा, हिंदी शिक्षण एवं प्रशिक्षण की स्थिति, हिंदी पुस्तकों की खरीद मुख्यालय एवं क्षेत्रीय कार्यशालाओं का आयोजन, राजभाषा तकनीकी सेमिनार का आयोजन, फाइल कवर पर द्विभाषी शीर्षक लिखा जाना आदि पर विचार विमर्श किया गया तथा अध्यक्ष महोदय द्वारा उचित निर्देश भी दिए गए । साथ ही मुख्यालय सहित सभी क्षेत्रीय कार्यालयों में भी राजभाषा कार्यान्यन समिति की बैठकों का नियमित आयोजन किया जाता है और रिपोर्ट मुख्यालय को भेजी जाती है ।

2. मुख्यालय में हिंदी पखवाड़े का आयोजन : भारतीय खान ब्यूरो मुख्यालय में दिनांक 2 सितम्बर 2011 से 15 सितम्बर 2011 तक हिंदी पखवाड़े का आयोजन किया गया । दिनांक 2 सितम्बर 2011

भारतीय खान ब्यूरो मुख्यालय में आयोजित हिन्दी पखवाड़े में उपस्थितों को संबोधित करते हुए खान नियंत्रक श्री रंजन सहाय. मंचासीन महानियंत्रक श्री सी.एस.गुंडेवार, हिन्दी राजभाषा अधिकारी श्री.आर.एन.शर्मा तथा क्षेत्रीय खान नियंत्रक श्री सहस्त्रबुद्धे.

को हिंदी पखवाड़े के उद्घाटन अवसर पर सभा को संबोधित करते हुए श्री एम.के. पराशर, खान नियंत्रक (समन्वय) ने अधिकाधिक कार्यालयीन कार्य हिंदी में ही करने पर बल दिया । इसके पूर्व सहायक निदेशक (राजभाषा) द्वारा भारतीय खान ब्यूरो कार्यालय की हिंदी प्रगति रिपोर्ट प्रस्तुत की गई जिसके अंतर्गत वर्ष भर का लेखाजोखा प्रस्तुत किया गया ।

हिंदी पखवाड़े के दौरान विभिन्न प्रतियोगिताओं जैसे हिंदी निबंध, टिप्पण आलेखन, हिंदी टंकण, हिंदी सुलेखन, परिसंवाद एवं तात्कालिक भाषण आदि का आयोजन किया गया । हिंदी पखवाड़े के सभी कार्यक्रम श्री एम.वी.सहस्त्रबुद्धे राजभाषा अधिकारी एवं श्री आर.एन. शर्मा सहायक निदेशक (राजभाषा) के मार्गदर्शन में आयोजित किए गए ।

हिंदी पखवाड़े के समापन एवं पुरस्कार वितरण समारोह का आयोजन दिनांक 15/9/2011 को किया गया । समापन समारोह की अध्यक्षता श्री एम.के. पराशर खान नियंत्रक (समन्वय) ने की । इस अवसर पर सहायक निदेशक (राजभाषा) श्री आर.एन. शर्मा भी उपस्थित थे । श्री एम.के. पराशर के कर कमलों द्वारा विभिन्न प्रतियोगिताओं के विजयी प्रतियोगियों को पुरस्कारों से सम्मानित किया गया । भारतीय खान ब्यूरो में सफलता पूर्वक मनाया गए हिंदी पखवाड़े के उद्घाटन एवं समापन समाचार को नागपुर से प्रकाशित होने वाले प्रमुख अखबारों में प्रमुखता से प्रकाशित किया गया ।

3. मुख्यालय में हिंदी दिवस का आयोजन : दिनांक 14 सितम्बर 2011 को भारतीय खान ब्यूरो मुख्यालय में हिंदी दिवस समारोह का आयोजन किया गया । इस अवसर पर माननीय गृह मंत्री पी चिदम्बरम का संदेश श्री दासगुप्ता प्रशासन अधिकारी द्वारा पढ़ा गया । माननीय गृह मंत्री ने हिंदी दिवस के अवसर पर बधाई देते हुए अपने संदेश में कहा कि सहज सरल और बोलचाल की हिंदी ही समाज के विभिन्न वर्गों के लोगों में लोकप्रिय होगी और सतत व स्थाई रूप से और अधिक विशाल क्षेत्रों में प्रयोग में लाई जाएगी । आज के समय में हिंदी भाषा और सूचना एवं प्रौद्योगिकी में निकट और सहजीवी संबंध विकसित होने की संभावना है ताकि हमारे देश के नागरिक विभिन्न क्षेत्रों में ज्ञान के विपुल भंडार का लाभ उठा सके ।

4. खान मंत्रालय की हिंदी सलाहकार समिति की बैठक : खान मंत्रालय की हिंदी सलाहकार समिति की बैठक का आयोजन दिनांक 15/06/2011 को नई दिल्ली में माननीय खान मंत्री की अध्यक्षता में किया गया । इस बैठक में सांसद सदस्यों के अलावा खान मंत्रालय के उच्च अधिकारी एवं विभिन्न विभागों के प्रमुख भी शामिल थे । भारतीय

हिन्दी अनुभाग

हिन्दी पखवाड़ा प्रतियोगिता के पुरस्कार वितरण समारोह में क्षेत्रीय खान नियंत्रक श्री एम.के.पराशर विजेताओं को पुरुस्कृत करते हुए. इस समय क्षेत्रीय खान नियंत्रक श्री सहस्त्रबुद्धे तथा हिन्दी राजभाषा अधिकारी श्री आर.एन.शर्मा उपस्थित थे.

खान ब्यूरो की ओर से माननीय महानियंत्रक महोदय श्री सी.एस. गुंडेवार व राजभाषा अधिकारी श्री एम.वी. सहस्त्रबुद्धे ने इस बैठक में भाग लिया ।

तत्पश्चात दिनांक 17/10/2011 को खान मंत्रालय की हिंदी सलाहकार समिति की एक अन्य बैठक का आयोजन बेंगलौर में माननीय खान राज्य मंत्री (स्वतंत्र प्रभार) श्री दिनशा पटेल की अध्यक्षता में किया गया । सलाहकार समिति की बैठक में भारतीय खान ब्यूरो नागपुर से श्री सी.एस. गुंडेवार महानियंत्रक एवं श्री आर.के. सिन्हा खान नियंत्रक (दक्षिण) ने भाग लिया ।

माननीय खान राज्य मंत्री (स्वतंत्र प्रभार) श्री दिनशा पटेल ने अपने अध्यक्षीय संबोधन में कहा कि खान मंत्रालय द्वारा राजभाषा हिंदी का प्रयोग बढ़ाने के लिए निरंतर प्रयास किए जा रहे हैं । उन्होंने कहा कि हिंदी के प्रयोग को त्वरित गति से बढ़ाने के लिए यह जरूरी है कि उसमें सहज एवं सरल शब्दों का प्रयोग किया जाए तथा इसमें दूसरी भाषाओं के शब्दों को भी ग्रहण किया जाए । इस अवसर पर अन्य सदस्यों ने भी अपने विचार व्यक्त किए । उपस्थित महत्वपूर्ण सदस्यों में श्री भोलासिंह (संसद सदस्य), श्री रमेश बैस (संसद सदस्य) एवं श्री आर.सी. सिहं (संसद सदस्य) थे । उक्त बैठक के कार्यवृत्त पर अनुवर्ती कार्रवाई खान मंत्रालय को भेज दी गई है ।

5. हिन्दी प्राज्ञ कक्षाओं का आयोजन : भारतीय खान ब्यूरो मुख्यालय में समूह घ से समूह ग में आए कर्मचारियों के लिए जुलाई 2011 में हिंदी प्राज्ञ कक्षाएं संचालित की गई । हिंदी प्राज्ञ कक्षाओं का संचालन हिंदी शिक्षण योजनाओं के सौजन्य से हुआ । इसमें मुख्यालय स्थित विभिन्न प्रभाग/अनुभाग से नामित कुल 16 कर्मचारियों को हिंदी प्राज्ञ का प्रशिक्षण दिलाया गया । हिंदी प्राज्ञ गहन प्रशिक्षण के बाद इसकी परीक्षा दिनांक 29/11/2011 को भारतीय खान ब्यूरो मुख्यालय में ही आयोजित की गई । परीक्षा में शामिल सभी परीक्षार्थियों ने परीक्षा में सफलता प्राप्त की । इन सभी सफल परीक्षार्थी को नियमानुसार व्यैक्तिक वेतन एवं नकद पुरस्कार प्रदान किया गया ।

6. अनुवाद कार्य : वर्ष के दौरान विभिन्न महत्वपूर्ण तकनीकी एवं प्रशासनिक दस्तावेजों का हिंदी अनुवाद किया गया। वर्ष 2012–13 के लिए आउट कम बजट एवं खान मंत्रालय की वार्षिक रिपोर्ट का हिंदी अनुवाद किया गया । इसके अतिरिक्त 80 पृष्ठों के राष्ट्रीय खनिज नीति 2008 का हिंदी अनुवाद किया गया । साथ ही करीब 250 पृष्ठों के जस्टिस एम बी शाह जांच आयोग की अंतरिम रिपोर्ट का अनुवाद हुआ । इसके अतिरिक्त समय समय पर खान मंत्रालय से प्राप्त विभिन्न दस्तावेजों का भी हिंदी अनुवाद कर यथा समय खान मंत्रालय को प्रेषित किया गया ।

7. नराकास नागपुर के तत्वावधान में आयोजित प्रतियोगिताओं में भारतीय खान ब्यूरो की सहभागिता : नराकास नागपुर के तत्वातवधान

भारतीय खान ब्यूरो क्षेत्रीय कार्यालय अजमेर में हिन्दी पखवाड़ा कार्यक्रम में उपस्थित अधिकारीगण. (दाएं) भारतीय खान ब्यूरो क्षेत्रीय कार्यालय बैंगलूर में हिन्दी पखवाड़ा कार्यक्रम में अध्यक्षीय भाषण देते हुए खान नियंत्रक श्री आर.के.सिन्हा.

में आयोजित विभिन्न प्रतियोगिताओं में भारतीय खान ब्यूरो के अधिकारी एवं कर्मचारी प्रमुखता से भाग लेते हैं । नराकास नागपुर द्वारा दिनांक 21.11.2011 से 15.12.2011 तक अंतरकार्यालयीन हिंदी प्रतियोगिताएं आयोजित की गई जिसमें भारतीय खान ब्यूरो के अधिकारियों एवं कर्मचारियों ने उत्साह पूर्वक भाग लिया । विजेता कार्मिकों को नराकास के पुरस्कार वितरण समारोह में पुरस्कार प्रदान कर सम्मानित किया गया । प्रमुख विजेताओं में श्री मुजीब सिददीकी, श्री चन्द्रशेखर तिवारी, श्री विनय कुमार सक्सेना, श्रीमती आर.एस. माकोडे एवं श्री पी. मुखर्जी हैं ।

8. नराकास नागपुर की छः माही बैठक में भारतीय खान ब्यूरो की प्रतिभागिता : नराकासनागपुर द्वारा आयोजित छः माही बैठक में भारतीय खान ब्यूरो नियमित रूप से सहभागिता करता है ।

9. हिंदी प्रोत्साहन पुरस्कार वर्ष 2010–11: वर्ष 2010–11 के लिए हिंदी प्रोत्साहन पुरस्कार योजना में भारतीय खान ब्यूरो के 9 कार्यालयों के कुल 41 कर्मचारियों ने भाग लिया । उन्हें हिंदी टिप्पण एवं आलेखन हेतु प्रथम द्वितीय एवं तृतीय पुरस्कार प्रदान किए गए ।

10. संसदीय राजभाषा समिति द्वारा गोवा क्षेत्रीय कार्यालय का निरीक्षण : संसदीय राजभाषा समिति की तीसरी उप समिति द्वारा दिनांक 18.1.2012 को गोवा क्षेत्रीय कार्यालय का राजभाषा निरीक्षण किया गया । उक्त बैठक में भारतीय खान ब्यूरो मुख्यालय से श्री एम. के. पराशर खान नियंत्रक (समन्वय) एवं श्री रामनारायण शर्मा उप–निदेशक (राजभाषा) ने भाग लिया ।

भारतीय खान ब्यूरो के क्षेत्रीय कार्यालयों में हिंदी कार्यशालाओं का आयोजन

वर्ष के दौरान निम्नलिखित क्षेत्रीय कार्यालयों में हिंदी कार्यशालाओं का आयोजन किया गया –

1 कोलकाता क्षेत्रीय कार्यालय कोलकाता क्षेत्रीय कार्यालय में दिनांक 17.10.2011 से 20.10.2011 तक चार दिवसीय हिंदी कार्यशाला का आयोजन किया गया, जिसमें उक्त कार्यालय के अधिकारियों/कर्मचारियों ने भाग लिया ।

2 उदयपुर क्षेत्रीय कार्यालय : उदयपुर क्षेत्रीय कार्यालय में दिनांक 16.11.2011 से 17.11.2011 तक दो दिवसीय हिंदी कार्यशाला का आयोजन किया गया, जिसमें उक्त कार्यालय के अधिकारियों/कर्मचारियों ने भाग लिया ।

3 हैदराबाद क्षेत्रीय कार्यालय : हैदराबाद क्षेत्रीय कार्यालय में दिनांक 16.02.2012 से 17.02.2012 तक दो दिवसीय हिंदी कार्यशाला का आयोजन किया गया, जिसमें उक्त कार्यालय के अधिकारियों/कर्मचारियों ने भाग लिया ।

4 अजमेर क्षेत्रीय कार्यालय : अजमेर क्षेत्रीय कार्यालय में दिनांक 22.02.2012 से 23.02.2012 तक दो दिवसीय हिंदी कार्यशाला का आयोजन किया गया, जिसमें उक्त कार्यालय के अधिकारियों/कर्मचारियों ने भाग लिया ।

5 देहरादून क्षेत्रीय कार्यालय : देहरादून क्षेत्रीय कार्यालय में दिनांक 1.3.2012 से 2.3.2012 तक दो दिवसीय हिंदी कार्यशाला का आयोजन किया गया, जिसमें उक्त कार्यालय के अधिकारियों/कर्मचारियों ने भाग लिया ।

ANNEXURES

1 COMPOSITION OF IBM ADVISORY BOARD*

Chairman

1. Secretary,
   Ministry of Mines,
   Shastri Bhavan, New Delhi 110115.

Members

2. Sp. Secretary/Additional Secretary,
   Ministry of Mines
   Shastri Bhavan, New Delhi 110115.

3. Additional/Joint Secretary & Financial Advisor,
   Ministry of Mines.
   Shastri Bhavan, New Delhi 110115.

4. Joint Secretary (In charge, IBM),
   Ministry of Mines
   Shastri Bhavan, New Delhi 110115.

5. Director/Deputy Secretary (In charge of IBM),
   Ministry of Mines
   Shastri Bhavan,
   New Delhi 110115.

6. Controller General,
   Indian Bureau of Mines,
   Civil Lines, Nagpur 440001.

7. Director General,
   Geological Survey of India,
   27, J.L.Nehru Road, Kolkata 700016.

8. Director General,
   Directorate of Mines Safety,
   Dhanbad.

9. Adviser(I &M),
   Planning Commission,
   Yojna Bhavan, Sansad Marg,
   New Delhi.110001.

10. A Representative of Ministry of Steel, Udyog Bhavan, New Delhi.

11. A Representative of Department of Science & Technology,New Delhi.

12. A Representative of Ministry of Environment & Forests, New Delhi.

13. President/Secretary General,
    Federation of Indian Mineral Industries,
    301, Bakshi House, 40-41.
    Nehru Place, New Delhi110019.

14. A Representative of Government of Odisha.

15. A Representative of Government of Chhattisgarh.

16. A Representative of Government of Gujarat.

17. A Representative of Government of Andhra Pradesh.

18. A Representative of Government of Rajasthan.

19. A Representative of Government of Karnataka.

20. A Representative of Government of Goa.

21. Chairman-cum-Managing Director,
    Hindustan Copper Limited, Kolkata.

22. Chairman-cum-Managing Director, National Aluminium Company Ltd., Bhubaneshwar.

23. Chairman-cum-Managing Director,
    MOIL Ltd. Nagpur.

24. Director,
    National Metallurgical Laboratory,
    Jamshedpur.

25. Director,
    Indian School of Mines, Dhanbad.

26. Professor,
    Department of Mining, VNIT, Nagpur.

27. Any other member as special invitee.

28. **Member Secretary**
    Technical Secretary to Controller General,
    Indian Bureau of Mines, Nagpur.

* Present composition of IBM Advisory Board as per Resolution No.35/1/2011-M.III dated 3rd July, 2012.

2 ORE DRESSING INVESTIGATIONS COMPLETED

NAGPUR	
1934 F/C	Bench-scale beneficiation studies on a Composite iron ore sample (No.7) from Chiria deposit, Dist. West Singhbhum, Jharkhand of M/s Steel Authority of India Limited (SAIL), for M/s HATCH. Associates India Pvt. Ltd, Haryana.
1935 F/C	Bench-scale beneficiation studies on a Iron Ore Fines sample from Noamundi Iron Ore Mines for M/s Tata Steel Ltd, Raigarh distt. Maharashtra.
1936 L/C	Various physical tests conducted on Blended iron Ore (HLO:LO:LGO:SLO:BIS) sample from Chiria for M/s HATCH. Associates India Pvt. Ltd, Haryana.
1937 F/C	Beneficiation studies on Kynatie sample from Navargaon, Chowa mines, Bhandara distt. MS for M/s MSMC.
1938 F/C	Beneficiation of China clay sample from Gua Iron Ore Mine, West Singhbhum distt., Jharkhand for SAIL.
1939 F/C	Beneficiation studies on Limestone sample No.(4) from Limestone Mines, Satna distt., M.P. for M/s Prism Cement Ltd, Satna, MP.
1940 F/C	Beneficiation studies on a Limestone sample No.(3) from Satna distt., M.P. for M/s Prism Cement (Limestone mines) Ltd Satna, MP.
1941 F/C	Bench-scale beneficiation studies on a Limestone sample (Sample No.2) from Prism Cement Limestone Mines, Distt. Satna, Madhya Pradesh for M/s Prism Cement Ltd.
1942 F/C	Beneficiation studies on a Low Grade Limestone sample (NP III-06) from Limestone Mines, Distt. Satna, Madhya Pradesh for M/s Prism Cement Ltd, Satna, MP.
1943 3 L/C	Flotation Test on Fly Ash Sample (three limited test) from ACC, Chaibasa, Jharkhand.
1944 F/C	Beneficiation of Sandy Clay sample from Bahadurgarh distt. Haryana for Hindustan National Glass and Industries Ltd.
1945 F/C **(PP)**	Pilot Scale beneficiation studies on a sub-grade Rock phosphate sample from Jhamarkotra Mines, Udaipur distt., Rajasthan for M/s Rajasthan State Mines and Minerals Ltd.
1946 F/C	Bench-scale beneficiation studies on a low-grade limestone sample (No.1) from Satna, M.P. for M/s Prism Cement Ltd.
1947	Bench-scale beneficiation studies on a sub-grade iron ore sample from Kasia Iron & Dolomite Mine, Keonjhar distt., Orissa for M/s Essel Mining and Industries Ltd.
1948 F/NC	Bench-scale beneficiation studies on a ferrugenous Rock Phosphate (Sample-E) from Beldih, Purulia distt. West Bengal for West Bengal Mineral Development and Trading Corporation Ltd. (Departmental Study).
1949	Bench-scale beneficiation studies on a mineral rejects/sub-grade iron ore sample from Guali Iron Ore mines, Keonjhar distt., Odisha for M/s R.P. Sao.
1950 F/NC	Bench-scale beneficiation studies on a low grade ferruginous Rock Phosphate sample (A) from Beldih area, Distt. Purulia, West Bengal of M/s West Bengal Minerals Development and Trading Corp. Ltd, Kolkata (Departmental Study).

1951 F/NC	Beneficiation of a very low grade ferruginous Rock Phosphate sample from Beldih Mines, Purulia dist., West Bengal of M/s West Bengal Minerals Development and Trading Corp. Ltd, Kolkata (Departmental Study).
1952 L/C	Bond's Rod mill work index determination tests on Iron Ore sample from NMDC for M/s National Mineral Development Corporation, Hyderabad.
1953 2	Limited scale beneficiation test on a low grade Iron Ore sample from Goa mines for M/s Nathurmal Mining & Minerals Pvt. Limited, Goa.
1954 F/C	Bench-scale beneficiation Studies on a low-grade Iron ore fines sample from Goa mines for M/s Nathurmal Mining & Minerals Pvt. Limited, Goa.
1955 F/C	Beneficiation Studies on a Silica Sand sample from Allahabad for M/s Mangalore Minerals Pvt. Ltd, Mangalore, Karnataka.
1956 F/NC	Beneficiation studies of a ferruginous low-grade Rock Phosphate sample (No.D) from Beldih area, Distt. Purulia, West Bengal of M/s West Bengal Minerals Development and Trading Corp. Ltd, Kolkata (Departmental Study).
1957 F/C	Beneficiation of low-grade iron ore sample from Katni, MP for M/s Pacific Exports Pvt. Ltd, Katni, MP.
1958 F/C	Bench-scale beneficiation studies on a magnetite sample from Ranchi for M/s Mines & Geology Department Dhurva, Ranchi.
1959 F/C	Beneficiation of iron ore of Narayanposhi iron and manganese ore mine for M/s Aryan Mining & Training Corp. (P) Ltd.
1960 F/C	Beneficiation of sub-grade iron ore sample from Jilling, Dist. Keonjhar, Orissa for M/s Essel Mining & Industries Ltd.
1961	Beneficiation studies on a low-grade Rock Phosphate sample from Beldih, West Bengal for West Bengal Mineral Development and Trading Corporation Ltd. (Departmental Studies).
1962 F/C	Bench Scale beneficiation studies on an iron ore sample from Koira Iron Mines, Odisha for M/s Essel Mining and Industries Ltd, Keonjhar Dist., Odisha.
1963	Bench Scale beneficiation studies on a Flaggy Limestone sample from Devapur area, distt. Adilabad, A.P. for M/s Orient Cement, Hyderabad.
1964	Beneficiation of Silica Sand sample from Kasarda, Maharashtra for M/s Mangalore Minerals (Pvt.) Ltd.
1965	Bench-scale beneficiation studies on a sub-grade iron ore sample from Oraghat mine, Keonjhar dist., Odisha for M/s Rungta Sons Pvt. Ltd.
1966 F/C	Bench-scale beneficiation studies on a sub-grade iron ore sample from Teherai iron ore mines (Rungta), Keonjhar dist.,Odisha for M/s Bonai Industrial Company Ltd.
	AJMER
450	Bench-scale beneficiation studies of a Limestone sample from Chittorgarh distt. Rajasthan for M/s Birla Cement Works, Chittorgarh, Rajasthan.
451	Report on blunging followed by Wet sizing test on clay sample from Buchera Mines, Jaipur distt., Rajasthan for M/s Shri Modi Levigated Kaolin Pvt. Ltd, Neem ka Thana, Rajasthan.

Ore Dressing Investigations Completed

452 L/C	Report on blunging followed by Wet sizing test on clay sample from Neemli, Jaipur distt., Rajasthan for M/s Shri Modi Levigated Kaolin Pvt. Ltd, Neem ka Thana, Rajasthan.
453 F/NC	Bench-scale beneficiation studies on a low grade Limestone samples from Bhagabhalag Limestone Mines of Jaypee Himachal Cement Plant for RCOM, Dehradun, Uttarakhand.
454	Bench-scale beneficiation studies on a Dolomitic Limestone samples from Bhagabhalag Mines of M/s Jaypee Himachal Cement Plant for RCOM, Dehradun, Uttarakhand.
455 F/C	Bench-scale beneficiation studies on a low grade Rock phosphate sample from Tickhi Project, Dhol-ki-Pati block for Mineral Exploration Corporation Ltd, Nagpur.
456 L/C	Sample preparation and chemical characterization of a ROM white Limestone sample (WLS-AMJ) for M/s. Wolkem Industries Ltd, Udaipur, Rajasthan.
457 L/C	Determination of Denver Grindability of a sandy-clay sample for M/s J.K. White Cement Works, Nagaur, Rajasthan.
458 F/NC	Bench-scale beneficiation studies on a iron ore sample from M/s P.S.L. Holding Pvt. Ltd, Thakhauro Ke Dhani, Jaipur Distt., Rajasthan for RCOM, IBM, Ajmer.
459 F/C	Bench-scale beneficiation studies of a Red Ochre sample from M/s Birla Cement Works, Chittorgarh distt. , Rajasthan.
460 F/NC	Bench-scale Beneficiation studies for metallurgical industries on an iron ore sample from M/s P.S. L. Holding Pvt. Ltd, Thakauro Ke Dhani, Jaipur dist. for RCOM, Ajmer.
461 2L/C	Measurement of brightness of natural limestone powder grade sample from Malaysia, for M/s Poly Pipes India Pvt. Ltd, Veppery, Chennai, Tamil Nadu.
	BENGALURU
641 2L/C	Size analysis and mineralogical studies on Iron ore samples (Siliceous ROM and BMQ) from M/s V.S. Dempo and Co.Pvt.Ltd, Panjim, Goa.
642 F/C	Beneficiation studies on a Gold Ore sample from Parasi (Central) Block, Singhbhum Shear Zone, Ranchi, Jharkhand for M/s Mineral Exploration Corporation Ltd, Nagpur.
643 2L/C	Limited Test on an Iron Ore sample from Barbil area, Orissa for M/s Ingwenya Mineral Tech. Pvt. Ltd, Bangalore.
644 F/NC	Beneficiation Studies on a low-grade Iron Ore (BHQ) sample from AARPEE Iron Mines, Hospet, Karnataka for RCOM, IBM, Bengaluru.
645 F&L/C	Beneficiation studies and work index determination on low grade iron ore sample from Hospet, Bellary distt., Karnataka for M/s V.S. Lad & Sons (Anil), Sandur.)
646 F&L/C	Dewatering and work index studies on a low-grade Iron Ore sample from Hospet Area, Bellary distt., Karnataka for M/s V.S. Lad and Sons (Anil), Sandur.
647	Limited Tabling Test on a low-grade iron ore fines sample from Barbil Region, Odisha for M/s Jagnathpur Steel Limited, Ranchi, Jharkhand.
648 F/C	Beneficiation studies on a Feldspar Sample from Somavarapadu, Prakasam Distt., Andhra Pradesh for M/s Gimpex Pvt. Ltd, Chennai.
649 F/C	Beneficiation Studies on a Low Grade Iron Ore sample from M.M.L. Dumps, Sandur Region, Bellary Distt., Karnataka for M/s Swastik Steels (Hospet) Pvt. Ltd, Hospet.

650 F/C	Beneficiation studies on an Iron Ore sample from SBK. Mines, Bellary for M/s Swastik Steels (Hospet) Pvt. Ltd, Hospet.
651 L/C	Limited studies on Roasted Manganese sample from Hosadurga, Chitradurga, Karnataka for M/s Allum Veerabhadrappa Mine Owner, Bellary.
652 F/C	Beneficiation studies on an Iron Ore sample from Devagiri Mines, Bellary for M/s Swastik Steels (Hospet) Private Limited, Hospet.
653 F/C	Order of Magnitude Equipment Sizing for sub-grade Iron Ore Beneficiation Project from Sandur-Hospet area, Bellary distt., Karnataka for M/s V.S. Lad & Sons (Anil), Sandur.
654 2L/C	Sieve and sub-sieve analysis of Iron Ore samples S-1 & S-2 from Sankalapuram Iron Ore Mine, Hospet, Bellary distt., Karnataka for M/s R.B. Seth Narsingadas, Hospet.
655 F/C	Beneficiation studies on an iron ore sample from GMIL, Dumps for M/s Greentex Mining Industries Ltd, Bengaluru.
656 4L/C	Limited studies on Clayey sand sample from Srikurman Mineral sand project, Srikakulam district, Andhra Pradesh for M/s Trimex Sands Private Limited, Andhra Pradesh.
657 F/C	Bench scale flotation tests on a Copper ore sample from Shinas Copper mine, Sohar, Oman for M/s Mawarid Mining Co.(MMC) formerly National Mining Co. (NMC) Sohar, Oman.
658 F+1L/C	Dewatering and Work Index studies on a low grade iron ore sample M.M.L dumps, Sandur Region, Bellary, Karnataka for M/s Swastik Steels (Hospet) Pvt. Ltd, Hospet.
659 F+2L/C	Work Index, Grindability and laboratory scale process development studies on a Barite dumps of Mangampet area, Cuddapah District, AP for M/s GIMPEX AP Barite beneficiation Pvt. Ltd, Chennai.
660 F/C	Beneficiation Studies on an iron ore sample from KMC Mines, Keonjhar District, Orissa for M/s Triveni Earth Movers (P) Ltd, Orissa.
661 L/C	Sieve analysis of Iron Ore fines sample from Iron Ore washing plant, Hospet, Bellary distt., Karnataka for M/s Swastik Steels (Hospet) Pvt. Ltd, Hospet.
662 F/C	Order of Magnitude Equipment sizing for sub-grade Iron Ore beneficiation project from M.M.L. Dumps, Sandur, Bellary distt., Karnataka for M/s Swastik Steels (Hospet) Pvt. Ltd, Hospet.
663 F&1L/C	Bench-scale beneficiation studies and Bond's work index on sub-grade Iron Ore sample from C.N. Halli, Tumkur distt., Karnataka for M/s Taha Mining Co. Ltd, Tumkur.
664 L/C	Limited size analysis studies on Siliceous Iron Ore sample from B Block, Sandur, Bellary for M/s V.S. Lad and Sons, Bengaluru.
665	Magnetic separation studies on iron ore sample from beneficiation plant of BMM Ispat Ltd for M/s BMM Ispat Ltd, Hospet, Bellery.
666 F&1L/C	Bench-scale beneficiation studies and Bond's work index determination on sub-grade iron ore fine sample from Chitradurga, Chitradurga distt. Karnataka for M/s Gem Laboratories, Pvt. Ltd, Bengaluru.
667 2L/C	Limited Gravity Separation Studies on BMQ Exploratory sample from Mincheri Forest, Vuravakonda Mandal, Rayadurga Taluk, Ananthapur District, AP for M/s Loha Processors & Traders, Bellary.
668 3L/C	Limited Beneficiation Studies on a Manganese Ore sample from Adilabad District, Andhra Pradesh for M/s A F Group, Geo Technical Division, Hyderabad.

Ore Dressing Investigations Completed

669 F/C	Beneficiation Studies on a Feldspar Sample from Gowaribidanur Taluk, Karnataka for Department of Mines & Geology, Bengaluru.
PILOT PLANT INVESTIGATION	
1945 NGP	Pilot-scale beneficiation studies on a sub-grade Rock phosphate sample from Jhamarkotra Mines, Udaipur distt., Rajasthan for M/s Rajasthan State Mines and Minerals Ltd.

3 FOREIGN DEPUTATION

S. No.	Name	Place of visit	Date	Purpose
1.	Shri R.N.Meshram, Chief Mineral Economist	Geneva, Switzerland	6th to 8th April 2011	For attending the Second Session of UNECE Expert Group on Resource Classification
2.	Shri C.S.Gundewar Controller General	Chile and Colombia	27th April to 4th May 2011	As a Member of delegation led by Hon'ble M oS(IC) for Mines for Bilateral discussions and related field visits with Chile and bilateral discussions, mine visits and signing a n MoU with Colombia
3.	Shri A.B.Panigrahi, Regional Controller of Mines	Australia	14th to 25th May 2011	As a member of the Indian Delegation for the 7th Indo Australian Joint working Group Meeting.
4.	Dr. B.P.Sinha, Controller of Mines	Oslo, Norway	25th June to 1st July 2011	To participate in the 18th Plenary Meeting of ISO/TC 207.
5.	Shri P.N.Sharma, Regional Controller of Mines	Istanbul, Turkey	11th to 16th September 2011	To attend the 22nd World Mining Congress & Expo
6.	Shri C.S.Gundewar Controller General	China	6th to 11th November, 2011	To participate in the China Mining Congress 2011 and field visits to beneficiation plant.
7.	Shri R.K.Sinha, Controller of Mines	South Africa	6th to 9th February, 2012	To participate in the 'Mining Indaba 2012'
8.	Shri S.K.Adhikari, Suptd. Mining Geologist	Mozambique	28th February to 2nd March, 2012	To attend the 1st Meeting of the India -Mozambique Joint Working Group on Mineral Resources and related field visits.
9.	Shri C.S.Gundewar, Controller General	Canada	5th to 7th March, 2012,	For attending the Annual Convention & Trade Show of Prospectors & Developers of Canada (PDAC 2012 in Toronto.

4 PARTICIPATION IN SEMINARS/WORKSHOPS

i) S/Shri B. P. Kerketta, ACOM and M. G. Bhattacharya, JMG attended a day-long Workshop on "Security of Supply of Raw Material Resources – Challenges & Opportunities" organised by Journal of Mines, Metals & Fuels on 25 June, 2011 at Kolkata.

ii) Dr. B. P. Sinha COM attended 3rd Annual International Conference, "India Coal 2011" (organised by ASAPP Conferences, Mumbai during 26-27 July, 2011 at Kolkata) and presented a paper on 'Forest & Environmental Issues Related to Coal Mining Project'.

iii) Shri C.S.Gundewar, Controller General, IBM attended Valedictory Function of the National Seminar on Challenges & Role of Social Responsibilities organised by MEAI, Jodhpur Chapter (during 18-19 Sept., 2011) at Udaipur on 18 Sept., 2011.

iv) S/Shri R. K. Sinha, COM Ram Mohan, RCOM and N. P. Haran, DODO attended Mining Exploration Convention & Trade Show organised by FIMI at Bengaluru during 05-07 Sept., 2011.

v) S/Shri M. K. Somani, SMG and Prem Prakash, Sr. ACOM attended Seminar on Approach & Strategy for Integrated Development of Joda-Barbil-Koir Mining Areas organised by the SGAT at Barbil, District Keonjhar (Odisha) during 23-24 Sept., 2011. Two technical papers viz (i) 'Sustainable Development Needs Best Mining Practices' authored jointly by Dr. V.G.K. Bhagwan Gumma, SMG, Shri Y.G. Kale, RCOM & TS and Shri T. K. Rath, RCOM and (ii) 'Resources - Availability and Utilisation' authored jointly by Shri S. Tiu, RCOM and Dr. V.G.K. Bhagwan Gumma, SMG were contributed for the seminar.

vi) Shri C.S.Gundewar, Controller General, IBM attended inaugural session of "XII International Conference on Mineral Processing Technology (MPT-2011)" organised jointly by M/s Hindustan Zinc Ltd (HZL) and Indian Institute of Mineral Engineers (IIME) at Udaipur on 20 Oct., 2011. The conference held during 20-22 October, 2011 was also attended by Shri Mohan Ram SOOD, Shri M. S. Rao, ODO, Smt. S. M. Lal, ODO, Shri N. P. Haran, DODO, DR. V. A. J. Aruna, DODO, Shri M. G. Raut, DODO, Shri V. A. Sontakkey DODO and Dr. A. N. Verma, Chemist as delegates from IBM. Six technical papers on various topics relevant to the conference were presented by participants from IBM in the conference.

vii) Shri C.S.Gundewar, Controller General, IBM presided over the inaugural session of "Golden Jubilee Seminar on Mining Technology for Sustainable Development", organised by Indian Mining & Engineering Journal at Raipur on 18 Nov., 2011. The seminar held during 18-19 November, 2011 was also attended by S/Shri M. Biswas, RCOM, Y.G. Kale, RCOM & TS, S.K. Adhikari, Sg.MG and U. L. Gupta, JMG as delegates from IBM. Two technical papers were presented in the seminar by (i) Shri Y.G. Kale entitled 'Policy Initiatives in India's Non-Coal Mineral Sector' authored jointly by Shri C.S. Gundewar, CG, IBM and Shri Y.G. Kale, RCOM&TS and (ii) Shri U.L. Gupta entitled "Proposed Sustainable Development Framework: Corrective Measures for Indian Mining Sector" authored jointly by S/Shri Ranjan Sahai, COM and U. L. Gupta, JMG.

viii) S/Shri R. K. Sinha, COM, B. Ram Mohan, RCOM, R. N. Selven, RMG and K.G.S. Bos, ACOM attended "Interface between the stakeholders on the draft MMDR Bill, 2011" organised by Federation of Indian Mineral Industries at Bengaluru on 15 November, 2011.

ix) Shri P.P. Chkravarti, DCOM, IBM, Jabalpur presented a paper titled `Mine Closure Planning – A Key to Environmentally Safe, Sustainable Mining' at Seventh Conference on Wireless Communication & Sensor Network (WCSN-2011) held at Panna Diamond Project, Madhya Pradesh during 05-09 Dec., 2011.

x) S/Shri Ibrahim Sharif, ACOM and Raja Singh, AMG, IBM, Bhubaneswar attended "International Seminar on Mining Legislation" organised by the Society of Geoscientist & Allied Technologist at Bhubaneswar during 02-03 Dec., 2011.

xi) Shri C.S.Gundewar, Controller General, IBM chaired the first plenary session at 4th Asian Mining Congress organized by The Mining

Geological & Metallurgical Institute of India (MGMI) at Kolkata during 29-31 Dec., 2011. S/Shri A. B. Panigrahi, RCOM, Y.G. Kale, RCOM & TS and B. P. Kerketta, ACOM also participated in the Congress as delegates. A technical paper titled "Sustainable Development in Indian Mining Sector – Emerging Scenario" jointly authored by CG, IBM and Shri Y.G. Kale was presented in the Congress.

xii) S/Shri R. K. Sinha, COM and S. Tiu, RCOM participated in a Conference on "Mining for Sustainability" organised by the Federation of Indian Mining Industries (FIMI) at Cidade-de-Goa during 13-14 Jan., 2012. Shri R. K. Sinha has presented a technical paper titled, "Sustainable Development Framework – A Panacea for Inclusive Growth" in the conference.

xiii) IBM participated in the 10th International Granite & Stones Fair STONA 2012 by putting up a Stall displaying functions and activities of IBM and its publications. The Fair was inaugurated by Secretary, Mines. The event was organised by All India Granites & Stone Association at Bengaluru during 01-04 Feb., 2012.

5 REVIEW AND RESTRUCTURING - SALIENT FEATURES

The salient features of the Report of the Committee for Review and Restructuring of the Functions and Role of Indian Bureau of Mines are as follows:

❖ A three-tier regulation system for the mining industry is proposed. The State Governments would come at Tier I regulation, wherein they would ensure the implementation of the systems and processes. IBM would evolve as a National Technical Regulator, which would primarily act as the Tier II of regulatory system operating at national level designing systems, processes and guidelines for regulation of the mining sector in onshore areas. Till suitable capacities develop at the State Government level, IBM would continue in regulating the sector. A Tier III system would be enabled through an independent mechanism of systems and process audit through Stakeholder Forums.

❖ The IBM would evolve as a consultant for creation and improvement of State level regulatory mechanisms and to assure suitable support structures to the State Governments in the initial stages to a dynamic process of training, skill development and infrastructure strengthening with appropriate training modules and centrally-sponsored schemes. IBM would also evolve criteria for assessment of the regulatory capabilities of the State Governments through standard assessment tools.

❖ In the developmental role, IBM would require to assist State Governments to ensure adherence to standards and parameters by leveraging technology to ensure scientific mining. IBM also requires to help in devising and working mechanism for consultations, information dissemination and disclosure to local communities and to enable formulation of free prior informed consent (FPIC) strategies.

❖ Mineral Information System to start from Regional offices. With a view to strengthen the systems for data collection and making the data available online, IBM would develop IT-based systems enabling the mining industry to report and access information online. The existing Mineral Information System (MIS) would be strengthened for wider coverage of data and dissemination of the same.

❖ Regional offices of IBM to be restructured to function as pivotal for all regulatory activities. Re-defining the territorial jurisdictions of Regional Offices as per the State boundaries to have more interaction and synergy with the State Government agencies. To create "East Zone" with headquarters at Kolkata, to open Regional offices at Gandhinagar and Raipur, up-gradation of Guwahati Regional office into full-fledged Regional office.

❖ Leveraging of technology for mineral regulation activities such as use of GPS/DGPS, GIS, Satellite imageries etc. Clear defined systems to increase objectivity of the tasks, ensuring internal audit mechanism for the Regional offices and mechanism to ensure timely and accurate submission of mineral data is proposed.

❖ At each Regional Office of IBM, a "Regional Co-ordination Committee" comprising Members from the Directorate of Mining & Geology, State Environment & Forest Department, State Pollution Control Board, Revenue Department, industry etc would be formed for effective regulation and development of the sector.

❖ In order to enhance the quality, multi-disciplinary inspections of mechanised and underground mines would be carried out by a team of Mining Engineers, Geologists and OD officers. The thrust of the inspections should be to ascertain the efforts put in by a miner to adopt processes for mechanisation, automation and computerisation of mining operations.

❖ To improve the quality of mining plan, the grant of recognition to qualified Persons (RQPs) to prepare mining plans would be given by an independent agency introducing 'accreditation system' .

❖ The outline and guidelines of mining plan would be more objective to cover the latest techno-economic parameters of various components of mining principles keeping in view the best available technology so as to achieve the optimum exploitation of minerals in scientific way, conservation of minerals and keeping in view the sustainable development framework. IBM would design the standard guidelines/ procedures for various components of mining plan.

❖ To display the non-commercial information of Mining Plan such as CSR activities, EIA/EMP, SDF, mine closure etc. in the public domain for greater transparency among the general public.

❖ IBM to develop its capacity to handle the regulation of the offshore mining activities and

for this purpose would set up an Offshore Mineral Development & Regulation Cell at the Headquarters for grant of mineral concessions in offshore areas and open two Regional offices at Kochi for west coast and at Visakhapatnam for east coast to perform various regulatory functions with regard to offshore area minerals.

❖ The Zonal offices to work as (i) Technical Auditor to carry out internal technical auditing to ensure quality of regulatory activities performed by the Regional Offices (ii) To co-ordinate with State Government authorities for prevention of illegal mining activities and setting up of Quick Response Teams (QRTs) for the purpose of immediate spot visits in the event of specific information (iii) To act as nodal office to deal with activities related to the disaster management (iv) To suggest measures for adopting mechanisation, automation and computerisation in mining activities in the mines in the region and to suggest potential areas where value addition of run of mine ore through mineral beneficiation is possible, or identifying areas and methods for cluster mining.

❖ In order to assist to the proposed Regulatory Authority, an 'Enforcement Wing' will be established in IBM. The overall mission of the Enforcement Wing will be to provide technical assistance to Regulatory Authority in investigations and prosecution and to maintain data on illegal mining activities.

❖ To prepare a vision document for mineral processing keeping the objective and targets for 2020. To segregate the various functions in the field of mineral processing into regulatory, regional, mine and commercial levels. IBM to restrict its activities only up to first two levels so as to give space for private sector.

❖ IBM to have basic wherewithal to cross-check the process sheets, but IBM should not develop business-level flow sheets on its own. Development of business/mine level flow sheets should be thrown open to private sector.

❖ The IBM should restrict itself for development of flow sheets only for such minerals which are strategic in nature and for such minerals on which the country is heavily dependent on imports. In addition to beneficiation, IBM should also take up R&D work related to the recovery of minor metals, technology metals, energy critical metals etc.

❖ Creation of matrix of institutions and academic bodies engaged in the mineral processing activities in India and to take up the industry oriented R&D work in the field of mineral processing for utilisation of low-grade ore so as to climb technology ladder.

❖ Statutory provisions to be made to carry out Amenability test in respect of exploration samples of drill cores for Prospecting and Large Area Prospecting Licence. IBM to encourage prospective proponent and mining operators to undertake (i) Laboratory Scale ore dressing investigations up to threshold value of minerals in mining leases and (ii) Pilot plant investigations to work out the feasibility of particular plant through consultations and counseling.

❖ IBM to give wider publicity of ore dressing investigations carried out by it through portal, publicity brochures, R&D Meets, seminar/symposia and other medium. For wider publicity and propaganda for the R&D work done more R&D meets need to be organised on specific themes to serve as a platform. IBM to act as a nodal agency for dissemination of information on R&D work carried out by different R&D institution engaged in the field of mineral processing.

❖ IBM to develop expertise in the area of energy auditing of processing plants. IBM should also carry out energy auditing of the plants so as to ensure that the processing of minerals is cost effective.

❖ IBM to expand their expertise from mineral processing to hydrometallurgical processing (including bio-leaching, solvent extraction, Ion-exchange besides the conventional leaching etc.) in order to utilise the mineral resources which are not amenable to normal mineral processing routes. IBM should also take up recycling issues with special emphasis on recovery from scrap and wastes like electronic waste, base metals, electronic metals etc. For this purpose, necessary facilities and logistics may be created in IBM.

❖ In order to have state-of-the-art Mineral Processing Laboratory, IBM needs to induct the latest instrument/equipment in its fleet to develop its own capacity.

❖ IBM should develop full-fledged capacity for excellence in analysis of mine environmental

samples. It is recommended for setting up of Environmental Laboratory at each State level (Regional) office and also strengthening of existing environmental laboratories with latest equipment and adequate technical personnel.

❖ The area falling under the proposed eastern zone would need substantial regulation and regional level studies towards beneficiation of Iron ore, Manganese ore, Bauxite, Chromite, Graphite and Limestone, Clay and other minerals. Therefore, the existing Clay Laboratory at Kolkata needs to be strengthened and converted into Regional Ore Dressing Laboratory.

❖ A National level "Mineral Processing Governing Council" headed by the Secretary (Mines) and Director (Ore Dressing) as Member Convener and involving various stakeholders may be constituted. This council would explain the progress achieved and make plans for the next year.

❖ To develop interactive web-enabled portal having multiple uses such as online submission of returns and notices, execution and maintenance of Online Register of Mining Tenement System, Processing of Satellite imageries etc. and creation of dedicated 'Information Technology Cell' for the purpose. Apart from handling of IT projects, the IT Cell should also collaborate with academic institutes/ research institutes/IT companies to develop new IT based methods of mineral administration. To ensure universal accessibility of databases and better co-relational analysis, all the existing databases should be inter-linked, failing which a new set of database should be created.

❖ To develop strong Mineral Intelligence System in IBM so as to formulate the short and long term national strategies to ensure the availabilty of raw materials for domestic industries. For this purpose the Mineral Economics Division to be re-organised into 6 branches and Mining & Mineral Statistics Division into 4 branches. To ensure effective data collection through statutory returns, non-statutory returns and independent surveys. Furnishing of information by mineral consuming industries should be made statutory.

❖ The frequency of updation of mineral inventory to be condensed. IBM to equip with necessary logistics in the form of structural changes, hardware and software for handling huge inventory database and for online and continuous updation of mineral inventory. Once the online collection of data is initiated, the updation of National Mineral Inventory should be continuous process.

❖ The training curriculum of IBM should have separate module for State DGM's, mineral industry, RQPs and IBM personnel. It is imperative to develop a dynamic training curriculum for IBM, and meet the emerging needs of the mineral sector. Strengthening of training infrastructure of IBM so as to cater the emerging needs. IBM should also organise training programmes/workshops for the local community representatives in various aspects of Sustainable Development Framework, including on free, prior and informed consents (FPIC).

❖ A separate modern building in the premises of H.Q. building may be constructed exclusively for training purpose. A portion of the building may be planned to have a "Mining Museum" which can be used for training purpose.

❖ To have wider reach to provide training to all targeted stakeholders viz. mineral industry, state Governments, RQP's, local representatives and IBM's own employee, through entire length and breadth of the country. It is necessary to create regional training facilities at various places in the country. Therefore, Regional Training Centres at Hyderabad and New Delhi/NCR should be set up.

❖ Techno-economic valuation in mining assumes importance and need to be reviewed at short intervals in view of rapid changes in associated industry clusters. Industry would still need independent technical advice of the nature as rendered by Technical Consultancy Cell. Therefore, continuation of technical services by the IBM and its strengthening is recommended.

❖ The main thrust of mining research by the IBM should be on research oriented towards improvement of recoveries and efficiency in operations and finding solutions for special mining problems which have a bearing on conservation, systematic development of minerals and environmental problems in mining areas. IBM to play greater role for Mining Research Cell in the area of mine environment. Modernisation of equipment of hardware and of software in the TMP Division is recommended.

❖ Mining Research Cell should also look into the capacity development for SDF

implementation by undertaking studies in the areas of infrastructure related issues, HRD issues regarding requirement of skilled manpower for the mineral industry, quality of engineering education, reclamation and rehabilitation of mined out areas, rehabilitation and resettlement of projects affected people, community development, public consultations, CSR activities, socio-economic impacts etc.

- The Publication Section should make attempts to receive feedback from stakeholders regarding contents and quality of publications and to improve its publications. The publications should not be restricted to print version but should also be brought out in audio and video versions as well.
- IBM to institute National Awards in various fields for the mining industry on similar lines of "National Geo-Science Award" (formerly National Mineral Award) and "National Mines Safety Awards".
- Creation of Legal infrastructure and a Legal Cell in IBM in order to have quality legal assistance and logical end in violation cases to ensure optimum mining in a sustainable manner.
- A "SDF Cell" comprising persons from disciplines of mining environment and socio-economics may be formed at Headquarters. The SDF Cell would be responsible to monitor the various aspects of the SDF in the mining sector and would also extend assistance to the Training Centre in order to design training modules on SDF. The SDF Cell would undertake the need-based studies in various mining clusters of the country and would also be posted at regional offices covering the mineral-rich States.
- IBM to upgrade its existing Liaison office in Delhi to 'Director' level office and include adequate number of technical and administrative officers and Staff to enable him to discharge the liaison and interaction functions. The technical officers and staff should be from all major disciplines of IBM having relevance to the work programme at Delhi.
- To have frequent and regular collaboration with international counterparts so as to introduce latest technology in Indian mining sector and improved Mineral Information System.
- Adequate assessment of requirement of human resources and deployment of the same with enhanced growth prospects.
- To structure a pyramid for the organisation. All Group 'A' entry should have 50% direct and 50% DPC ratio and recruitment rules should need to modify to incorporate 100% DPC in senior Group 'A' posts to address the concern of stagnation.
- Having considered the vision and functions to be performed by IBM, strengthening of IBM by additional deployment of 933 posts in various cadres.
- The Controller General, IBM should be from academic background of Mining Engineering discipline who should be able to understand the ambiguity of the techno-legal issues of the mineral industry and therefore, IBM should be headed only by Mining Engineer.
- The posts of Controller of Mines, Chief Ore Dressing Officer, Chief Mining Geologist and Chief Mineral Economist, should be upgraded and granted Grade Pay of Rs. 10,000/- ; The posts of Chief Controller of Mines and Director (Ore Dressing) should be upgraded and granted Grade pay of Rs. 12,000/-; The post of Controller General, IBM should be upgraded from present level of HAG scale to Apex scale.
- A Recruitment Calendar should be prepared on annual basis and it should be monitored for faster and regular recruitment. Officers of Group 'A' & 'B' in respects of Geology discipline of IBM should be recruited through annual 'Geologists Examination' conducted by UPSC. Possibility of conducting similar examinations for recruitment of Group 'A' and 'B' officers for other disciplines of IBM may also be explored.
- The induction training of at least 6 months duration with field exposure should be made compulsory to all Group 'A' new entrants so as to equip them with adequate knowledge and skill of the functions to be performed. Similarly periodic in-service refresher training should also be arranged for all the officers. IBM may tie up and ink MoUs with academic institutions for imparting tailor-made induction and in-service training to its employees.

6 NOMINATIONS TO COMMITTEES, WORKING GROUPS

Working Group for Twelfth Five Year Plan

The 2011-12 is the terminal year of the XI Five Year Plan and therefore, various Ministry's constituted Working Groups for formulation of the XII Five Year Plan. IBM represented on the following Working Groups.

i) Working Group on Mineral Exploration and Development constituted by Ministry of Mines

Planning Commission had constituted a Working Group on Mineral Exploration and Development (other than coal & lignite) for twelfth Five Year Plan (2012-17) under the chairmanship of Secretary (Mines) vide order No. I&M-3(24)/2010 dated 23/02/2011. Controller General, IBM is one of the members of the Working Group. Ministry of Mines vide its order No. 10(59)/2010/M5 dated 30/03/2011 constituted four sub-groups. S/shri M. Sengupta, Sg.MG, R.N. Meshram, CME, (Dr) S.S. Bhake, Sg.ME and A.B. Panigrahi, RCOM were nominated to represent IBM on these sub-groups I, II, III & IV respectively. Further Shri D.K.Silekar, Mineral Economist was nominated on the Core Group on Ferrous minerals. After a number of brainstorming sessions and deliberations, draft reports of all four sub-groups have been submitted to Secretary (Mines).

ii) Working Group on "Cement Industry" constituted by Planning Commission, Industries Division

Dr.S.S.Bhake, Suptdg.Mineral Economist, IBM was nominated by CG,IBM as his representative on the Working Group on "Cement Industry" constituted by Planning Commission, Industries Division. He attended a number of meetings and provided necessary inputs to the Working Group.

iii) Working Group on "Occupational Health and Safety" constituted by Planning Commission, Labour, Employment & Manpower Division

Dr. B. P. Sinha, COM was nominated on the Working Group on Safety & Health for the Twelfth Five Year Plan. He attended a number of meetings held under the chairmanship of Secretary (Labour & Employment) and provided necessary inputs to the Working Group.

iv) Working Group on "Effectively Integrating Industrial Growth and Environment Sustainability" constituted by Planning Commission, Industries Division

Dr. B. P. Sinha, COM was nominated on the Working Group on Effectively Integrating Industrial Growth and Environment Sustainability for the Twelfth Five Year Plan. He attended a number of meetings & provided necessary inputs to the Working Group.

v) Sub-Group-II: Raw material and Infrastructure issues in Iron & Steel of Working Group on Steel Sector constituted by Ministry of Steel

Shri D.K.Silekar, Mineral Economist was nominated as IBM's representative on Sub-Group-II: Raw material and Infrastructure issues in Iron & Steel of Working Group on Steel Sector constituted by Ministry of Steel. He attended a number of meetings & provided necessary inputs for finalisation of Sub-group Report.

7 PUBLICATIONS RELEASED

Sl No.	Name of the Publications	Date of Release
1.	MSMP – October 2010	11.04.2011
2.	BMI (April -2010 – September 2010)	10.05.2011
3.	MSMP – November 2010	13.05.2011
4.	BMI (October 2010 – March 2011)	26.05.2011
5.	The Offshore Areas Mineral Concession Rules - 2006	20.06.2011
6.	IMI At a Glance (2008-09)	29.06.2011
7.	MSMP December 2010	30.06.2011
8.	MSMP January 2011	06.07.2011
9.	MSMP February 2011	29.07.2011
10.	Iron & Steel, Vision – 2020	29.08.2011
11.	Bulletin of Mining Leases & Prospecting Licences 2010	26.09.2011
12.	Market Survey – Copper	30/05/2011
13.	Statistical Profiles of Minerals 2009 10	20.10.2011
14.	MSMP April 2011	17.11.2011
15.	MSMP May 2011	22.11.2011
16.	Lead & Zinc A Market Survey	30/05/2011
17.	IMYB – 2010	29.12.2011
18.	MSMP March 2011	30.12.2011
19.	MSMP June 2011	19.01.2012
20.	MSMP July 2011	16.02.2012
21	Manual of procedure for Chemical & Instrumental analysis of Ores, Minerals, Ore Dressing Products & Environmental samples	01.03.2012
22.	MSMP August 2011	02.03.2012
23.	MSMP September 2011	21.03.2012
24.	BMI (April September 2011)	28.03.2012

Scheme-wise performance of Indian Bureau of Mines during 11th Plan (2007-08 To 2011-12)

Item/Activity	2007-08		2008-09		2009-10		2010-11		2011-12		Total	
	Target	Achieve-ment	Target	Achiev-ement	Target	Achieve-ment	Target	Achieve-ment	Target	Achieve-ment	Target	Achieve-ment
Scheme No. 1: Inspection of Mines for Scientific and Systematic mining, mineral con servation and mines environment												
Inspection of Mines for MCDR/MPI/MSI	2500	2793	2500	2645	2500	2371	2000	2177	2500	2563	12,000	12549
Mining Geological Studies/NMI Updation	12 RMGS	12 RMGS completed	12 RMGS	12 RMGS completed	12 RMGS	12 RMGS completed	Updation of NMI (7774 Pvt.L/H)	7232	12 RMGS	12 RMGS Completed	48 RMGS	48 studies completed.
Mining Plan received/Disposal	547	575	418	415	277	306	226	184	263	223	1731 received	1703 disposed
Scheme of Mining received/Disposal	374	352	436	398	371	400	279	253	675	430	2135 received	1833 disposed
Recognition granted to prepare Mining Plans	-	87 Granted	-	52 Granted 02 Renewed	-	64 Granted 5 Renewed	-	77 Granted 17 renewed	-	46 Granted 31 renewed	-	326 Granted 55 renewed
Scheme No. 2: Mineral Beneficiation Studies - utilization of low grade and sub-grade ores and analysis of environmental samples												
Ore Dressing Investigations	70	66	70	68	70	66	60	60	70	65	340	325
Mineralogical Examinations	2300	2390	2300	2366	2300	2383	2000	2,060	2300	2408	11,200	11607
Chemical Analysis	50,000	46804	50,000	49,108	50,000	50,519	40,000	41,925	50,000	49139	2,40,000	2,37495
In-plant Studies	-	12	-	10	-	06	-	01	-	01	-	30

Item/Activity	2007-08		2008-09		2009-10		2010-11		2011-12		Total	
	Target	Achieve-ment	Target	Achiev-ement	Target	Achieve-ment	Target	Achieve-ment	Target	Achieve-ment	Target	Achieve-ment
Scheme No. 3: Technological upgradation and Modernisation												
Technical Consultancy Assignments	5-7	8	5-7	13	5-7	10	5-7	06	5-7	6	27-35	43
Mining Research Assignments	5-7	9	07	09	08	08	06	07	5-7	8	31-35	41
Training Courses	16	16	16	16	16	15	12	12	12	12	72	71
Preparation of Mineral Maps with forest overlays	Prepared 120 Multi Mineral Maps in respect of Maharashtra (43) & Tamil Nadu (77)		Prepared 100 Multi Mineral Maps in respect of Rajasthan.		Prepared 100 Multi Mineral Maps in respect of Gujarat.		Prepared 100 Multi Mineral Maps in respect of M.P.(83), Uttarakhand (6) and U.P.(11)		Prepared 60 Multi Mineral Maps in respect of J&K, H.P., Haryana, West Bengal, N -E States, Kerala and Goa.		Prepared 480 Multi Mineral Maps with forest overlays.	
Updation of National Mineral Inventory	Updation of NMI as on 1.4.2005 completed.		Handbook on NMI as on 1.4.2005 & an ad-hoc publication NMI at a Glance (As on 1.4.2005) were prepared.		Updation of NMI as on 1.4.2010 initiated. Conference for Exploration agencies & a Workshop for Mining Geologists of IBM were organized.		Updation of NMI as on 1.4.2010 was in progress. Summary outputs generated for 18 minerals.		Summary output of 52minerals generated.		Updation of NMI as on 1.4.2005 completed. Handbook on NMI as on 1.4.2005 & an ad -hoc publication NMI at a Glance (As on 1 .4.2005) were prepared. Updation of NMI as on 1.4.2010 has been completed. Summary outputs generated for 70 Minerals.	

Item/Activity	2007-08		2008-09		2009-10		2010-11		2011-12		Total	
	Target	Achieve-ment	Target	Achiev-ement	Target	Achieve-ment	Target	Achieve-ment	Target	Achieve-ment	Target	Achieve-ment
Scheme No. 4: Collection, processing, dissemination of data on mines and minerals through various publications												
Publications released	16 publications released		23 publications released.		18 publications released.		24 publications released.		24 publications released.		105 Publications released	
Advisory Role	537 Ministry references & 172 Parliament Questions dealt.		561 Ministry references & 115 Parliament Questions dealt		486 Ministry references & 133 Parliament Questions dealt		478 Ministry references & 190 Parliament Questions dealt		391 Ministry references & 143 Parliament Questions dealt		2453 Ministry references & 756 Parliament Questions dealt	
Scheme No. 5: Computerised Online Register of Mining Tenements System												
	Project Proposal was being re-casted as suggested by the Ministry.		Project Proposal was approved by the Standing Finance Committee (SFC) in the meeting held on 19th February 2009.		The GIS Component of the project was developed at ISRO, Nagpur. The pilot project was hosted on the web.		The process for hiring of consultant for preparation of DPR has been finalised by NIC.		M/s. Earnest & Young has been appointed as consultant for preparation of DPR.		Formalities for submission of DPR by Consultant are in progress.	

Statement showing 11th Plan yearwise BE, FE and Actual expenditure.

(Rupees in crores)

Name of the Schemes/project/Programme	11th Plan (2007-12) Approved Outlay	2007-2008			2008-2009			2009-2010			2010-2011			2011-2012		
		Approved Outlay		Actual Exp.	Approved Outlay		Actual Exp.	Approved Outlay		Actual Exp.	Approved Outlay		Actual Exp.	Approved Outlay		Actual Exp.
		BE	FE		BE	FE		BE	FE		BE	FE		BE	FE	
1		2	3	4	5	6	7	8	10	11	12	13	14	15	16	17
Scheme No.1. Inspection of Mines for Scientific & Systematic mining, Mineral Conservation and Mine Environment	26.35	6.00	7.60	7.26	6.23	8.71	8.59	6.74	10.96	10.74	7.90	9.22	9.00	6.94	8.57	8.13
Scheme No.2. Mineral Beneficciation studies- Utilisation of low grade & sub-grade ores and analysis of environmental samples	24.70	4.68	4.76	4.68	5.30	6.25	5.97	5.17	6.54	6.37	6.20	6.38	6.31	5.09	4.96	4.90
Scheme No.3. Technical upgradation & Modernisation.	18.30	4.97	2.98	2.91	3.12	4.56	4.43	3.17	6.28	6.18	4.10	3.79	3.61	3.48	3.28	3.26
Scheme No.4. Collection, Processing, Dissemination of Data on Mines & Minerals through various publications.	7.00	2.28	1.30	1.29	1.34	1.84	1.81	1.56	2.44	2.41	2.24	1.92	1.84	1.90	1.89	1.86
Scheme No.5. Management of Solid Waste from Mining in India.	0.75	0.00	0.00	0.00	0.60	0.00	0.00	0.15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Scheme No.6. Computerisation online Register on Mining Tenement System.	2.25	0.00	0.00	0.00	0.50	0.00	0.00	0.30	0.30	0.30	4.75	3.72	3.62	1.50	1.06	0.97
Tribal Area Sub-Plan	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.88	0.00	0.00
Capital Expenditure (Works Outlay)	--	0.37	0.00	0.00	0.01	0.00	0.00	0.01	0.00	0.00	0.01	0.00	0.00	0.01	0.00	0.00
Capital Outlay (NER)	2.61	1.21	0.00	0.00	1.40	0.00	0.00	0.00	0.00	0.00	1.25	0.00	0.00	0.55	0.00	0.00
Lump-sum provision for NER	3.04	0.49	0.00	0.00	0.50	0.00		1.90	0.00	0.00	1.55	0.00	0.00	1.65	0.00	0.00
Token Provision for New Schemes	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TOTAL(IBM)	**85.00**	**20.00**	**16.64**	**16.14**	**19.00**	**21.36**	**20.80**	**19.00**	**26.52**	**26.00**	**28.00**	**25.03**	**24.38**	**22.00**	**19.76**	**19.12**
Construction (MOUD Budget)	5.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	0.01	0.01	1.00	1.00	--
Non Plan		**17.11**	**17.03**	**16.86**	**17.70**	**26.33**	**25.20**	**30.36**	**32.50**	**32.26**	**28.07**	**37.17**	**36.95**	**38.55**	**42.75**	**42.61**

9A RETURN ON ILLEGAL MINING FOR THE YEAR 2011-12

Major Minerals

STATE	No. of cases	Quantum of mineral/ Ore excavated / stacked / Transported (in lakh tonnes)	Value of Mineral / Ore (Rs. In Lakhs)	FIR lodged (Nos.)	Court cases filed (Nos.)	Fine realised (Rs. Lakh)
ANDHRA PRADESH	460	0.2651	135.717	0	0	166.654
ANDAMAN & NICOBAR*	0	0.000	0.000	0	0	0.00
ASSAM	0	0.000	0.000	0	0	0.00
CHHATTISGARH	306	0.283	158.804	87	303	176.75
GOA	1	0.000	0.000	0	0	0.00
GUJARAT	195	1.569	365.42	3	0	443.66
HARYANA	0	0.000	0.000	0	0	0.00
HIMACHAL PRADESH	0	0.000	0.000	0	0	0.00
JHARKHAND	19	0.004	0.38	1	0	0.5
KARNATAKA	231	3.272	257.8	50	54	260.97
KERALA	17	0	0	0	0	3.98
MADHYA PRADESH **	161	0.000	248.119	23	161	158.90
MAHARASHTRA	7704	0.085738	46.53	0	0	777.81
MANIPUR	0	0.000	0.000	0	0	0.00
MIZORAM	0	0.000	0.000	0	0	0.00
NAGALAND	0	0.000	0.000	0	0	0.00
ODISHA***	309	0.000	482.920	6	4	130.20
PUNJAB	0	0.000	0.000	0	0	0.00
RAJASTHAN	358	0.1915	74.78278	91	2	107.594
SIKKIM	0	0.000	0.000	0	0	0.00
TAMILNADU	0	0	20.4475	0	0	13.509
TRIPURA	0	0.000	0.000	0	0	0.00
UTTAR PRADESH****	0	0.000	0.000	0	0	0.00
UTTARAKHAND	0	0.000	0.000	0	0	0.00
WEST BENGAL	196	26.603	0	160	36	0
	9957	**32.273**	**1790.92**	**421**	**560**	**2240.53**
Quantity of mineral Seized given in Cu.mt/other unit	Andaman & Nicobar*	00 cu. mt				
	Madhya	65140 cu mt.				
	Odisha***	949657 cu. Mt				
	U. P.****	0 cu. Mt				

Minor Minerals

SR. No.	STATE	No. of cases	Quantum of mineral/ Ore excavated / stacked / Transported (in lakh tonnes)	Value of Mineral / Ore (Rs. In Lakhs)	FIR lodged (Nos.)	Court cases filed (Nos.)	Fine realised (Rs. Lakh)
1	ANDHRA PRADESH	19453	6.282	2555.783	0	519.24	2493.08
2	ANDAMAN & NICOBAR*	3	0.000	0.00	0	0	0.05
3	ASSAM	0	0.000	0.00	0	0	0.00
4	CHHATTISGARH	2640	4.955	562.16	0	2640	191.79
5	GOA	0	0.000	0.00	0	0	0.00
6	GUJARAT	3290	17.967	1665.390	45	2	1696.01
7	HARYANA HIMACHAL	2022	4.471	127.06	72	0	283.95
8	PRADESH	1289	0.000	0.00	186	186	38.52
9	JHARKHAND	345	0.095	29.01	254	0	12.775
10	KARNATAKA	6460	1.595	435.96	124	49	1350.72
11	KERALA MADHYA	3158	0	0	0	0	317.16
12	PRADESH **	6986	0.000	7186.96	2713	6740	3928.82
13	MAHARASHTRA	32938	0	0	0	0	4241.92
14	MANIPUR	0	0.000	0.00	0	0	0.00
15	NAGALAND	0	0.000	0.00	0	0	0.00
16	MIZORAM	2	0	0	0	0	0
17	ODISHA***	0	0.000	13.53	0	0	11.81
18	PUNJAB	314	0.223	35.099	37	0	45.52
19	RAJASTHAN	843	2.628	509.8338	91	18	448.493
20	SIKKIM	0	0.000	0.00	0	0	0.00
21	TAMILNADU	123	308.709	194.17	409	0	2523.752
22	TRIPURA UTTAR	0	0.000	0.00	0	0	0.00
23	PRADESH****	4708	0.000	542.49	0	0	683.42
24	UTTARAKHAND	0	0.000	0.00	0	0	0.00
25	WEST BENGAL	73	0.004	0.00	13	0	0.00
	Total	**84647**	**346.929**	**13857.45**	**3944**	**10154**	**18267.79**
Note	Quantity of mineral Seized given in Cu.mt/other unit	Andaman & Nicobar*	15 cu. mt				
		Madhya Pradesh**	11024691 cu. Mt. 1566.20				
		Odisha***	cu.mt				
		U. P.****	29825.79 cu.mt				

9B INSPECTIONS FOR ILLEGAL MINING

Inspections by Task Force for Illegal Mining 2009-10, 2010-11& 2011-12

Task Force	Phase	States Covered	Month & Year	Number of Mines Inspected
I	-	AP, Gujarat, Jharkhand, Karnataka, Odisha	Dec., 2009	106
II	1	Karnataka,	April 2010	67
II	2	Jharkhand, Odisha	August, 2010	95
II	3	AP, Chhattisgarh, Jharkhand, Odisha	Nov., 2010 Jan., 2011	54 37
II	4	Goa, Karnataka, Maharashtra, M.P.	Mar., 2011	75
II	5	Jharkhand, Odisha	December, 2011	20

Total Mines Inspected in 2009 : 106 (TF-I)
Total Mines Inspected in 2010-11 : 328 (TF-II, Phase 1 to 4)
Total Mines Inspected in 2011-12 : 20 (TF-II, Phase 5)
Total : 454

3. खनिज उत्पादन, मार्च 2012
(परमाणु खनिजों और गौण खनिजों को छोडकर)
खनिजवार
3. MINERAL PRODUCTION, MARCH 2012
(Excluding Atomic Minerals and Minor Minerals)
MINERAL-WISE

(मूल्य '000 रुपये / Value in Rs.'000)

खनिज	Mineral	इकाई Unit	मार्च 2012 March 2012		फरवरी 2012 February 2012		अप्रेल 2011 . मार्च 2012 Apr 2011 - Mar 2012		अप्रेल 2010 . मार्च 2011 Apr 2010 - Mar 2011	
			मात्रा / Qty.	मूल्य / Val.	मात्रा / Qty.	मूल्य / Val.	मात्रा / Qty.	मूल्य / Val.	मात्रा / Qty.	मूल्य / Val.
सभी खनिज	All Minerals			206207683		180362145		2068686126		2077879169
ईंधन खनिज	Fuel Minerals			156232267		139133969		1544760266		1547508099
कोयला	Coal	'000t	64563	77877874	56133	66271333	539852	626758451	532694	620210400
लिग्नाइट	Lignite	'000t	5153	5561655	4488	4965265	42897	48276082	37733	43307200
प्राकृतिक गैस (उपभुक्त)	Natural Gas (ut.)	m c m	3751	14037914	3526	13195865	46576	174308170	52222	195438015
पेट्रोलियम (अपरिष्कृत)	Petroleum (crude)	'000t	3218	58754824	2996	54701506	38088	695417563	37712	688552484
धात्विक खनिज	Metallic Minerals			44703939		36383365		469016162		476387940
बॉक्साइट	Bauxite	t	1267669	518275	1130595	490290	12877394	5520032	12722820	5122151
क्रोमाइट	Chromite	t	378695	4203209	408536	2831137	3764120	26523121	4325699	25964208
ताम्र अयस्क	Copper Ore	t	314202	0	245970	0	3478189	0	3601984	0
ताम्र सान्द्र	Copper Conc.	t	11355	595136	8818	491180	130458	6167138	136856	4733515
सोना अयस्क	Gold Ore	t	43849	0	45734	0	492192	0	741522	0
सोना (कुल)	Gold (total)	kg	173	472303	174	480764	2192	5496037	2399	4345197
सोना (प्राथमिक)	Gold (primary)	kg	173	472303	174	480764	2192	5496037	2399	4345197
सोना (उप उत्पाद)	Gold (by-product)	kg	0	0	0	0	0	0	0	0
लोह अयस्क (कुल)	Iron Ore (total)	'000t	14620	33873694	12261	28051244	167289	379651367	207157	396141714
लोह अयस्क (ढेले)	Iron Ore (lumps)	'000t	5330	17445010	4630	14633640	62700	179737036	77273	173545279
लोह अयस्क (चूरा)	Iron Ore (fines)	'000t	9257	16403019	7591	13389364	104180	199634866	129203	222181727
लोह अयस्क सान्द्र	Iron Ore Conc.	'000t	33	25665	40	28240	409	279465	681	414708
सीसा व जस्ता अयस्क	Lead & Zinc Ore	t	694271	0	672920	0	8041881	0	7539999	0
सीसा सान्द्र	Lead Conc.	t	17095	282246	12292	183805	161157	2464159	147625	2000435
जस्त सान्द्र	Zinc Conc.	t	116959	1934453	127393	1728810	1412291	19893051	1427231	17930226
मैंगनीज अयस्क	Manganese Ore	t	229099	1139542	194542	907677	2349300	11712864	3056385	14684000
चांदी	Silver	kg	29731	1683039	21240	1216892	207142	11561651	148303	5438695
टिन सान्द्र	Tin Conc.	kg	3721	2042	3350	1566	48971	26742	60643	27799
अधात्विक खनिज	Non-metallic Minerals			5271477		4844811		54909698		53983130
अगेट	Agate	t	120	60	50	25	476	238	19	10
एपेटाइट	Apatite	t	210	441	266	564	3053	6401	3846	8345
फॉस्फोराइट	Phosphorite	t	254726	593623	164236	464648	2326876	6429734	2097490	5014699
एस्बेस्टोस	Asbestos	t	41	1833	29	1064	280	12827	268	13341
सुघट्य मृतिका	Ball Clay	t	148628	62385	174334	77505	1594634	635665	1086714	390238
बेराइट्स	Barytes	t	102228	87756	148218	136239	1722804	1651573	2338806	2698279
केल्साइट	Calcite	t	1785	597	2377	847	51499	18342	38826	14104

(क्रमश: / Contd.....)

3. खनिज उत्पादन, मार्च 2012
(परमाणु खनिजों और गौण खनिजों को छोडकर)
खनिजवार
3. MINERAL PRODUCTION, MARCH 2012
(Excluding Atomic Minerals and Minor Minerals)
MINERAL-WISE

(मूल्य '000 रुपये / Value in Rs.'000)

खनिज	Mineral	इकाई Unit	मार्च 2012 March 2012		फरवरी 2012 February 2012		अप्रेल 2011 . मार्च 2012 Apr 2011 - Mar 2012		अप्रेल 2010 . मार्च 2011 Apr 2010 - Mar 2011	
			मात्रा / Qty.	मूल्य / Val.	मात्रा / Qty.	मूल्य / Val.	मात्रा / Qty.	मूल्य / Val.	मात्रा / Qty.	मूल्य / Val.
खडिया	Chalk	t	18737	6988	16825	6332	176010	66612	177197	65799
मृतिका अन्य	Clay (others)	t	75064	3474	80030	5510	744561	51117	730752	70342
कोरंडम	Corundum	kg	0	0	0	0	0	0	0	0
हीरा	Diamond	crt	1581	15526	2359	23985	18489	198242	11222	106776
डायस्पोर	Diaspore	t	2141	3578	2536	4515	24124	28519	26082	32003
डोलोमाइट	Dolomite	t	517552	133388	453783	121881	5416817	1521320	5839710	1870047
डुयूनाइट	Dunite	t	8365	5372	3030	2348	39223	25386	23716	6879
फेल्सपार	Felspar	t	59259	17509	55105	18334	660371	212294	546472	154676
अग्नि मृतिका (1)	Fireclay (1)	t	61031	9601	58071	9649	759746	130654	856741	136668
फेल्साइट	Felsite	t	63	145	64	196	1018	1854	1670	2420
फ्लूओराइट (श्रेणीकृत)	Fluorite (graded)	t	242	951	264	996	4856	11782	59954	50147
गार्नेट (अपघर्ष)	Garnet (abrasive)	t	69713	93022	111299	96334	1824648	1354920	2126337	1274864
गार्नेट (रत्न)	Garnet (gem)	kg	0	0	0	0	0	0	0	0
ग्रेफाइट (खान निर्गत)	Graphite (r.o.m.)	t	17079	7582	14701	6280	148974	66451	115697	50380
जिप्सम	Gypsum	t	452087	192247	368054	157286	3189229	1315174	4918170	1475454
आयोलाइट	Iolite	kg	0	0	0	0	0	0	4	40
जैस्पर	Jasper	t	0	0	0	0	0	0	0	0
केओलिन (कुल)	Kaolin (total)	t	216899	59418	220029	50656	2734349	634795	2727946	737101
केओलिन (प्राकृतिक) (6)	Kaolin (natural) (6)	t	210086	46029	214050	39805	2667219	520244	2651448	598095
केओलिन (संसाधित) (7)	Kaolin (processed) (7)	t	6813	13389	5979	10851	67130	114551	76498	139006
कायनाइट	Kyanite	t	557	661	468	555	4064	4802	5954	6291
सिलिमेनाइट	Sillimanite	t	5201	49460	4466	44550	58043	521094	48784	407406
लेटेराइट	Laterite	t	279424	34845	254431	28177	1665820	226797	1220304	147948
चूना पत्थर	Limestone	'000t	24432	3568783	22262	3248878	256669	36529857	246336	36349567
चूना कंकड	Limekankar	t	11704	2677	16184	3226	311218	62847	383817	84903
लाइम शैल	Limeshell	t	1889	2850	1147	1250	33226	39832	30410	32159
मैग्नेसाइट	Magnesite	t	20754	33928	19749	32371	217662	340948	235762	378217
मार्ल	Marl	t	390529	25835	362907	25061	4143975	269024	4399379	307556
अभ्रक (अपरिष्कृत)	Mica (crude)	kg	175082	6510	235600	5951	1807430	61934	1333277	44505
अभ्रक (अपशिष्ट स्क्रेप) (2)	Mica (waste & Scrap) (2)	kg	1158851	0	777279	0	13690117	0	7310749	0
गेरू	Ochre	t	64957	6016	101324	16147	1352812	217588	1218261	240374
परलाइट	Perlite	t	0	0	0	0	0	0	0	0
पायरोफाइलाइट	Pyrophyllite	t	22542	13302	30091	18522	239811	72720	240082	83123

(क्रमशः / Contd.....)

3. खनिज उत्पादन, मार्च 2012
(परमाणु खनिजों और गौण खनिजों को छोडकर)
खनिजवार
3. MINERAL PRODUCTION, MARCH 2012
(Excluding Atomic Minerals and Minor Minerals)
MINERAL-WISE

(मूल्य '000 रुपये / Value in Rs.'000)

खनिज	Mineral	इकाई Unit	मार्च 2012 March 2012		फरवरी 2012 February 2012		अप्रेल 2011 . मार्च 2012 Apr 2011 - Mar 2012		अप्रेल 2010 . मार्च 2011 Apr 2010 - Mar 2011	
			मात्रा / Qty.	मूल्य / Val.	मात्रा / Qty.	मूल्य / Val.	मात्रा / Qty.	मूल्य / Val.	मात्रा / Qty.	मूल्य / Val.
पायरोक्सोनाइट	Pyroxenite	t	10128	3106	9941	3017	87310	29150	253205	126179
क्वार्ट्ज	Quartz	t	43025	11466	37006	9695	520146	117074	497546	112108
क्वार्ट्जाइट	Quartzite	t	24082	12794	18039	11119	181065	91790	118117	45750
सिलिका बालू	Silica Sand	t	508068	75248	565983	71684	4334925	689115	3380968	444684
बालू (अन्य)	Sand (others)	t	360455	22988	313582	21060	2625329	162809	2057119	109682
नमक (सैंधा)	Salt (rock)	t	0	0	0	0	0	0	1200	2971
शैल	Shale	t	348113	14879	275523	12547	3338919	128416	3081622	103993
स्लेट	Slate	t	0	0	0	0	0	0	0	0
स्टियटाइट	Steatite	t	91645	73923	104024	90482	958746	788833	902686	618286
सेलेनाइट	Selenite	t	1002	1152	913	1050	12852	14547	6736	5726
गंधक (3)	Sulphur (3)	t	36080	0	33609	0	381146	0	236998	0
वर्मिकुलाइट	Vermiculite	t	1722	1048	535	483	9746	6690	19234	13132
वोलेस्टोनाइट	Wollastonite	t	15224	14510	14647	13792	184445	159931	183381	145958

(समाप्त / Concld.)

11 MINERAL RESERVES/RESOURCES

ALL INDIA MINERAL RESERVES/RESOURCES AS ON 01.04.2010 - SUMMARY

Sl. No	Mineral	Unit	Reserves	Remaining Resources	Total Resources
1	Alexandrite	-	N. E.	N. E.	N. E.
2	Andalusite	'000 tonnes	-	18,450	18,450
3	Antimony				
	Ore	tonne	-	10,588	10,588
	Metal		-	174	174
4	Apatite	tonne	2,090,216	22,138,530	24,228,746
5	Asbestos	tonne	2,510,841	19,655,762	22,166,603
6	Ball clay	tonne	16,777,842	66,615,662	83,393,504
7	Barytes	tonne	31,584,128	41,149,746	72,733,874
8	Bauxite	'000 tonnes	592,938	2,886,682	3,479,620
9	Bentonite	tonne	25,060,508	543,306,838	568,367,346
10	Borax	tonne	-	74,204	74,204
11	Calcite	tonne	2,664,338	18,281,110	20,945,448
12	Chalk	'000 tonnes	4,332	585	4,917
13	China clay	'000 tonnes	177,158	2,528,049	2,705,207
14	Chromite	'000 tonnes	53,970	149,376	203,346
15	Cobalt (Ore)	Million tonnes	-	44.91	44.91
16	Copper				
	Ore	'000 tonnes	394,372	1,164,086	1,558,458
	Metal		4,768.33	7,518.34	12,286.67
17	Corundum	tonne	597	740,194	740,792
18	Diamond	carats	1,045,318	30,876,432	31,921,750
19	Diaspore	tonne	2,859,674	3,125,144	5,984,818
20	Diatomite	'000 tonnes	-	2,885	2,885
21	Dolomite	'000 tonnes	738,185	6,992,372	7,730,557
22	Dunite	'000 tonnes	17,137	168,232	185,369
23	Emerald	-	N. E.	N. E.	N. E.
24	Feldspar	tonne	44,503,240	87,832,212	132,335,452
25	Fire clay	'000 tonnes	30,104	683,415	713,519
26	Fluorite	tonne	4,712,316	13,501,588	18,213,904
27	Fullers Earth	tonne	58,200	256,593,879	256,652,079
28	Garnet	tonne	19,324,793	37,638,032	56,962,824
29	Gold				
	Ore (Primary)	tonne	24,124,537	469,570,375	493,694,912
	Metal (Primary)		110.54	549.30	659.84
	Ore (Placer)		-	26,121,000	26,121,000
	Metal (Placer)		-	5.86	5.86
30	Granite (Dimension Stone)	'000 cu m	263,692	45,966,608	46,230,300
31	Graphite	tonne	8,031,864	166,817,781	174,849,645
32	Gypsum	'000 tonnes	39,096	1,247,402	1,286,498
33	Iron Ore (Heamatite)	'000 tonnes	8,093,546	9,788,551	17,882,097
34	Iron Ore (Magnetite)	'000 tonnes	21,755	10,622,305	10,644,060
35	Kyanite	tonne	1,574,853	101,670,767	103,245,620
36	Laterite	'000 tonnes	24,714	446,119	470,833

No	Mineral	Unit	Reserves	Remaining Resources	Total Resources
37	Lead and Zinc				
	Ore	'000 tonnes	108,980	576,615	685,595
	Lead metal		2,245.01	9,304.38	11,549.39
	Zinc metal		12,453.26	24,211.64	36,664.90
	Lead +Zinc metal		0	118.45	118.45
38	Limestone	'000 tonnes	14,926,392	170,008,720	184,935,112
39	Magnesite	'000 tonnes	41,950	293,222	335,172
40	Manganese ore	'000 tonnes	141,977	288,003	429,980
41	Marble	'000 tonnes	276,495	1,654,968	1,931,463
42	Marl	tonne	139,976,150	11,704,870	151,681,020
43	Mica	Kg.	190,741,448	341,495,531	532,236,979
44	Molybdenum				
	Ore	tonne	-	19,286,732	19,286,732
	Contained MOS_2			12,640	12,640
45	Nickel Ore	Million tonnes	-	189	189
46	Ochre	tonne	54,942,176	89,319,089	144,261,265
47	Perlite	'000 tonnes	428	1,978	2,406
48	Platinum Group of Metals (PGM)	tonnes of metal content	-	15.7	15.7
49	Potash	Million tonnes	-	21,816	21,816
50	Pyrite	'000 tonnes	-	1,674,401	1,674,401
51	Pyrophyllite	tonne	23,275,451	32,807,451	56,082,902
52	Quartz/ Silica Sand	'000 tonnes	429,223	3,069,808	3,499,031
53	Quartzite	000' tonnes	86,599	1,164,649	1,251,248
54	Rock Phosphate	tonne	34,778,650	261,505,701	296,284,351
55	Rock Salt	'000 tonnes	16,026	-	16,026
56	Ruby	Kg	236	5,112	5,348
57	Sapphire	Kg	-	450	450
58	Shale	'000 tonnes	15,331	580	15,911
59	Sillimanite	tonne	4,085,052	62,902,385	66,987,437
60	Silver				
	Ore	tonne	187,558,668	279,426,291	466,984,959
	Metal		8,039.57	19,588.68	27,628.25
61	Slate	'000 tonnes	0	2,369	2,369
62	Sulphur (Native)	'000 tonnes	-	210	210
63	Talc/Steatite/Soapstone	'000 tonnes	90,026	178,996	269,022
64	Tin				
	Ore	tonne	7,131	83,719,066	83,726,197
	Metal		1,132.43	101,142.41	102,274.84
65	Titanium minerals	tonne	22,030,223	371,965,694	393,995,917
66	Tungsten				
	Ore	tonne	-	87,387,464	87,387,464
	Contained WO_3		-	142,094.35	142,094.35
67	Vanadium				
	Ore	tonne	410,955	24,307,933	24,718,888
	Contained V_2O_5		1,602.72	63,284.45	64,887.17
68	Vermiculite		1,704,007	803,003	2,507,010
69	Wollastonite		2,487,122	14,082,751	16,569,873
70	Zircon	tonne	1,347,470	1,786,482	3,133,952

Figures rounded off. *N.E. :- Not Estimated*

12 CIRCULARS ISSUED BY IBM

भारत सरकार / Government of India
खान मंत्रालय / Ministry of Mines
भारतीय खान ब्यूरो / Indian Bureau of Mines
मुख्य खान नियंत्रक का कार्यालय / Office of the Chief Controller of Mines

No. O-11011/1/2011-CCOM Nagpur, dated : 16th September 2011

To,
The Regional Controller of Mines / OIC,
Indian Bureau of Mines,
Ajmer / Bangalore / Bhubaneshwar / Chennai / Dehradun / Goa / Hyderabad / Jabalpur / Kolkata / Nagpur / Ranchi / Udaipur.

Sub.:- On line registration under Rule 45 of the Mineral Conservation and Development (Amendment) Rules, 2011 - reg.

Sir,

As you are aware of the fact that consequent to the amendments made in Rule 45 of MCDR, 1988 vide notification dated 09.02.2011, it is now mandatory for all the mining lessees, traders, stockists, exporters, end users, etc. engaged in mineral business to register them with Indian Bureau of Mines.

In view of above you are advised to bring into notice of all the mining lessees under your jurisdiction that despatches of ore / mineral from the mining leases in any form shall be to any trader(s), stockist(s), exporter(s), end user(s), etc. who has valid registration number under Rule 45 of the Mineral Conservation and Development (Amendment) Rules, 2011.

This has approval of the competent authority.

Yours faithfully,

16/9/11

(Ranjan Sahai)
Controller of Mines

Copy for information to:-
1. The Controller of Mines (NZ/CZ/SZ), IBM, Ajmer / Nagpur / Bangalore.
2. The Technical Secretary, IBM, Nagpur.

(Ranjan Sahai)
Controller of Mines

13 HUMAN RESOURCE POLICY

HUMAN RESOURCES DEVELOPMENT AND DEPLOYMENT POLICY FOR GROUP A & B OFFICERS OF THE INDIAN BUREAU OF MINES.

1.0 Purpose of this Policy Documents

1.1 Established in 1948, the Indian Bureau of Mines (IBM) is a subordinate office of the Ministry of Mines. IBM is engaged in multi-disciplinary functions viz. promotion, conservation and scientific development of mineral resources and protection of environment in mines other than coal, petroleum and natural gas, atomic minerals and minor minerals.

1.2 In order to achieve the programmatic goals of IBM and effective utilization of human resources, guidelines concerning following areas have been developed.

(i) Human resource development, including career development and promotion of specialization and excellence; and

(ii) Human resource deployment including posting, transfer, assignment of work etc.

1.3 The fundamental guidelines for the purpose is 'the public interest' and optimization of human resources in the best interest of IBM within its Charter of functions. Transfers that facilitate growth of IBM as an organization needs to be implemented in a planned manner, while 'transfer for the sake of transfer' needs to be abjured.

1.4 The public interest as well as IBM's interests is best served if there is a clear and transparent policy in the public domain, enabling all officers and the organization having dealing with IBM to be adequately assured that deployment within IBM is based on sound and well thought out principles. Hence this document.

2.0 Objective of the policy

2.1 IBM is an all India Organization with a pan India presence. All Group A & B Officers of the IBM must expect to be transferred and posted anywhere in India as per requirement. In the public interest, IBM's endeavor must be that, this is done in the best interest of the organization and its employees, and in a planned and transparent manner.

2.2 Not only should Group A & B officers have the opportunity to have the experience of different geographical and demographical settings, but each office of IBM at Zonal level and below should exhibit adequate all India diversity. As such not more than 25% of the sanctioned posts in Group A & B officers should be filled from the State concerned.

2.3 Senior level (Deputy Controller of Mines and above) posting at central headquarters will be based on merit and aptitude as determined by the Committee constituted every year for transfers by Controller General, IBM.

2.4 Officers of IBM need to be groomed and prepared for taking up higher responsibilities (on the basis of seniority and expertise) by giving the officers concerned an opportunity to acquire and further increase expertise. Postings and deployments will be made so as to promote specialization as well as appropriate multi-disciplinary expertise.

2.4 Conscious effort will be made to ensure continuity of management and systematic succession planning for key posts in the middle and senior management.

3.0 General Principles

3.1 Keeping with its traditional role and to meet emerging challenges, IBM must undertake dedicated efforts to develop into a world class institution for systematic development of mineral deposits, conservation of minerals, technical consultancy services, mineral statistics analysis, Ore dressing studies, mining plans and Mine Closure Management and related environment and social management etc., while keeping pace with the latest technologies and best practices.

3.2 Presently IBM exercises its activities within the five schemes. In order to fulfill obligations set out in the charter, the scheme-wise activities are as follows: -

Sl.No.	Name of the Schemes	Components/Activities
1.	Inspection of Mines for Scientific & Systematic Mining, Mineral Conservation & Mines	Periodical inspections of Mines for administration of MCDR,1988, including approval of mining plan/ scheme/mine closure plan etc. Inspection for grant of PL & RP, illegal mining.
2	Mineral Beneficiation studies utilisation of low grade & sub-grade ores & analysis of environmental samples.	Studies for development of process flow sheets, promotion of mineral conservation by upgrading low grade and sub -grade ores. Environmental sample analysis etc.
3.	Technological upgradation & modernisation	Updation of NMI as per UNFC. Preparation of mineral map with forest overlays. Consultancy services to mining industry on mining, geological and environmental aspects. Threshold value of minerals. Development of new mining methods. Human resource and infrastructure development.
4	Collection processing dissemination of data on Mines & Minerals through various publications.	Publication of Indian Minerals Year Book, National Mineral Inventory, Monthly Statistics on Mineral Production etc.
5	Development of Solid Waste from Mining in India	Kept in abeyance.
6.	Computerisation of online register on Mining Tenement system	To provide access to various online information. To create a single window information on mineral resources. To make the information available to Ministry of Mines and other State and Central Government organisations, MP's, MLA's and other identified institutions. To keep pace with the developed countries in accordance with international practices in mineral resource development in India

3.3 The deployment / redeployment of personnel in IBM must meet its obligations set out in the Charter of functions and shall be regulated by proper and judicious placement of its Group A and B Officers. An officer will be required to serve at any location of IBM's offices / establishments.

4.0 Rotational posting

4.1 For the purpose of rotational transfer the posts have been classified as Sensitive, Less sensitive and Non-sensitive detailed as follows:

(i) Sensitive: Controller of Mines, Regional Controller of Mines, Officer incharge of Zonal and Regional Office posted in Zonal, Regional and Sub Regional Offices.

(ii) Less sensitive: Deputy Controller of Mines, Senior Assistant Controller of Mines, Assistant Controller of Mines, Superintending Mining Geologist, Regional Mining Geologist, Senior Mining Geologist, Junior Mining Geologist, Superintending Officer (OD) and Officer incharge(OD) posted in Zonal, Regional and Sub Regional Offices.

(iii) Non-sensitive: All remaining Group 'A' & B posts.

4.2 The tenure for above categories for the purpose of rotational transfer will be as follows:

(i) The sensitive postings are to be rotated every 3 years as far as possible, and 5 years in any case.

(ii) Less sensitive postings are to be rotated every 5 years as far as possible, and 8 years in any case.

(iii) The non-sensitive postings involving, Mining, Geology, Ore Dressing, Chemistry, and

Administration disciplines etc. will be rotated after a minimum period of 8 years depending upon exigencies of work and public interest.

4.3 Group A & B Officers who have completed residency period as mentioned in para 4.1 above, in a particular place shall be redeployed on rotational basis in various offices/ establishments of IBM in accordance with individual capability, aptitude and work experience.

4.4 Group A & B officers shall be redeployed on promotion to another Zonal/Regional Offices / Ore Dressing Labs, as per their respective discipline, as a matter of policy and cases of transfer of officers on the verge of promotion would also be considered accordingly, so as to avoid frequent transfers.

4.5 Senior level officers on promotion shall be redeployed to another Zonal/Regional Offices /Ore Dressing Labs, as per their respective discipline, as a matter of policy, provided that in case his tenure at the current station is less than 5 years, he may be retained if he so opts and availability of a suitable vacancy. In all such cases, an officer with less tenure shall be given preference over an officer with a longer tenure.

4.6 Group A & B Officers in IBM with 2 years of residual service before superannuation, on request may be exempted from redeployment in a manner as mentioned in preceding paragraphs except on promotion in which case transfer is effected as a matter of policy as laid down in para 4.4 above.

4.7 The transfers to and fro NE Regional Stations will be as per the Government. instructions in this regard.

4.8 Since Mineral Economics Division is located only at IBM Headquarters, there will, ordinarily, be no transfers of officers belonging to Mineral Economics Discipline. However, if required in public interest, the officers will be subjected to transfers as per the norms set for non-sensitive post.

4.9 The Officers of Mining and Mineral Statistics Division belong to Indian Statistical Service and Subordinate Statistical Services. Their transfers are controlled by Ministry of Statistics and Programme Implementation. They are not covered under this Policy.

4.10 Notwithstanding anything above, there will be full powers to transfer any of the officers/officials of IBM at anytime to any of its offices in administrative exigencies and public interest. For this purpose Controller General, Indian Bureau of Mines will forward a proposal recording the reasons to the Ministry for approval.

5.0 Time Schedule of general Transfers:

5.1 The transfer season shall commence on 1st of April each year.

5.2 Controller General shall constitute committees for preparation of transfer proposals on or before 31st of January every year consisting of following officers:

1) Chief Controller of Mines/Director(OD) -- Chairman
2) Controller of Mines (P & C) -- Member
3) Controller of Mines (TMP) -- Member
4) Chief Mining Geologist -- Member
5) Chief Ore Dressing Officer -- Member
6) Chief Administrative Officer -- Member

For deciding the transfers of Group 'A' & 'B' Officers from Mineral Economics Division, Chief Mineral Economist shall be co-opted as a member in the committee headed by CCOM.

5.3 The proposals shall be prepared based on the requirements as per the annual programme, and the duration of stay of the officers as per the norms discussed in the preceding paragraphs. Proposals for transfer and postings of Group 'A' & 'B' Officers by the committees as mentioned at 5.2 shall be prepared and submitted to Controller General not later than 5th February every year positively. After obtaining the approval of Controller General on Committee's proposal, orders for transfer/posting will be issued.

5.4 Proposals for transfer in respect of COM/equivalent officers will be prepared by a Committee headed by Controller General, Indian

Bureau of Mines with Chief Controller of Mines and Director (Ore Dressing) as members and the same would be forwarded to Ministry for approval.

5.5 General transfers shall be completed by 15th April each year.

5.6 Transfers outside the period of general transfer should only be done:

(i) To fill up a vacancy caused due to promotion, retirement or other unanticipated event, and where the post cannot be kept vacant.

(ii) On compassionate grounds for reasons given in paragraph below.

(iii) On account of public interest or a new and pressing requirement which could not be anticipated in the annual programme.

6.0 Compassionate postings and transfers:

6.1 Every officer is expected to serve anywhere in India in the public interest. However, in case it is possible to reasonably make alternative arrangements within the framework of this policy, personal circumstances of the officers and their families will be given utmost consideration, and for this purpose, (i) Where both husband and wife are in Central Government employment, posting to the same station shall be given due weightage subject to considerations of maximum tenure as per the Policy. This has to be in accordance with the DOPT O.M. No.F.No. 2804/9/2009-Estt.A, dated 30.09.2009 (Annexure-I).

(ii) Where the officer or his spouse or minor children require to be at a location on account of availability of super-specialised medical services not available at present place of posting, posting to a station of choice (in order of priority) shall be given due weightage.

(iii) Physically challenged employees shall be considered for transfer under this clause based on nature and extent of the disability. Definitions of Categories of disabilities have been given in Para 8 of DOPT O.M. No.36035/3/2004-Estt(Res.) dated 29th December, 2005 on the subject 'Reservation for the Persons with Disabilities.'

(iv) DOPT guidelines issued vide their O.M. No.AB-14017/49/90-Estt.(RR) dated 15.02.1991 and O.M. No.AB-14017/41/90-Estt.(RR) (Vol.II) dated 05.01.1993 in respect of the employees having mentally challenged child/spouse shall be followed.

(v) In case of an officer due to superannuation within 2 years, posting to a station of choice (in order of priority) shall be given due weightage. Provided, in case an officer seeks a posting to a particular station on medical grounds or on grounds of Disabilities, the Transfer Committee may send its recommendation to the Controller General, IBM after referring the case to a Medical Board for its opinion.

6.2 Applications for posting on compassionate grounds shall be sent on proforma (Annexure-II) along with documents in support and shall be approved by the Controller General for consideration during the next General Transfer.

6.3 The list of approved cases for compassionate transfers shall also be published in IBM's Portal/Internet.

6.4 Where on grounds of extreme urgency, it is not possible to wait till the next General Transfer, a transfer on compassionate grounds may be made with the prior approval of the Secretary (Mines).

7.0 Handing over/Taking over

7.1 All officers shall, on receiving the order of transfer, forthwith, handover charge to the officer and by such date specified in the order without delay and join at the new place of posting subject to instructions on availing joining time.

7.2 All officers handing over charge shall in their charge report include a list of pending items, including pending Reports. It is the responsibility of the Divisional Head concerned to ensure completion of the report at the earliest.

7.3 The officer taking over charge or assuming charge shall bring to the notice of his superior in writing all cases of pending items and reports and obtain his directions wherever necessary.

8.0 Methodology of prioritisation for transfer

8.1 Subject to the provisions of this Policy, an

officer with less tenure at a station shall not be transferred out except on request, unless all officers with a longer tenure than him in the same grade and stream have been included in the transfer order.

8.2 All transfer orders along with Region-wise / Grade-wise / Stream-wise / Tenure-wise lists shall be published on IBM Portal/Internet in the interest of transparency. All cancellations, deferments and deviation from Policy shall also be similarly published

8.3 The Seniority list for Group 'A' & B Officers proposed to be considered for transfer shall be published on the Portal on 1st January each year giving current post and date of assuming charge in Regional Office/Zonal Office/Divisions/Regional Ore Dressing Laboratory.

9.0 Transfer on Administrative Grounds or in Public Interest.

Notwithstanding anything contained in this policy, Government may, if necessary in Public Interest, transfer or post any officer to any station or posts. An officer against whom the CVC has recommended initiation of vigilance proceedings should not normally be posted or remain posted at the station where the cause of the vigilance proceedings originated. He shall also not be posted on a 'sensitive' charge. This restriction will remain in operation until the vigilance matter is closed. A self contained proposal for transfer will be made by Controller General, Indian Bureau of Mines and forwarded to Ministry for approval.

10.0 Transfer on complaint basis:

Where a complaint is received and in the opinion of the Controller General, IBM for reasons to be recorded, continuance of the officer at the station will not be in the public interest, he may order the immediate transfer of the officer pending inquiry, to another office within the same zone. A self contained proposal for transfer will be made by Controller General, Indian Bureau of Mines and forwarded to Ministry for approval.

11.0 Appeal:

11.1 Whenever a redeployment order is issued, the officer concerned shall comply with the order without delay. It would be open to an officer to make representation through proper channel to the Controller General, IBM against a transfer order within 10 days from the date of receipt of redeployment order. All such appeal shall be with specific reference to the provisions of this Policy.

11.2 In the event of redeployment order not stayed/modified/cancelled, if sought in the representation under 11.1 above within 30 days from the date of written representation, the Head of Division/Zone/Region/Regional Lab shall ensure that the officer is relieved by the date prescribed in the redeployment order.

12. Availing of Earned Leave after issue of transfer Orders

An officer under orders of transfer may be granted or allowed to avail Earned Leave if applied for, only after he has joined his new place of posting. The period spent on Earned Leave will not count towards computation of tenure in that station. Officers who proceed on Earned Leave without completing the minimum tenure prescribed for the station area will have to rejoin the same station for completing the prescribed tenure. In other cases the relevant Transfer Committee will decide their posting after rejoin on completion of any other leave except, Casual Leave.

13. Interpretation in an event of dispute:

In an event of dispute in the application of above-mentioned deployment and re-deployment policy the interpretation and decision of the administrative Ministry shall be final and binding.

14. Coming into force:

This policy comes into force with effect from 1st October, 2010.

CONTROLLER GENERAL

F.NO.28034/9/2009-Estt.(A)
Government of India
Ministry of Personnel, Public Grievances and Pensions
(Department of Personnel and Training)
North Block,
New Delhi,

Dated the 30th September 2009.

Subject: Posting of husband and wife at the same station.

In view of the utmost importance attached to the enhancement of women's status in all walks of life and to enable them to lead a normal family life as also to ensure the education and welfare of the ·children, guidelines were issued by DOP&T in O.M No. 28034/7/86-Estt.(A) dated 3.4.86 and No.28034/2/97-Estt.(A) dated 12.6.97 for posting of husband and wife who are in Government service, at the same station. Department had on 23.8.2004 issued instructions to all Mins.lDeptts. to follow the above guidelines in letter and spirit.

2. In the context of the need to make concerted efforts to increase representation of women in Central Government jobs, these guidelines have been reviewed to see whether the instructions could be made mandatory. It has been decided that when both spouses are in same Central Service or working in same Deptt. and if posts are available, they may mandatorily be posted at the same station. It is also necessary to make the provisions at Paras 3(iv) and (vi) of the O.M. dated 3.4.86 stronger as it is not always necessary that the service to which the spouse with longer service belongs has adequate number of posts and posting to the nearest station by either of the Department may become necessary.

3. On the basis of the 6th CPC Report, Govt. servants have already been allowed the facility of Child Care Leave which is admissible till the children attain 18 year s of age. On similar lines, provisions of O.M. dated 12.6.97 have been amended.

All India Services, namely lAS, IPS and Indian Forest Service (Group 'A'); The spouse may be transferred to the same cadre by providing for a cadre transfer of one spouse to the Cadre of the other spouse, on the request of the member of service subject to the member of service not being posted under this process to his/her home cadre. Postings within the Cadre will, of course, fall within the purview of the State Govt.

(ii) Where one spouse belongs to one of the All India Services and the other spouse belongs' to one of the Central Services:-

The cadre controlling authority of the Central Service may post the officer to the station or if there is no post in that station, to the State where the other spouse belonging to the All India service is posted.

(iii) Where the spouses belong to the same Central Service:

The Cadre controlling authority may post the spouses to the same station.

(iv) Where the spouse belongs to one Central Service and the other spouse belongs to another Central Service:-

The spouse with the longer service at a station may apply to his/her appropriate cadre controlling authority and the said authority may post the said officer to the station or if there is no post in that station to the nearest station where the post exists. In case that authority, after consideration of the request, is not in a

position to accede to the request, on the basis of non-availability of vacant post, the spouse with lesser service may apply to the appropriate cadre authority accordingly, and that authority will consider such requests for posting the said officer to the station or if there is no post in that station to the nearest station where the post exists.

(v) Where one spouse belongs to an All India Service and the other spouse belongs to a Public Sector Undertaking:

The spouse employed under the Public Sector Undertaking may apply to the competent authority and said authority may post the said officer to the station, or if there is no post under the PSU in that station, to the State where the other spouse is posted.

(vi) Where one spouse belongs to a Central Service and the other spouse belongs to a PSU:-

The spouse employed under the PSU 'may apply to the competent authority and the said authority may post the officer to the station or if there is no post under the PSU in that station, to the station nearest to the station where the other spouse is posted. If, however, the request cannot be granted because the PSU has no post in the said station, then the spouse belonging to the Central Service may apply to the appropriate cadre controlling authority and the said authority may post the said officer to the station or if there is no post in that station, to the station nearest to the station where the spouse employed under PSU is posted.

(vii) Where one spouse is employed under the Central Govt. and the other spouse is employed under the state Govt.:-

The spouse employed under the Central Govt. may apply to the competent authority and the competent authority may post the said officer to the station or if there is no post in that station to the State where the other spouse is posted.

(viii) "The husband & wife, if working in the same Department and if the required level of post is available, should invariably be posted together in order to enable them to lead a normal family life and look after the welfare of their children especially till the children attain 18 years of age. This will not apply on appointment under the central Staffing Scheme. Where only wife is a Govt. servant, the above concessions would be applicable to the Govt. servant.

5. Complaints are sometimes received that even if posts are available in the station of posting of the spouse, the administrative authorities do not accommodate the employees citing administrative reasons. In all such cases, the cadre controlling authority should strive to post the employee at the station of the spouse and in case of inability to do so, specific reasons, therefore, may be communicated to the employee.

6. Although, normal channels of representations/complaints redressal mechanism exist in the Min.l Deptts., added safeguards to prevent non-compliance may be provided by ensuring that the complaints against non-adherence to the instructions are be decided by the authorities at least one level above the authorities which took the original decision when they are below the level of secretary to the Govt. of India/Head of the PSU concerned and all such representations are considered and disposed off in time bound manner.

(C.B.P~I)

Joint Secretary to the Govt. of India

GOVERNMENT OF INDIA
MINISTRY OF MINES
INDIAN BUREAU OF MINES
Career Planning Proforma
[Seeking Transfer on Compassionate Grounds]

1. Name

2. Designation

3. Place of Posting

4. Mission/Region

5. Since when posted at present place

6. How many years of service left

7. No. of previous transfers locations

8. Present Grounds for seeking transfer

9. Supporting documents

10. Previous transfer application, if any on similar/other

A. Compassionate reasons (accepted/rejected) (Signature)

B. Comments of the immediate superior officer (Signature)

C. Comments and recommendation of region/Mission Head (Signature)

D. Decision of the Controller General, IBM (Signature)

14A STATUS OF RECONNAISSANCE PERMITS IN INDIA

Status of Reconnaissance Permits in India as on 31.03.2012

State	Total No. of RPs granted by the State Government till date (as on 31.03.2012)	No. of RPs where final exploration data submitted to IBM
Andhra Pradesh	53	38
Arunachal Pradesh	01	00
Chhattisgarh	42	19
Gujarat	04	00
Jharkhand	04	01
Karnataka	65	25
Kerala	01	00
Madhya Pradesh	87	18
Maharashtra	10	05
Manipur	01	00
Odisha	26	19
Rajasthan	74	19
Uttar Pradesh	21	07
West Bengal	03	01
All India	**392**	**152**

14B STATUS OF PROSPECTING LICENCES IN INDIA

Status of Prospecting Licences in India as on 31.03.2012

State	Total No. of PLs granted by the State Government from Nov. 2007 to 31.03.2012)	No. of PLs where final exploration data submitted to IBM
Andhra Pradesh	57	23
Arunachal Pradesh	07	00
Chhattisgarh	21	00
Gujarat	15	00
Himachal Pradesh	03	00
Jharkhand	12	00
Karnataka	03	01
Kerala	01	00
Madhya Pradesh	309	04
Maharashtra	27	01
Manipur	04	00
Odisha	01	01
Rajasthan	95	01
Tamil Nadu	10	00
Uttarakhand	28	00
All India	**593**	**31**

14C STATE-WISE DISTRIBUTION OF MINING LEASES

State-wise Distribution of Mining Leases (As on 31.03.2011)

State	No. of Leases	Percentage	Leases Area (in ha)	Percentage
AndhraPradesh	1999	18.17	68047.13	12.42
Assam	8	0.07	929.50	0.17
Bihar	11	0.10	2074.72	0.38
Chhattisgarh	316	2.87	23551.77	4.30
Goa	336	3.05	24393.26	4.45
Gujarat	1152	10.47	30035.65	5.48
Haryana	118	1.07	12255.12	2.24
HimachalPradesh	54	0.49	3440.41	0.63
Jammu&Kashmir	57	0.52	2671.84	0.49
Jharkhand	332	3.02	37071.32	6.77
Karnataka	754	6.85	59204.59	10.81
Kerala	82	0.75	2878.62	0.53
MadhyaPradesh	1100	10.00	30930.93	5.65
Maharashtra	251	2.28	16093.72	2.94
Manipur	2	0.02	610.17	0.11
Meghalaya	21	0.19	1297.63	0.24
Odisha	532	4.84	77743.91	14.19
Rajasthan	2696	24.50	107102.01	19.55
Sikkim	3	0.03	96.32	0.02
TamilNadu	945	8.59	37780.11	6.90
UttarPradesh	95	0.86	7608.54	1.39
Uttarakhand	89	0.81	1276.76	0.23
WestBengal	50	0.45	720.28	0.13
All India	**11003**	**100.00**	**547814.31**	**100.00**

14D MINERAL-WISE DISTRIBUTION OF MINING LEASES

Mineral-wise Distribution of Mining Leases As on 31/03/2011 (All India)

Sl.No.	Mineral	No. of Leases	Area in ha
1	Agate	3	59.62
2	Amethyst	6	74.42
3	Apatite	2	20.17
4	Asbestos	34	1632.75
5	Ball clay	54	28281.41
6	Barytes	164	2587.75
7	Bauxite	343	30032.74
8	Borax	1	159.00
9	Calcareous sand	14	151.54
10	Calcite	80	1620.02
11	Chalk	162	650.75
12	China clay	514	17386.17
13	Chromite	35	9432.57
14	Clay (others)	106	1280.61
15	Coppe rore	17	10007.01
16	Corundum	17	240.62
17	Diamond	2	275.96
18	Diaspore	12	94.38
19	Dolomite	542	8124.63
20	Dunite	1	14.28
21	Epidote	1	5.00
22	Felsite	6	102.29
23	Felspar	862	11653.41
24	Fireclay	272	6507.87
25	Fluorite	16	1670.71
26	Garnet	96	938.88
27	Garnet (Gem)	1	12.08
28	Gold	11	6441.71
29	Graphite	121	3787.65
30	Gypsum	89	15255.15
31	Iolite	11	104.35
32	Iron ore	800	98082.70
33	Jasper	5	211.70

Sl.No.	Mineral	No. of Leases	Area in ha
34	Kyanite	32	3217.74
35	Laterite	186	2293.10
36	Lead & Zinc ore	12	7175.19
37	Lime Kankar	19	648.17
38	Limeshell	35	4879.47
39	Limestone	2073	153926.94
40	Magnesite	40	3015.53
41	Manganese ore	340	23258.72
42	Marl	8	1729.08
43	Mica	311	7511.74
44	Moulding sand	62	1380.64
45	Ochre	158	3405.40
46	Perlite	1	144.88
47	Phosphorite	12	2750.76
48	Pyrites	1	647.50
49	Pyrophyllite	97	2259.98
50	Pyroxenite	10	90.84
51	Quartz	1892	16696.91
52	Quartzite	88	2016.35
53	Ruby	1	4.07
54	Sand (others)	57	13547.01
55	Sapphire	1	673.40
56	Shale	46	570.11
57	Silica sand	545	17797.48
58	Sillimanite	6	2847.06
59	Slate	18	683.31
60	Steatite	474	16609.18
61	Tin	15	321.02
62	Vermiculite	16	285.94
63	White clay	24	212.16
64	White shale	16	74.90
65	Wollastonite	7	239.83
	Total	**11003**	**547814.31**

15 STATE-WISE AVERAGE SALE VALUE – MINERAL-WISE/GRADE-WISE

State wise Average Sale Price of minerals by grades for which royalty is chargable on ad valorem basis not linked to any international benchmark price

Month : March 2012

State / Mineral / Grades		Avg. Price
India		
Bauxite	Rs./t	
Non-Metallurgical		
Cement		175
Abrasive		274
Refractory		1383
Others (U)		NA
Chromite	Rs./t	
Lumps		
Up to 40% Cr2O3		4227
40 - 52% Cr2O3		NA
Above 52% Cr2O3		NA
Fines		
Up to 40% Cr2O3		2208
40 - 52% Cr2O3		13189
Above 52% Cr2O3		17352
Concetrates (U)		16494
Iron Ore (lumps)	Rs./t	
Below 55% Fe		1476
55 - 58% Fe		2463
58 - 60% Fe		3268
60 - 62% Fe		3915
62 - 65% Fe		5496
65% Fe & above		5683
Iron Ore (fines)	Rs./t	
Below 55% Fe		1654
55 - 58% Fe		2024
58 - 60% Fe		2223
60 - 62% Fe		2385
62 - 65% Fe		2385
65% Fe & above		2732
Iron Ore Conc.	Rs./t	700
Manganese Ore	Rs./t	
MnO2		18279
Up to 25% Mn		1838
25 - 35% Mn		4059
35 - 46% Mn		7855
Above 46% Mn		10263
Agate	Rs./t	500
Apatite	Rs./t	2100
Phosphorite	Rs./t	
Up to 25% P2O5		364
25 - 30% P2O5		NA
Above 30% P2O5		4753
Asbestos	Rs./t	
Ambhibole		NA
Ball Clay	Rs./t	396
Barytes	Rs./t	
White		688
Off Colour		859
Calcite	Rs./t	359
Chalk	Rs./t	367
Clay (others)	Rs./t	104
Corundum	Rs./kg	NA
Corundum (ruby)	Rs./kg	NA
Diamond	Rs./crt	9820
Diaspore	Rs./t	1671
Dunite	Rs./t	196
Felspar	Rs./t	303
Fireclay	Rs./t	167
Felsite (u)	Rs./t	2305
Fluorite (graded)	Rs./t	
Up to 30% CaF2		NA
30-70% CaF2		NA
70-85% CaF2		NA
Above 85% CaF2		NA
Garnet (abrasive)	Rs./t	1334
Garnet (gem)	Rs./kg	NA
Graphite (r.o.m.)	Rs./t	
With less than 40% fixed carbon		445
With 40% or more fixed carbon		NA
Gypsum	Rs./t	425
Jasper	Rs./t	NR
Kaolin (natural)	Rs./t	246
Kaolin (processed)	Rs./t	1965
Kyanite	Rs./t	
Up to 40% Al2O3		1186
Above 40% Al2O3		NA
Sillimanite	Rs./t	9509
Laterite	Rs./t	
Non-Metallurgical		
Cement		134
Abrasive		NA
Chemical		NA
Refractory		NA
Others		NA
Magnesite	Rs./t	2016
Marl	Rs./t	NA
Mica (crude)	Rs./kg	29
Mica (waste & Scrap)	Rs./kg	NA
Perlite	Rs./t	NA
Pyrites	Rs./t	NA
Pyrophyllite	Rs./t	666
Pyroxenite	Rs./t	307
Quartz	Rs./t	266
Quartzite	Rs./t	346
Silica Sand	Rs./t	143
Sand (others)	Rs./t	NA
Salt (rock)	Rs./t	NA
Shale	Rs./t	60
Steatite	Rs./t	
Insecticide (Filler) grade		373
Other than insecticide (Filler) grade		1293
Selenite	Rs./t	1150
Vermiculite	Rs./t	608

NA : Not Available lme: London Metal Exchange t : Tonne mt : Metric Tonne
(U) : Under Reference lbm: London Bullion Market c : Cents $: Dollor tr oz : Troy Ounce

* : Avearage Sale Price for March 2012, Source - MINERALS & METALS REVIEW, April 2012. Daily average prices has been taken for Gold & Silver.

State wise Average Sale Price of minerals by grades for which royalty is chargable on ad valorem basis not linked to any international benchmark price

Month : March 2012

State / Mineral / Grades		Avg. Price
Wollastonite	Rs./t	953
Aluminium (lme Price)*	$/mt	2183
Copper (lme Price)*	$/mt	8457
Lead (lme Price)*	$/mt	2061
Nickel (lme Price)*	$/mt	18710
Tin (lme Price)*	$/mt	23016
Zinc (lme Price)*	$/mt	2035
Silver (lbm Price)*	c/tr oz	3295
Gold (lbm Price)*	$/tr oz	1674
Andhra Pradesh		
Iron Ore (lumps)	Rs./t	
Below 55% Fe		368
55 - 58% Fe		500
58 - 60% Fe		707
60 - 62% Fe		NA
62 - 65% Fe		NA
Iron Ore (fines)	Rs./t	
Below 55% Fe		308
55 - 58% Fe		308
60 - 62% Fe		500
62 - 65% Fe		NA
Manganese Ore	Rs./t	
MnO2		NA
Up to 25% Mn		1553
25 - 35% Mn		1991
35 - 46% Mn		3137
Above 46% Mn		NA
Apatite	Rs./t	2100
Asbestos	Rs./t	
Ambhibole		NA
Ball Clay	Rs./t	286
Barytes	Rs./t	
White		NA
Off Colour		861
Calcite	Rs./t	NA
Clay (others)	Rs./t	103
Felspar	Rs./t	258
Fireclay	Rs./t	209
Garnet (abrasive)	Rs./t	4988
Kaolin (natural)	Rs./t	158
Sillimanite	Rs./t	9262
Laterite	Rs./t	
Non-Metallurgical Cement		115
Mica (crude)	Rs./kg	30
Mica (waste & Scrap)	Rs./kg	NA
Pyrophyllite	Rs./t	NA
Quartz	Rs./t	215
Quartzite	Rs./t	592
Silica Sand	Rs./t	87
Sand (others)	Rs./t	NA
Shale	Rs./t	46
Steatite	Rs./t	
Insecticide (Filler) grade		179
Other than insecticide (Filler) grade		745
Vermiculite	Rs./t	437
Bihar		
Mica (crude)	Rs./kg	NA
Mica (waste & Scrap)	Rs./kg	NA
Pyrites	Rs./t	NA
Quartzite	Rs./t	567
Steatite	Rs./t	
Insecticide (Filler) grade		NA
Chhattisgarh		
Bauxite	Rs./t	
Non-Metallurgical		
Abrasive		NA
Refractory		NA
Iron Ore (lumps)	Rs./t	
55 - 58% Fe		NA
58 - 60% Fe		NA
60 - 62% Fe		NA
62 - 65% Fe		4567
65% Fe & above		5400
Iron Ore (fines)	Rs./t	
Below 55% Fe		2162
55 - 58% Fe		NA
58 - 60% Fe		2162
60 - 62% Fe		2298
62 - 65% Fe		2504
65% Fe & above		2727
Clay (others)	Rs./t	NA
Quartz	Rs./t	350
Quartzite	Rs./t	482
Steatite	Rs./t	
Insecticide (Filler) grade		300
Goa		
Bauxite	Rs./t	
Non-Metallurgical		
Cement		NA
Iron Ore (lumps)	Rs./t	
Below 55% Fe		1748
55 - 58% Fe		2747
58 - 60% Fe		3019
60 - 62% Fe		3019
62 - 65% Fe		NA
65% Fe & above		NA
Iron Ore (fines)	Rs./t	
Below 55% Fe		1705
55 - 58% Fe		2316
58 - 60% Fe		2944
60 - 62% Fe		3664
62 - 65% Fe		3702
65% Fe & above		NA
Iron Ore Conc.	Rs./t	700

NA : Not Available lme: London Metal Exchange t : Tonne mt : Metric Tonne
(U) : Under Reference lbm: London Bullion Market c : Cents $: Dollor tr oz : Troy Ounce

* : Avearage Sale Price for March 2012, Source - MINERALS & METALS REVIEW, April 2012. Daily average prices has been taken for Gold & Silver.

State wise Average Sale Price of minerals by grades for which royalty is chargable on ad valorem basis not linked to any international benchmark price

Month : March 2012

State / Mineral / Grades		Avg. Price
Manganese Ore	Rs./t	
Up to 25% Mn		NA
25 - 35% Mn		NA
35 - 46% Mn		NA
Above 46% Mn		NA
Laterite	Rs./t	
Non-Metallurgical		
Cement		NA
Pyrophyllite	Rs./t	NA
Gujarat		
Bauxite	Rs./t	
Non-Metallurgical		
Cement		175
Abrasive		274
Refractory		1534
Others (U)		NA
Manganese Ore	Rs./t	
Up to 25% Mn		NA
Agate	Rs./t	500
Ball Clay	Rs./t	110
Chalk	Rs./t	367
Clay (others)	Rs./t	NA
Fireclay	Rs./t	70
Fluorite (graded)	Rs./t	
Up to 30% CaF2		NA
Gypsum	Rs./t	NA
Kaolin (natural)	Rs./t	173
Kaolin (processed)	Rs./t	1166
Laterite	Rs./t	
Non-Metallurgical		
Cement		NA
Abrasive		NA
Chemical		NA
Others		NA
Marl	Rs./t	NA
Perlite	Rs./t	NA
Pyrophyllite	Rs./t	NA
Quartz	Rs./t	197
Silica Sand	Rs./t	76
Steatite	Rs./t	
Insecticide (Filler) grade		138
Himachal Pradesh		
Barytes	Rs./t	
White		NA
Off Colour		NA
Salt (rock)	Rs./t	NA
Shale	Rs./t	NA
Jammu & Kashmir		
Gypsum	Rs./t	300
Jharkhand		
Bauxite	Rs./t	
Non-Metallurgical		
Cement		NA
Iron Ore (lumps)	Rs./t	
Below 55% Fe		1629
55 - 58% Fe		1629
58 - 60% Fe		3886
60 - 62% Fe		5667
62 - 65% Fe		6237
65% Fe & above		NA
Iron Ore (fines)	Rs./t	
Below 55% Fe		NA
55 - 58% Fe		500
58 - 60% Fe		1000
60 - 62% Fe		1443
62 - 65% Fe		3026
65% Fe & above		3026
Manganese Ore	Rs./t	
MnO2		NA
Up to 25% Mn		NA
25 - 35% Mn		NA
35 - 46% Mn		NA
Above 46% Mn		NA
Felspar	Rs./t	259
Fireclay	Rs./t	160
Graphite (r.o.m.)	Rs./t	
With less than 40% fixed carbon		455
Kaolin (natural)	Rs./t	251
Kaolin (processed)	Rs./t	2004
Kyanite	Rs./t	
Up to 40% Al2O3		1186
Above 40% Al2O3		NA
Laterite	Rs./t	
Non-Metallurgical		
Cement		NA
Mica (crude)	Rs./kg	NA
Mica (waste & Scrap)	Rs./kg	NA
Pyrophyllite	Rs./t	NA
Pyroxenite	Rs./t	307
Quartz	Rs./t	217
Quartzite	Rs./t	197
Silica Sand	Rs./t	336
Steatite	Rs./t	
Insecticide (Filler) grade		280
Karnataka		
Bauxite	Rs./t	
Non-Metallurgical		
Cement		NA
Chromite	Rs./t	
Lumps		
Up to 40% Cr2O3		4227
40 - 52% Cr2O3		NA
Fines		
Up to 40% Cr2O3		NA
40 - 52% Cr2O3		NA
Concetrates (U)		NA
Iron Ore (lumps)	Rs./t	

NA : Not Available lme: London Metal Exchange t : Tonne mt : Metric Tonne
(U) : Under Reference lbm: London Bullion Market c : Cents $: Dollor tr oz : Troy Ounce

* : Avearage Sale Price for March 2012, Source - MINERALS & METALS REVIEW, April 2012. Daily average prices has been taken for Gold & Silver.

State wise Average Sale Price of minerals by grades for which royalty is chargable on ad valorem basis not linked to any international benchmark price

Month : March 2012

State / Mineral / Grades		Avg. Price
Below 55% Fe		NA
55 - 58% Fe		NA
58 - 60% Fe		3032
60 - 62% Fe		4250
62 - 65% Fe		4484
65% Fe & above		4963
Iron Ore (fines)	Rs./t	
Below 55% Fe		NA
55 - 58% Fe		1394
58 - 60% Fe		1770
60 - 62% Fe		2176
62 - 65% Fe		2176
65% Fe & above		NA
Iron Ore Conc.	Rs./t	NA
Manganese Ore	Rs./t	
Up to 25% Mn		2139
25 - 35% Mn		4200
35 - 46% Mn		NA
Above 46% Mn		NA
Clay (others)	Rs./t	NA
Dunite	Rs./t	134
Felspar	Rs./t	NA
Fireclay	Rs./t	440
Felsite (u)	Rs./t	2305
Kaolin (natural)	Rs./t	NA
Kaolin (processed)	Rs./t	2415
Kyanite	Rs./t	
Up to 40% Al2O3		NA
Above 40% Al2O3		NA
Laterite	Rs./t	
Non-Metallurgical		
Cement		140
Chemical		NA
Refractory		NA
Magnesite	Rs./t	3344
Quartz	Rs./t	NA
Quartzite	Rs./t	280
Silica Sand	Rs./t	166
Shale	Rs./t	NA
Steatite	Rs./t	
Insecticide (Filler) grade		NA
Kerala		
Kaolin (natural)	Rs./t	269
Kaolin (processed)	Rs./t	3484
Sillimanite	Rs./t	11000
Laterite	Rs./t	
Non-Metallurgical		
Cement		443
Chemical		NA
Others		NA
Silica Sand	Rs./t	1819
Madhya Pradesh		
Bauxite	Rs./t	
Non-Metallurgical		
Cement		NA
Refractory		852
Iron Ore (lumps)	Rs./t	
Below 55% Fe		1187
55 - 58% Fe		1187
58 - 60% Fe		NA
60 - 62% Fe		NA
Iron Ore (fines)	Rs./t	
Below 55% Fe		NA
55 - 58% Fe		605
58 - 60% Fe		NA
Manganese Ore	Rs./t	
MnO2		NA
Up to 25% Mn		2141
25 - 35% Mn		3645
35 - 46% Mn		7091
Above 46% Mn		10033
Phosphorite	Rs./t	
Up to 25% P2O5		704
25 - 30% P2O5		NA
Above 30% P2O5		NA
Calcite	Rs./t	NR
Clay (others)	Rs./t	105
Diamond	Rs./crt	9820
Diaspore	Rs./t	1866
Fireclay	Rs./t	109
Kaolin (natural)	Rs./t	60
Laterite	Rs./t	
Non-Metallurgical		
Cement		94
Pyrophyllite	Rs./t	699
Quartz	Rs./t	NA
Shale	Rs./t	400
Steatite	Rs./t	
Insecticide (Filler) grade		NA
Vermiculite	Rs./t	NA
Maharashtra		
Bauxite	Rs./t	
Non-Metallurgical		
Cement		NA
Others (U)		NA
Chromite	Rs./t	
Lumps		
Up to 40% Cr2O3		NA
40 - 52% Cr2O3		NA
Iron Ore (lumps)	Rs./t	
Below 55% Fe		986
55 - 58% Fe		2369
58 - 60% Fe		2369
60 - 62% Fe		NA
62 - 65% Fe		NA
Iron Ore (fines)	Rs./t	

NA : Not Available lme: London Metal Exchange t : Tonne mt : Metric Tonne
(U) : Under Reference lbm: London Bullion Market c : Cents $: Dollor tr oz : Troy Ounce

* : Avearage Sale Price for March 2012, Source - MINERALS & METALS REVIEW, April 2012. Daily average prices has been taken for Gold & Silver.

State wise Average Sale Price of minerals by grades for which royalty is chargable on ad valorem basis not linked to any international benchmark price

Month : March 2012

State / Mineral / Grades		Avg. Price
Below 55% Fe		750
55 - 58% Fe		2080
58 - 60% Fe		2080
62 - 65% Fe		NA
Manganese Ore	Rs./t	
MnO2		18653
Up to 25% Mn		1276
25 - 35% Mn		4378
35 - 46% Mn		8172
Above 46% Mn		11063
Clay (others)	Rs./t	NA
Corundum	Rs./kg	NA
Fireclay	Rs./t	135
Fluorite (graded)	Rs./t	
30-70% CaF2		NA
70-85% CaF2		NA
Above 85% CaF2		NA
Kyanite	Rs./t	
Up to 40% Al2O3		NA
Above 40% Al2O3		NA
Sillimanite	Rs./t	1917
Laterite	Rs./t	
Non-Metallurgical		
Cement		NA
Pyrophyllite	Rs./t	320
Quartz	Rs./t	467
Quartzite	Rs./t	450
Silica Sand	Rs./t	489
Sand (others)	Rs./t	NA
Shale	Rs./t	NA
Meghalaya		
Shale	Rs./t	NA
Orissa		
Chromite	Rs./t	
Lumps		
Up to 40% Cr2O3		NA
40 - 52% Cr2O3		NA
Above 52% Cr2O3		NA
Fines		
Up to 40% Cr2O3		2208
40 - 52% Cr2O3		13189
Above 52% Cr2O3		17352
Concetrates (U)		16494
Iron Ore (lumps)	Rs./t	
Below 55% Fe		2146
55 - 58% Fe		3084
58 - 60% Fe		3669
60 - 62% Fe		3816
62 - 65% Fe		5669
65% Fe & above		6921
Iron Ore (fines)	Rs./t	
Below 55% Fe		687
55 - 58% Fe		1294
58 - 60% Fe		1294
60 - 62% Fe		1561
62 - 65% Fe		2142
65% Fe & above		2409
Manganese Ore	Rs./t	
MnO2		17952
Up to 25% Mn		1914
25 - 35% Mn		5837
35 - 46% Mn		9890
Above 46% Mn		15243
Corundum (ruby)	Rs./kg	NA
Fireclay	Rs./t	NA
Garnet (abrasive)	Rs./t	5149
Graphite (r.o.m.)	Rs./t	
With less than 40% fixed carbon		435
With 40% or more fixed carbon		NA
Kaolin (processed)	Rs./t	NA
Sillimanite	Rs./t	10000
Pyrophyllite	Rs./t	NA
Pyroxenite	Rs./t	NA
Quartz	Rs./t	350
Quartzite	Rs./t	490
Silica Sand	Rs./t	NA
Steatite	Rs./t	
Insecticide (Filler) grade		NA
Other than insecticide (Filler) grade		NA
Rajasthan		
Iron Ore (lumps)	Rs./t	
Below 55% Fe		252
55 - 58% Fe		NA
Manganese Ore	Rs./t	
25 - 35% Mn		2984
Phosphorite	Rs./t	
Up to 25% P2O5		251
25 - 30% P2O5		NA
Above 30% P2O5		4753
Ball Clay	Rs./t	426
Barytes	Rs./t	
White		688
Off Colour		516
Calcite	Rs./t	359
Clay (others)	Rs./t	240
Felspar	Rs./t	322
Fireclay	Rs./t	198
Fluorite (graded)	Rs./t	
Up to 30% CaF2		NA
30-70% CaF2		NA
70-85% CaF2		NA
Garnet (gem)	Rs./kg	NA
Gypsum	Rs./t	426
Jasper	Rs./t	NR
Kaolin (natural)	Rs./t	324
Kyanite	Rs./t	

NA : Not Available lme: London Metal Exchange t : Tonne mt : Metric Tonne
(U) : Under Reference lbm: London Bullion Market c : Cents $: Dollor tr oz : Troy Ounce

* : Avearage Sale Price for March 2012, Source - MINERALS & METALS REVIEW, April 2012. Daily average prices has been taken for Gold & Silver.

State wise Average Sale Price of minerals by grades for which royalty is chargable on ad valorem basis not linked to any international benchmark price

Month : March 2012

State / Mineral / Grades		Avg. Price
Up to 40% Al2O3		NA
Sillimanite	Rs./t	NA
Magnesite	Rs./t	NA
Mica (crude)	Rs./kg	25
Mica (waste & Scrap)	Rs./kg	NA
Pyrophyllite	Rs./t	NA
Quartz	Rs./t	204
Quartzite	Rs./t	150
Silica Sand	Rs./t	255
Steatite	Rs./t	
Insecticide (Filler) grade		240
Other than insecticide (Filler) grade		1334
Selenite	Rs./t	1150
Vermiculite	Rs./t	NA
Wollastonite	Rs./t	953
Tamil Nadu		
Ball Clay	Rs./t	NA
Dunite	Rs./t	380
Felspar	Rs./t	371
Fireclay	Rs./t	168
Garnet (abrasive)	Rs./t	507
Graphite (r.o.m.)	Rs./t	
With less than 40% fixed carbon		435
Magnesite	Rs./t	2004
Marl	Rs./t	NA
Quartz	Rs./t	904
Silica Sand	Rs./t	1685
Steatite	Rs./t	
Insecticide (Filler) grade		NA
Vermiculite	Rs./t	2236
Uttar Pradesh		
Diaspore	Rs./t	1163
Pyrophyllite	Rs./t	234
Silica Sand	Rs./t	NA
Uttarakhand		
Magnesite	Rs./t	1342
Steatite	Rs./t	
Insecticide (Filler) grade		966
Other than insecticide (Filler) grade		1247
West Bengal		
Apatite	Rs./t	NA
Clay (others)	Rs./t	NA
Felspar	Rs./t	400
Fireclay	Rs./t	85
Kaolin (natural)	Rs./t	410
Kaolin (processed)	Rs./t	810
Quartz	Rs./t	313
Silica Sand	Rs./t	424

NA : Not Available lme: London Metal Exchange t : Tonne mt : Metric Tonne
(U) : Under Reference lbm: London Bullion Market c : Cents $: Dollor tr oz : Troy Ounce

* : Avearage Sale Price for March 2012, Source - MINERALS & METALS REVIEW, April 2012. Daily average prices has been taken for Gold & Silver.

16 CENTRAL INFORMATION COMMISSION ORDER

CENTRAL INFORMATION COMMISSION

.....

F.No.CIC/AT/A/2009/000816	F.No.CIC/AT/A/2009/000817	F.No.CIC/AT/A/2009/000818
F.No.CIC/AT/A/2010/000003	F.No.CIC/AT/A/2010/000010	F.No.CIC/AT/A/2010/000029
F.No.CIC/AT/A/2010/000058	F.No.CIC/AT/A/2010/000059	F.No.CIC/AT/A/2010/000060
F.No.CIC/AT/A/2010/000078	F.No.CIC/AT/A/2010/000127	F.No.CIC/AT/A/2010/000169
F.No.CIC/AT/A/2010/000184		Total : 13 Appeals

Dated, the 07th June, 2010

Appellants : **Dr.D. Dhaya Devadas** (Appeal No.816-818, 3, 10, 29, 58-60 & 127)
Shri Milind B. Nijsure (Appeal No.78/10)
Shri Ashok G. Naik (Appeal No.169/10)
Shri R.Y. Kutumbe (Appeal No.184/10)

Respondents : **Indian Bureau of Mines (IBM)**

These 13 second-appeals have been clubbed for disposal by Commission due to the fact that the matter for decision in all these cases is the disclosure-liability of Mining Plans.

2. Matter was heard on 24.05.2010 pursuant to Commission's notice dated 26.04.2010.

Presence:

Appellants:

(i) Dr.D. Dhaya Devadas : Through rep., Shri Sudalayandi
(ii) Shri Milind B. Nijsure : Present in person
(iii) Shri Ashok G. Naik : Through rep., Shri Bhobe
(iv) Shri R.Y. Kutumbe : Absent

Respondents:

(i) Shri Anil Subramaniam, Under Secretary, Ministry of Mines.
(ii) Shri R.K. Sinha, COM, Indian Bureau of Mines, Bangalore.
(iii) Shri Tuhin Ray, CPIO, Indian Bureau of Mines, Chennai.
(iv) Shri U.L. Gupta, CPIO, Indian Bureau of Mines, Nagpur.
(v) Shri S.K. Adhikari, CPIO, Indian Bureau of Mines, Goa.

3. Earlier, Commission, through its interim-order dated 04.02.2010, had observed as follows:-

"2. *A question has arisen whether the information contained in a Mining Plan as submitted by a private party was liable to be disclosed,*

especially in the face of the private party's plea that that would compromise his commercial confidence and the opposite side's plea that mining of mineral resources of the country could not be a matter exclusively between a commercial entity and the public authority. It was a matter of national resources and the citizens in general have had the right to know all about it.

3. Since the issue involved in these three appeals has larger ramifications, the views of the Ministry of Mines should be obtained about whether disclosure of the type of information requested by the appellant .... could be authorized."

4. Accordingly, assistance of the Ministry of Mines, Government of India was sought through Commission's references dated 05.02.2010 and 19.03.2010.

5. Accordingly, the Ministry of Mines, through a letter dated 22.03.2010 from Shri Anil Subramaniam, Under Secretary, have advised that except certain parts of the Mining Plan – which had elements whose disclosure would be prejudicial to commercial / competitive interest of a third-party (Mining Lease applicants) – the following parts of the Plan could be disclosed:-

"(i) 'General information', and 'Location and accessibility' in Chapter 1 & 2 in Introductory Notes of the Mining Plan.

(ii) 'Mine Drainage', 'Skating of Mineral rejects and Disposal of waste', 'Use of Mineral' and 'Other information' in Chapters 6, 7, 8 and 9 respectively of the Part 'A' of the Mining Plan.

(iii) 'Environmental Management Plan' in Chapter 11 of Part 'B' of the Mining Plan."

6. During the hearing on 24.05.2010, Sudalayandi, representing one of the appellants, Dr.D.Dhaya Devadas, agreed that disclosure of the Mining Plan could be authorized as per Ministry of Mines' advice. Shri Milind B. Nijsure (one of the appellants) insisted that the Mining Plan be made public *in-toto* in public interest.

7. On considering all aspects of the case, I consider it appropriate that disclosure of the Mining Plans – as requested in the 13 RTI-applications corresponding to these second-appeals – be authorized

on the lines advised by the Ministry of Mines. It is observed that Ministry has advised exclusion of only those portions of the Mining Plans which included details specific to a lessee – mobilization of resources, technology employed and so on. While these being specific to the lessee seem obvious, it is not yet clear as to how public interest would be served by its disclosure. It seems fairly apparent that the interests of the lessees – and their competitive position vis-à-vis other competitors – could be seriously jeopardized on account of such disclosures. Thus, the classification of disclosable and non-disclosable information in the Mining Plans as suggested by the Ministry of Mines seems rational and practical. These (non-disclosable parts) are covered by provisions of Sections 11(1), 8(1)(d) and 8(1)(j) of the RTI Act.

8. It is, therefore, directed that the parts (as paraphrased at paragraph 5 above) in the Mining Plans be disclosed to the appellants in these 13 second-appeals as per their requests in the corresponding RTI-applications.

9. It is also noted that the appellant, Dr.D.Dhaya Devadas, through his RTI-applications dated 03.02.2009, (in Appeal No.CIC/AT/A/2010 /000059), dated 11.06.2009 (in Appeal No.CIC/AT/ A/2010/000817) and dated 01.06.2009 (in Appeal No.CIC/AT/A/2010/000818) has also requested information relating to illegal mining and the report of the Deputy Controller of Mines, Chennai Region submitted to Indian Bureau of Mines. These items of information were already disclosed to the appellant through Commission's decision in *Appeal No.F.No.CIC/AT/A/ 2010/000138; Date of Decision: 10.05.2010*. As such, there shall be no further disclosure obligation as regards these.

10. The Ministry of Mines is advised – under Section 25(5) of the RTI Act – to have all public authorities under it put-up the above (disclosable) parts of the Mining Plans on their respective websites to obviate repeated RTI-queries in the matter. Time for action – 2 months.

11. Appeals disposed of with the above directions.

12. Copy of this direction be sent to the parties.

(A.N. TIWARI)
INFORMATION COMMISSIONER

Dr.D.D. Devadas & Ors. Vs. IBM-Appeal Nos.816-818 (2009), 3,10, 29, 58-60, 127 78, 184, 169 (2010).doc

Page 3 of 3

Case Nos. CIC/AT/A/2009/000816, 817, 818
A-10/03, 10, 29, 58, 59, 60, 78, 127, 169 & 184

Authenticated by

(D.C. Singh)
Deputy Registrar

Copy forwarded to:

1. Shri Tuhin Ray, Dy. Controller & CPIO, Indian Bureau of Mines, C-4A, Rajaji Bhavan, Besant Nagar, **CHENNAI** – 600 090.	**7. Dr. D. Dhaya Devadas,** President, Federation of India Placer, Mineral Industries, 1S, Prasad Street, Seethapathy Nagar,Velachery, **CHENNAI** – 600 042 - *Appellant*
2. Shri A.K. Ghoshal, Jr. Mining Geologist & CPIO Regional Office,Indian Bureau of Mines 6th Floor, A- Block, Indira Bhawan, Civil Lines, **NAGPUR – 440 102.**	**8. Shri Milind B. Nijsure** A/P: Velas, Tal: Mandangad, Distt.- **Ratnagiri** (Maharashtra) - *Appellant*
3. Controller of Mines (SZ) & AA, Indian Bureau of Mines No. 29, Industrial Suburb, Goraguntepalya, Tumkur Road, **BANGALORE.**	**9. Shri Ashok G. Naik.** Advocate & Notary, 50, 1st Floor, Apna Bazar Building, **Vasco-da-Gama, GOA.** - *Appellant*
4. Shri S.K. Adhikari, JMG & CPIO, O/o Regional Controller of Mines, Indian Bureau of Mines, Opp. R.T.O's Office, P.O. – Fatorda **MARGAO –GOA** - 403 602.	**10. Shri R.Y. Kutumbe** 62, East High Court Road, New Ramdashpeth,, **NAGPUR** - 10 (Maharashtra). - *Appellant*
5. Shri Ranjan Sahai, Controller of Mines (CZ) & AA, Indian Bureau of Mines 6th Floor, A- Block, Indira Bhawan, Civil Lines, **NAGPUR – 440 102.**	**11. M/s. Ashapura Minochem Ltd.,** Near Madarsa Aarchi , Taluka – Sriburdhan, Distt. Raigarh 402 110 (Maharashtra) - *Representatives of 3rd Parties*
6. The Secretaty, Ministry of Mines, Room No. 320, 3rd Floor, A- Wing, Shastri Bhavan, **New Delhi** – 110 001 - *For Compliance of Para –10.*	**12. M/s V. V. Minerals,** **C/o R. Anand Padmanabhan,** Advocate, D-23, Navkunj Apartments, Plot No. 87, Patparganj, **DELHI** – 110 092 - *3rd Party*
	13. M/s Salitho Ores Pvt. Ltd., Salgaocar Chambers, P.O.Box No. 114 Margao –**GOA** – 403 601. - *3rd Party*

17 SDF & WAY FORWARD

The SDF framework incorporates not only regulatory requirements, but goes beyond that and recommends practices and best in class aspects to address the challenges of sustainable development. It provides a path towards achieving sustainable development aided by guidance steps, measurable outcomes and reporting and assurance.

Key Principles of the SDF

The following seven principles form the core of the Sustainable Development Framework:

(i) Incorporating Environmental and Social Sensitivities in decisions on leases: This principle integrates sustainable development concepts at the earliest phase of the mining life cycle. The underlying philosophy of the principle is to categorise mineral bearing areas based on an environmental and social analysis taking a risk-based approach. At the bidding stage, the categorisation of lease areas into High and Low risk will allow the investors to take business decision with the knowledge that the cost and uncertainties of getting approvals as well as operations in high risk areas will be significantly higher than the low risk areas. It will also allow regulators to put additional commitments at an early stage for environmental and social performance. This principle allows for the government to balance environmental and social interests of the nation, with mining priorities in the longer term;

(ii) Strategic Assessment in Key Mining regions: Understanding that mining activities occurs in clusters which have impacts at a regional level, undertake a strategic assessment of regional and cumulative impacts and develop a Regional Mineral Development Plan based on as assessment of the regional "capacity" at periodic intervals. Creating an institutional structure to own and implement such plans in key mining regions and taking critical decisions on mining, new leases, allocation of resource, and even possible moratorium on mining to ensure more sustainable planning and development in such regions;

(iii) Managing impacts at the Mine level impact through sound management systems: The key elements of this principle are impact assessment of key environmental, social, health and safety issues, development of management framework and systems at the mine level and continual improvement of the same on the basis of international standards on a self driven basis. A key element is disclosing performance on environmental and social parameters to external stakeholder at every stage of the project lifecycle;

(iv) Addressing Land, Resettlement and Other Social Impacts: This principle demands a comprehensive assessment of social impacts and displacement of mining projects at the household, community and mining region level, and management commitment to address those impacts through mitigation measures and management plans;

(v) Community engagement, benefit sharing and contribution to socio-economic development: The principle seeks commitment to regular engagement with the local community as well as sharing of project benefits with the affected families. It is rooted in the principle of sharing profits with the affected communities, a provision incorporated in draft MMDR Bill awaiting approval. It dovetails the social impact management of project operations with the CSR initiatives being undertaken and looks at an integrated approach to mitigate impacts and improve local livelihoods and living conditions in the neighborhood areas/communities.

(vi) Mine Closure and Post Closure: Mining operations must prepare, manage and progressively work on a process for eventual mine closure. This process must cover all relevant aspects and impacts of closure in an integrated and multi-disciplinary way. This must be an auditable document and include a fully scoped and accurate estimate of planned cost of closure to the company. The cost estimates must be adequately set aside to cover national, regional and local legal and regulatory requirements for closure; and must also include the cost of servicing all agreements/ commitments made with stakeholders towards post-closure use;

(vii) Assurance and Reporting: This principle seeks mining sector stakeholders to assess their performance against this SDF and demonstrate

continual improvement on this performance over the life of the project. It requires this performance to be reported in a structured manner in a Sustainable Development Report to be disclosed in the public domain as well as to regulatory agencies to consider during approval processes.

Implementing the SDF

The SDF needs to be driven through an institutional framework that encourages not only voluntary adoption and performance beyond just legal compliance, but ensures there is monitoring of this adoption and tracking of the SDF impacts. The SDF as an institutional system is understood to be fully integrated, though functioning at different levels through an arrangement of representative cells. Specific functions are linked to different levels and connect with existing entities, as described below. The four levels are

- National level within the Ministry of Mines; with the secretariat at the Indian Bureau of Mines, where majority of the centralised functions are undertaken and housed;
- State level within the state Departments of Mines;
- At the mining region level where the SDF has proposed that strategic decisions be taken for mining, environmental and social safeguards and infrastructure development; and
- At the lease level, where each mine has to have an organisational structure in place to manage sustainable development performance.

Way forward

The SDF document has been finalised. As part of roll-out of SDF the detailing of measureable indicators of the system along with practicality of the implementation agencies/stakeholders is proposed to be tested in pilot projects to be undertaken in three mineral-rich States before Pan India roll-out.

18 STATE-WISE PLANS/SCHEMES APPROVED BY IBM IN 2011-12

Sl No.	State	Mining Plans		Schemes of Mining		Final Mine Closure Plans	
		Approved	Not Approved	Approved	Not Approved	Approved	Not Approved
1	Assam	00	00	00	00	00	00
2	Andhra Pradesh	09	09	11	04	00	00
3	Bihar	00	00	00	00	01	00
4	Chhattisgarh	09	04	16	02	01	00
5	Goa	05	05	01	00	00	00
6	Gujarat	29	04	38	24	01	00
7	Himachal Pradesh	02	00	07	00	02	00
8	Jammu & Kashmir	00	00	00	00	06	00
9	Jharkhand	04	02	06	03	03	00
10	Karnataka	10	03	41	05	01	00
11	Kerala	00	00	01	00	08	00
12	Madhya Pradesh	26	08	65	04	17	00
13	Maharashtra	03	02	03	06	00	00
14	Meghalaya	03	00	00	00	00	00
15	Odisha	29	00	60	01	00	00
16	Rajasthan	23	02	55	11	00	00
17	Tamil Nadu	10	03	42	17	00	00
18	Uttarakhand	14	00	01	00	00	00
19	Uttar Pradesh	05	00	03	01	00	00
20	West Bengal	00	00	01	01	00	01
	TOTAL	**181**	**42**	**351**	**79**	**40**	**01**

19 JURISDICTION OF ZONAL/REGIONAL OFFICES

North Zone

Ajmer Regional Office

STATE : RAJASTHAN (27)
Districts : Ajmer, Alwar, Baran, Barmer , Bharatpur, Bhilwara, Bikaner, Bundi, Churu, Dausa, Dholpur, Ganganagar, Hanumangarh, Jaipur, Jaisalmer, Jalore, Jhalawar, Jhunjhunu, Jodhpur, Karauli, Kota, Nagaur, Pali, Sawai Madhopur, Sikar, Sirohi , Tonk.

Dehradun Regional Office

STATE : DELHI (1)
Districts : Delhi
UNION TERRITORY: Chandigargh
STATE : HARYANA (21)
Districts : Ambala, Bhiwani, Faridabad, Fatehabad, Gurgaon, Hissar, Jhajjar, Jind, Kaithal, Karnal, Kurukshetra, Mahendargarh, Mewat, Palwal, Panchkula, Panipat, Rewari, Rohtak, Sirsa, Sonepat, Yamuna Nagar.
STATE : HIMACHAL PRADESH (12)
Districts : Bilaspur, Chamba, Hamirpur, Kangra, Kinnaur, Kulu, Lahul & Spiti, Mandi, Shimla, Sirmaur, Solan, Una.
STATE : JAMMU & KASHMIR (22)
Districts : Anantnag, Bandipore, Baramula, Badgam, Doda, Ganderbal, Jammu, Kargil, Kathua, Kishtwar, Kulgam, Kupwara, Ladakh, Poonch, Pulwama, Rajauri, Ramban, Reasi, Samba Srinagar, , Shupiyan, Udhampur.
STATE : PUNJAB (20)
Districts : Amritsar, Barnala, Bhatinda, Faridkot, Fatehgarh Sahib, Ferozpur, Gurdaspur, Hoshiarpur, Jallandur, Kapurthala, Ludhiana, Mansa, Moga, Muktsar, Nawan Shehar, Patiala, Rup Nagar, Sangrur, Sahibzada Ajit Singh Nagar (Mohali), Taran.

STATE : UTTAR PRADESH (61)
Districts : Agra, Aligarh, Ambedkar Nagar, Auraiya, Azamgarh, Baghpat, Bahraich, Ballia, Balrampur, Barabanki, Bareilly, Basti, Bijnor, Budaun, Bulandshahr, Chandauli, Chitrakut, Deoria, Etah, Etawah, Faizabad, Farrukhabad, Fatehpur, Firozabad, Gautam Buddha Nagar, Ghaziabad, Gazipur, Gonda, Gorakhpur, Hardoi, Hathras, Jalaun, Jaunpur, Jyotiba Fuley Nagar, Kanshiram Nagar (Kasganj), Kannauj, Kanpur Dehat, Kanpur Nagar, Kheri, Kaushinagar, Lucknow, Mainpuri, Mathura, Mau, Meerut, Moradabad, Muzaffarnagar, Pilibhit, Pratapgarh, Rae Bareli, Rampur, Saharanpur, Sant Kabir Nagar, Sant Ravidas Nagar, Shahjahanpur, Shravasti, Siddarth Nagar, Sitapur, Sultanpur, Unnao, Varanasi.
STATE : UTTARAKHAND (13)
Districts : Almora, Bageshwar, Chamoli, Champawat, Dehradun, Haridwar, Nainital, Pauri Garhwal, Pithoragarh, Rudraprayag, Tehri Garhwal, Udhamsing Nagar, Uttar Kashi.

Udaipur Regional Office

UNION TERRITORY: DADRA & NAGAR HAVELI
UNION TERRITORY: DAMAN & DIU
STATE : GUJARAT (26)
Districts : Ahmedabad, Amreli, Anand, Banaskantha, Bharuch, Bhavnagar, Dahod, Dang, Gandhinagar, Jamnagar, Junagarh, Kheda, Kuchch, Mehesana, Narmada, Navasari, Panchmahals,Patan, Porbandar, Rajkot, Sabarkantha, Surat, Surendranagar, Vadodara, Valsad, Tapi.
STATE : RAJASTHAN (6)
DISTRICTS : Banswara, Chittorgarh, Dungarpur, Pratapgarh, Rajsamand, Udaipur.

South Zone

Hyderabad Regional Office (Including Nellore Sub-Regional Office)

STATE : ANDHRA PRADESH (23)
Districts : Adilabad, Anantapur, Chittoor, Cuddapah, Godavari East, Godavari West, Guntur, Hyderabad, Karimnagar, Khammam, Krishna, Kurnool, Mahaboobnagar, Medak, Nalgonda, Nellore, Nizamabad, Prakasam (Ongole H.Q.), Rangareddy, Srikakulam, Visakhapatnam ,Vizianagaram, Warangal.
STATE : MAHARASHTRA (3)
Districts : Latur, Nanded, Osmanabad.

Goa Regional Office

STATE : GOA (2)
Districts : North Goa, South Goa .
STATE : MAHARASHTRA (7)
Districts : Kolhapur, Pune, Ratnagiri, Sangli, Satara, Sholapur, Sindhudurg.
STATE : KARNATAKA (7)
Districts : Bagalkot, Belgaum, Bijapur, Dharwar, Gadag, Haveri, Uttar Kanada.

Bangalore Regional Office

STATE : KARNATAKA (23)
Districts : Bengaluru, Bengaluru Rural, Bellary, Bidar, Chamarajanagar, Chikkaballapura, Chikmagalur, Chitradurga, Davangere, Gulbarga, Hassan, Kodagu, Kolar, Koppal, Mandya, Mysore, Raichur, Ramanagara, Shimoga, South Kanara, Tumkur, Udupi, Yadgir.
STATE :KERALA (14)
Districts : Alappuzha (Alleppy), Ernakulam, Idukki (Iddiki), Kannur, Kasargod, Kollam, Kottayam, Kozhikode, Malappuram, Palakkad, Pathanamthitta, Thiruvananthapuram, Trissur, Wynad.
UNION TERRITORY: LAKSHADWEEP

Chennai Regional Office

STATE : TAMIL NADU (32)
Districts : Ariyalur, Chennai, Coimbatore, Cuddalore, Dharmapuri, Dindigul, Erode, Kanchipuram, Kanyakumari, Karur, Krishnagiri, Madurai, Nagapattinam, Namakkal, Niligiris, Perambaloor, Pudukkottai , Ramnathapuram , Salem, Sivaganga, Thanjavur ,Theni (Madurai), Thiruvallur (Chengalpattu), Thiruvannamalai, Thiruvarur, (Nagapattinam) , Trichirapalli , Tirunelveli, Tiruppur, Turicorin, Vellore, Villupuram, Virudhunagar.
STATE : PONDICHERRY (4)
Districts : Karaikal , Mahe, Pondicherry, Yanam.

Central Zone

Bhubaneswar Regional Office

STATE : ODISHA (30)
Districts : Angul ,Balasore, Bargarh, Bhadrak, Bolangir, Boudh, Cuttack, Deogarh, Dhenkanal, Gajapati, Ganjam, Jagatsingpur, Jajpur, Jharsuguda, Kalahandi, Kandhamal, Kendrapara, Keonjhar, Khurda, Koraput, Malkanagiri, Mayurbhanj, Nabrangpur, Nayagarh, Nuapada, Puri, Raygada, Sambalpur, Sonpur, Sundargarh.

Jabalpur Regional Office

STATE : MADHYA PRADESH (25)
Districts : Ashoknagar, Anuppur, Bhind, Chhatarpur, Damoh, Datia, Dindori, Guna, Gwalior, Jabalpur, Katni, Mandla, Morena, Narasinhapur, Panna, Rewa, Sagar, Satna, Shahdol, Shivpuri, Shyopur, Sidhi, Singrauli, Tikamgarh, Umaria.

STATE : UTTAR PRADESH (10)
Districts : Allahabad, Banda, Chatrapati Shahuji Maharaj Nagar, Hamirpur, Jhansi, Kaushambi, Lalitpur, Mahoba, Mirzapur, Sonbhadra.

Ranchi Regional Office

STATE : BIHAR (38)
Districts : Araria, Arwal, Aurangabad, Banka, Begusarai, Bhagalpur, Bhojpur, Buxar, Darbhanga, East Champaran, Gaya, Gopalganj, Jahanabad, Jamui, Kaimur, Katihar, Khagaria, Kishanganj, Lakhisarai, Madhepura, Madhubani, Munger, Muzaffarpur, Nalanda, Nawadha, Patna, Purnia, Rohtas, Saharsa, Samastipur, Saran, Sheikhpura, Sheohar, Sitamarhi, Siwan, Supaul ,Vaishali, West Champaran.
STATE : JHARKHAND (21)
Districts : Bokaro, Chatra, Deogarh, Dhanbad, Dumka, Garhwa, Giridih, Godda, Gumla, Hazaribagh, Jamtara, Khunti, Kodarma, Latehar, Lohardaga, Pakur, Palamau, Ramgarh, Ranchi, Sahebganj, Simdega.

Kolkata Regional Office

STATE : JHARKHAND (3)
Districts : Saraikela-Kharsawan, Singhbhum (East), Singhbhum (West).
STATE : SIKKIM (4)
Districts : Sikkim East, Sikkim West, Sikkim North, Sikkim South
STATE : WEST BENGAL (19)
Districts : 24- Parganas North , 24-Parganas South , Bankura ,Birbhum, Bardhaman, Cooch Behar, Darjeeling , Dakshin Dinajpur , Uttar Dinajpur, Hooghly, Howrah, Jalpaiguri, Kolkata, Malda, Murshidabad, Nadia, Paschim Midnapore, Purba Medinipur, Purulia
UNION TERRITORY: Andaman Nicobar
Districts : Andaman, Nicobar.

GUWAHATI SUB-REGION
STATE : ARUNACHAL PRADESH (16)
Districts : Anjaw, Changlang, Dibang Valley, East Kameng, East Siang, Kurung Kumey, Lohit, Lower Dibang Valley, Lower Subansiri, Paum Pare, Tawang, Tirap, Upper Siang, Upper Subansiri, West Kameng, West Siang.

STATE : ASSAM (28)
Districts : Barpeta, Baksa, Bongaigaon, Cachar, Chirang, Darrang, Dhemaji ,Dhubri, Dibrugarh,

Goalpara, Golaghat, Hailakandi, Jorhat, Kamrup, Kamrup Metropolitan, Karbi Anglong, Karimganj, Kokrajhar, Lakhimpur, Morigaon, Nagaon, Nalbari, North Cachar Hills, Sibsagar, Sonitpur, Tinsukia, Udalguri.

STATE : MANIPUR (10)

Districts : Bishnupur, Chandel, Churachandpur, Imphal East, Imphal West, Senapati, Tamenglong, Thoubal, Ukhrul.

STATE : MEGHALAYA (7)

Districts : Garo Hills East, Garo Hills West, Jaintia Hills, Khasi Hills East, Khasi Hills West, Ri-Bhoi ,South Garo Hills.

STATE : MIZORAM (8)

Districts : Aizwal, Champhai, Kolasib, Lawngtlai, Lunglei, Mamit, Saiha, Serchhip.

STATE : NAGALAND (11)

Districts : Dimapur, Kiphire, Kohima, Longleng, Mokokchung, Mon, Peren, Phek, Tuensang, Wokha, Zunheboto.

STATE : TRIPURA (4)

Districts : Dhalai, North Tripura, South Tripura, West Tripura

Nagpur Regional Office

STATE : CHHATTISGARH (18)

Districts : Bastar, Bijapur, Bilaspur, Dantewara, Dhamtari, Durg, Janjgir-Champa, Jashpur, Kanker, Kawardha, Korba , Koriya, Mahasamund, Narayanpur, Raigarh, Raipur, Rajnandgaon, Surguja .

STATE : MADHYA PRADESH (25)

Districts : Alirajpur, Badwani, Balaghat, Betul, Bhopal, Burhanpur, Chhindwara, Dewas, Dhar, Harda, Hoshangabad, Indore, Jhabua, East Nimar (Khandwa), West Nimar (Khargaon), Mandsaur, Neemuch, Raisen, Rajgarh ,Ratlam, Sehore, Seoni, Shahjanpur, Ujjain, Vidisha.

STATE : MAHARASHTRA (25)

Districts : Ahmednagar, Akola, Amravati, Aurangabad, Bhandara, Beed, Buldhana, Chandrapur, Dhule, Gadchiroli, Gondia, Greater Mumbai, Hingoli, Jalgaon, Jalna, Mumbai (Suburban), Nagpur, Nandurbar, Nashik, Parbhani, Raigad, Thane, Wardha, Washim, Yavatmal and Bombay High.

20 CONTACT DETAILS OF INDIAN BUREAU OF MINES

Contact Details of Divisional / Zonal / Regional Offices of Indian Bureau of Mines

1. Divisional Offices

Name of the Division / Office	Designation of the Divisional Head & Postal Address	Telephone No.	Fax No.	E-Mail
Mines Control & Conservation of Minerals Division	**Chief Controller of Mines** 2 nd Floor, Block 'A', Indira Bhavan, Civil Lines, Nagpur-440001	91-712-2560961	91-712-2565488	ccom@ibm.gov.in
Ore Dressing Division	**Director (Ore Dressing)** 2 nd Floor, Block 'B', Indira Bhavan, Civil Lines, Nagpur-440001	91-712 - 2565024	91-712-2562631	codo@ibm.gov.in
Planning & Co Ordination Division	**Controller of Mines (Planning & Co-ordination)** 2nd Floor, Block 'D', Indira Bhavan, Civil Lines, Nagpur-440001	91-712-2561824	91-712-2561824	com.plcdn@ibm.gov.in
Technical Consultancy, Mining Research & Publication Division	**Controller of Mines (TMP)** (TC) 7 th Floor, Block 'D', Indira Bhavan, Civil Lines, Nagpur-440001	91-712 - 2562143	91-712 2561110	com.tc@ibm.gov.in
	(MR) 8 th Floor, Block 'D', Indira Bhavan, Civil Lines, Nagpur-440001	91-712 - 2561110	91-712-2561110	com.mr@ibm.gov.in
Mineral Economics Division	**Chief Mineral Economist** 3 rd Floor, Block 'D', Indira Bhavan, Civil Lines, Nagpur-440001	91-712 - 2565471	91-712-2565471	cme@ibm.gov.in
Mining & Mineral Statistics Division	**Deputy Director General (Statistics) & In-charge MMS Division** 5 th Floor, Block 'D', Indira Bhavan, Civil Lines, Nagpur-440001	91-712-2564934	91-712-2564934	mms@ibm.gov.in

2. Other Important Offices

Name of the Division / Office	Postal Address	Telephone No.	Fax No.	E-Mail
Chief Mining Geologist	1 st Floor, Block 'D', Indira Bhavan, Civil Lines, Nagpur-440001	91-712 - 2561267	91-712 - 2561267	cmg@ibm.gov.in
Technical Secretary	2 nd Floor, Block 'D', Indira Bhavan, Civil Lines, Nagpur-440001	91-712- 2565136	91-712- 2565073	rcom.ts@ibm.gov.in
Director (Training)	8 th Floor, Block 'A', Indira Bhavan, Civil Lines, Nagpur-440001	91-712 - 2565867	91-712 - 2565867	dir.trg@ibm.gov.in
Chief Administrative Officer	4 th Floor, Block 'D', Indira Bhavan, Civil Lines, Nagpur-440001	91-712 - 2565333	91-712 - 2565333	ho-office@ibm.gov.in
Chief Editor Publication Section	1 st Floor, Block 'B', Indira Bhavan, Civil Lines, Nagpur-440001	91-712 - 2565500 Extn : 1105	91-712 - 2565471	ce.press@ibm.gov.in

3. Zonal Offices of MCCM Division

Name of the Zone	Postal Address	Telephone No.	Fax No.	E-Mail
Central	Controller of Mines (CZ) 6 th Floor, Block 'D', Indira Bhavan, Civil Lines, Nagpur 440001	0712 - 2565603	0712 - 2565603	com.cz@ibm.gov.in
South	Controller of Mines (SZ) 29, Industrial Suburb, IInd Stage, Tumkur Road, Yeshwantpuram, Bangalore-560022	080 - 23373287 080 - 23375366 / 080 - 23375367 (PBX)	080 - 23373287	rcombng@kar.nic.in comsz@rediffmail.com zo.bangalore@ibm.gov.in
North	Controller of Mines (NZ) Type-IV, Block B/9, IBM Colony, Adarsh Nagar, Balupura Road, Ajmer-308 002	0145 - 2681831	0145 - 2441244 Ext. 28	com_ajm@rediffmail.com c_ibm_ajm@yahoo.co.in zo.ajmer@ibm.gov.in

4. Regional Offices of MCCM Division

Name of the Region	Postal Address	Telephone No.	Fax No.	E-Mail
Ajmer	Regional Controller of Mines Makhupura Industrial Estate, Nasirabad Road, Ajmer - 305002.	91-0145 - 2695150	0145 - 2695202	rcomajm@sancharnet.in rcomajm@yahoo.com ro.ajmer@ibm.gov.in
Bengaluru	Regional Controller of Mines Industrial Suburb, II Stage, Tumkur Road, Yeshwantpur, Bengaluru - 560 022.	91-080 - 23371027	080 - 23373287	rcombng@rediffmail.com rcom_bng@vsnl.net ro.bangalore@ibm.gov.in
Bhubaneswar	Regional Controller of Mines Mahanee Complex, 308, District Center, Chandrasekharpur, Bhubaneswar - 751016	91-0674-2744430	0674-2744430	ibmbbsr@yahoo.com ro.bhubaneshwar@ibm.gov.in
Chennai	Regional Controller of Mines Rajaji Bhavan, C-4 A, C.G.O. Complex, Besant Nagar, Chennai- 600 090	91-044 - 24911570 91-044 - 24914461	044 - 24911295	rcomchennai@yahoo.co.in ro.chennai@ibm.gov.in
Dehradun	Regional Controller of Mines 108, Nehru Nagar, Scheme No. II, Dehradun -248 001	91-0135 - 2671896 91-0135 - 2676350 91-0135 - 2672610	0135 - 2674962	ibmddn@rediffmail.com rcmdn@dataone.in ro.dehradun@ibm.gov.in
Goa	Regional Controller of Mines IBM Colony, New National Highway , Near Arlem Breweries, P.O. Fatorda, Margao- 403602	91-0832 - 2741757 91-0834 - 2741758	0832 - 2741758	ibmgoa@sancharnet.in rcomgoa@sancharnet.in ro.goa@ibm.gov.in
Hyderabad	Regional Controller of Mines Kendriya Sadan, Ist Floor, Sultan Bazar, Koti, Hyderabad - 500 145	91-040 - 24653349 91-040 - 24657472 91-040 - 24656259	040 - 24653349	ibmhyd@ap.nic.in ro.hyderabad@ibm.gov.in
Jabalpur	Regional Controller of Mines Scheme No. 11, IBM Colony, Kamla Nehru Nagar, Jabalpur – 482 002	91-0761 - 2416780 91-0761 - 2416231 91-0761 - 2416589	0761 - 2416780	recomjbp@sancharnet.in ro.jabalpur@ibm.gov.in

Name of the Region	Postal Address	Telephone No.	Fax No.	E-Mail
Kolkata	Regional Controller of Mines CP-13, Sector V, Salt Lake City , Kolkatta- 700 091	91-033 - 23673986	91-033 - 23673617	rcomcal@cal3.vsnl.net.in ro.kolkata@ibm.gov.in
Nagpur	Regional Controller of Mines 6 th Floor, Block 'B&C', Indira Bhavan, Civil Lines, Nagpur-440 001	91-712-2565089	91-712-2565089	rcom.nr@ibm.gov.in bmantu@ibm.gov.in
Ranchi	Regional Controller of Mines 318/B, Ashok Nagar, Road No. 3, Ranchi - 834 002	91-0651 - 2242903 91-0651 - 2242889	0651 - 2242903	rch_rslpibm@sancharnet.in ro.ranchi@ibm.gov.in
Udaipur	Regional Controller of Mines 142-C, Sector - XI, Hiran Magri Scheme, Udaipur - 313 001	91-0294 - 2583230 91-0294 - 2583139.	0294 - 2583139	rcomudp@rediffmail.com ro.udaipur@ibm.gov.in

5. Sub-Regional Offices of MCCM Division

Name of the Sub-Region	Postal Address	Telephone No.	Fax No.	E-Mail
GUWAHATI (Under Kolkata Region)	Officer in Charge I-A, K.C.Sen Road, Palton Bazar, Guwahati - 781 001	0361 - 2636184	0361 - 2636184	ibmuser@sify.com sro.guwahati@ibm.gov.in
NELLORE (Under Hyderabad Region)	Officer in Charge 57, Sri Sai Nilayam, D.No.26 / II / 3361-A, 3rd Lane, Vedayapalem, Nellore - 524004-	0861 - 2327294	0861 - 2327294	ibmnlrr@yahoo.co.in sro.nellore@ibm.gov.in

6. Mineral Processing Laboratories and Pilot Plants

Location of the Pilot Plant / Regional Ore Dressing Laboratory	Postal Address	Telephone No.	Fax No.	E-Mail
Nagpur Modern Mineral Processing Laboratory and Pilot Plant	Chief Ore Dressing Officer L-8, MIDC, Hingna Road, Nagpur -440 016	07104-236645 / 235541 / 235543 / 235545	07104-235542	indian75@bsnl.in ibmhngn@bsnl.in

Location of the Pilot Plant / Regional Ore Dressing Laboratory	Postal Address	Telephone No.	Fax No.	E-Mail
Ajmer Regional Ore Dressing Laboratory and Pilot Plant	Suptdg. Officer (Ore Dressing) Makhupura Industrial Estate, Nasirabad Road, Ajmer - 305002	0145 - 2695163 2695150	0145 - 2695163	ibm_rodl_ajm@yahoo.co.in
Bengaluru Regional Ore Dressing Laboratory and Pilot Plant	Suptdg. Officer (Ore Dressing) & Officer in Charge Industrial Suburb, II Stage, Tumkur Road, Gurguntaplayam, Bengaluru0. - 560 022.	080 - 23379824 23375362 23375364	080 - 23375360	rodlbng@vsnl.net majumdar.ibm@gmail.com

7. Liaison Office

Location of the Liaison Office	Designation of the Officer-in-charge Postal Address	Telephone No.	Fax No.	E-Mail
NEW DELHI	Administrative Officer, Indian Bureau Of Mines 5th Floor,11th Block , CGO Complex , New Delhi-110 003.	011 - 24363199		rajagopalan.ibm@gmail.com
	Mines - III, Ministry of Mines, Shastri Bhavan, New Delhi - 110 115	011 - 23383085	011 - 23383085	

Government of India

Indian Bureau of Mines

Ministry of Mines

Indira Bhavan, Civil Lines, Nagpur - 440 001

Website: http://www.ibm.gov.in