भारत सरकार

खान मंत्रालय

Government of India
Ministry of Mines

भारतीय खान ब्यूरो – वार्षिक रिपोर्ट 2022-23

Indian Bureau of Mines- Annual Report 2022-23

Hon'ble Union Minister of Parliamentary Affairs, Coal & Mines, Shri Pralhad Joshi, addressing the gathering at IBM's 75th Anniversary celebrations on 01.03.2023 at Nagpur

“Being a developing nation, the country is dependent on the growth of the energy sector to achieve the desired economic growth. Considering this, we must adopt technology, use of Artificial Intelligence (AI) and best global practices to take the mining sector to new heights. Need of the hour is to take the contribution of the mining sector to the country’s gross domestic product (GDP) to 2.5 per cent by 2026-27”.

Shri Pralhad Joshi Coal and Mines Minister

(At the function organised to mark the 75th Foundation Day of the Indian Bureau of Mines (IBM) on 1st March, 2023 at Nagpur)

ANNUAL REPORT
2022-23

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Nagpur

Contents

Indian Bureau of Mines (IBM)

1.0 Vision, Mission, Objectives and Functions

The Indian Bureau of Mines (IBM) is a subordinate office under the Ministry of Mines. It is engaged 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 minerals and minor minerals. It performs regulatory functions with respect to the relevant provisions of Mines and Minerals (Development and Regulation) Act, 1957 and enforcement of the rules framed there under, namely Mineral Conservation and Development Rules, 1988/2017 and Mineral Concession Rules, 1960/2016 and Environmental (Protection) Act, 1986 and Rules made there under.

It undertakes scientific, techno-economic, research-oriented studies in various aspects of mining, geological studiesand ore beneficiation studies.

1.1 Vision for IBM

"*IBM to perform as a National Technical Regulator and to discharge the developmental functions for the sustainable development of the mineral industry and to work as repository of database on mines and minerals*".

1.2 Mission

1) To ensure effective regulation of Indian Mineral Sector which promotes long term benefits for its sustainable growth.
2) To provide capacity building to State regulatory agencies and also to provide quality technical assistance to the mineral industry, and
3) To work as data bank on mines and minerals and to disseminate mineral information for policy formulations.

1.3 Objectives

i. To work as National Technical Regulator operating at national-level designing systems, processes and guidelines for regulation of the mineral sector;

ii. To function as a facilitator for creation and improvement of state-level regulatory mechanisms and to facilitate state agencies to ensure adherence to standards and parameters for scientific and systematic mining in the sector;

iii. To work as catalytic agent for development of mineral sector by evolving capability & proficiency in beneficiation techniques; dissemination of knowledge and skills in mining and allied areas through its training facilities; consultancy services.

iv. To play crucial role of that of facilitatorto the Government in matters and issues relating to the mineral sector in areas of short-medium and long-term mineral-wise strategies, mineral taxation and legislative processes.

v. To play the role of National Repository of mineral data through maintaining a data bank of mines and minerals in the country by developing advanced IT based Mineral Information System enabling the industry to report and access information online, and

vi. To broaden its interactive base and reach out to overseas counter parts through consultations and exchange programmes and to build capacity, skill & expertise through academic and training programmes at institutes of international repute.

1.4 Present Charter of Functions

In the wake of liberalization of the policy regime governing mineral sector and increasing need for adequate environment management as part of systematic and scientific mining, the mandated functions for IBM, as given for notification in Official Gazette vide Resolution No. 31/ 49/ 2014 – M. III, dated 3rd November, 2014 are given below:-

(i) Collect, collate and organize into a database, all information on exploration, prospecting, mines and minerals in the country in the shape of a National Mineral Information Repository and take steps to publish and disseminate the same;

(ii) Function as the National Technical Regulator in respect of the mining sector, and lay down regulations, procedures and systems to guide the State Governments (first tier of regulation);

(iii) Build up capacity in the system, both for regulatory as well as the developmental work, at the central level as well as at the level of the States;

(iv) Establish institutional mechanisms of coordination between the centre, the States, mineral industry, research and academic institutions and all stake holders, so as to proactively develop solutions to the demands and problems faced by the industry;

(v) Promote research on all aspects of practical relevance to the Industry and to act as bridge between research institutions on the one hand and user industry on the other;

(vi) Provide Technical Consultancy Services;

(vii) Participate in International collaborative projects in the area of regulation and development of the mineral sector;

(viii) Advise Government on all matters relating to the mineral industry; and

(ix) Undertake any such other activity as has become necessary in the light of developments in the field of geology, mining, mineral beneficiation and the environment.

1.5 Key Activities and Functions

In light of the role and charter of IBM, the key functions being performed by IBM can be broadly classified as (1) Regulatory Functions, and (2) Developmental Functions.

1.5.1 Regulatory Functions

i. Mining Plan, Review of Mining Plan & Modification in the Approved Mining Plan -Inspections and Approval (Rule 13 to 17 of Chapter V of M (OAHCEM) CR 2016; Rule 9, 10, 11 & 12 of MCDR 2017);

ii. Mining Regulations for ensuring implementations of Mining Plan, review of mining plan, Mine Closure Plan and other statutory provisions of MCDR 2017and launching of prosecutions and compounding thereof (Section 22 & 24 of MMDR Act 1957);

iii. Inspections and grant of permissions to carry out 'stoping' operations in underground mines (Rule 26 of MCDR1988/ Rule 30 of MCDR 2017);

iv. Monitoring of Environmental Impact Assessment (EIA) and Environmental Management Plan (EMP) aspects of mining operations (Rule 13 and 31 to 41of MCDR 1988/ Rule 11 and Rule 35 to 44 of MCDR 2017 and Section 10 of EP Act 1986);

v. Facilitating in calculations of State-wise, mineral-wise and month-wise royalty on *ad valorem* basisby regulating the submission of monthly and annual returns by the mining lease holders (Rule 64D of MCR 1960/ Rule 38 to 47 of M(OHEM) CR Rules, 2016 and Rule 45 of MCDR 1988/ 2017);

vi. Mine Closure Plan - Inspections, Approval and monitoringof Progressive and Final Mine Closure Plans (Rule 23A to 23F of MCDR 1988/ Rule 22 to 27 of MCDR 2017);

vii. Co-ordination with State Governments for curbing illegal mining activities (intimation of violation of Section 4(1) of MMDR Act 1957 to State Government agencies&monitoring of submission of quarterly return and compliance thereof, of illegal mining by various State Governments).

viii. As prescribed under Section 9(C) of the Act, IBM will discharge a pro- active role in NMET by furnishing inputs on mineral-wise conservation strategies, exploration gaps etc. keeping in view of the national interest.

ix. IBM administer the framework for sustainable development of the mining sector, as prescribed under section 20A (2) of the Act, through star rating of mines.

x. IBM will continue to publish the Average Sale Price (ASP) of all the major minerals through its MMS division. This information is required as per the rule 8

of Mineral (Auction) Rules, 2015 for calculating the "Value of estimated Resources" and "Value of the Mineral Dispatched" and that of 'Reserve Price' of the deposit to be put to auction.Further, based on the ASP as declared by IBM every month, assessment of ad-valorem royalty is also carried out by the State Governments.

1.5.2 Developmental Functions

(i) R&D in Mineral Processing - To play a role of a catalytic agency to promote & develop the much-needed R&D in mineral processing in the field of mineral beneficiation, mineral characterization, chemical analysis of ores and minerals and analysis of environmental samples;

(ii) Information Support and Facilitator Services- To function as a facilitator to the government in formulation of mineral policy, lending technical guidance & support for framing Mineral Acts and in articulating provisions, rules & regulations thereof and lend it the credentials to formulate strategies, articulate policy requirements and oversee their implementation at both national and State levels;

(iii) National Mineral Inventory – Periodical Updation of National Mineral Inventory reflecting the micro-level status and possession of various mineral resources of the country as per the international standardsofUNFC;

(iv) Repository on Mines & Minerals – To shoulder the responsibility for collection, processing and storage of statistical data in respect of all major minerals through statutory and non-statutory basis;

(v) Publications on topical interest – To assort process and analyze mines and mineral information generated on account of statutorily and non-statutorily collected information and supply them as important inputs for policy interventions, and

(vi) Training and Capacity Building – To provide training facilities for human resource development and to develop required technical expertise and skill inthe personnel manning the mineral industry.

2.0 Organizational set up of IBM

IBM has its headquarters at Nagpur, 4 Zonal Offices at Bengaluru, Nagpur, Udaipur and Kolkata, and 13 Regional Offices at Ajmer, Bengaluru, Bhubaneswar, Chennai, Gandhinagar, Goa, Dehradun, Guwahati, Hyderabad, Jabalpur, Nagpur, Ranchi and Raipur. During the year 2017, IBM opened two new skill development centres for sustainable mining practices at Udaipur and Kolkata.IBM has well-equipped ore dressing laboratories and pilot plants at Ajmer, Bengaluru and Nagpur.

2.1 Reorganization of IBM

In the light of transition due to change in the regulatory regime through MMDR Amendment Act, 2015 and transferring of 31 majorminerals to the list of minor minerals, IBM had submitted a road map for redefining and restructuring of the organization.

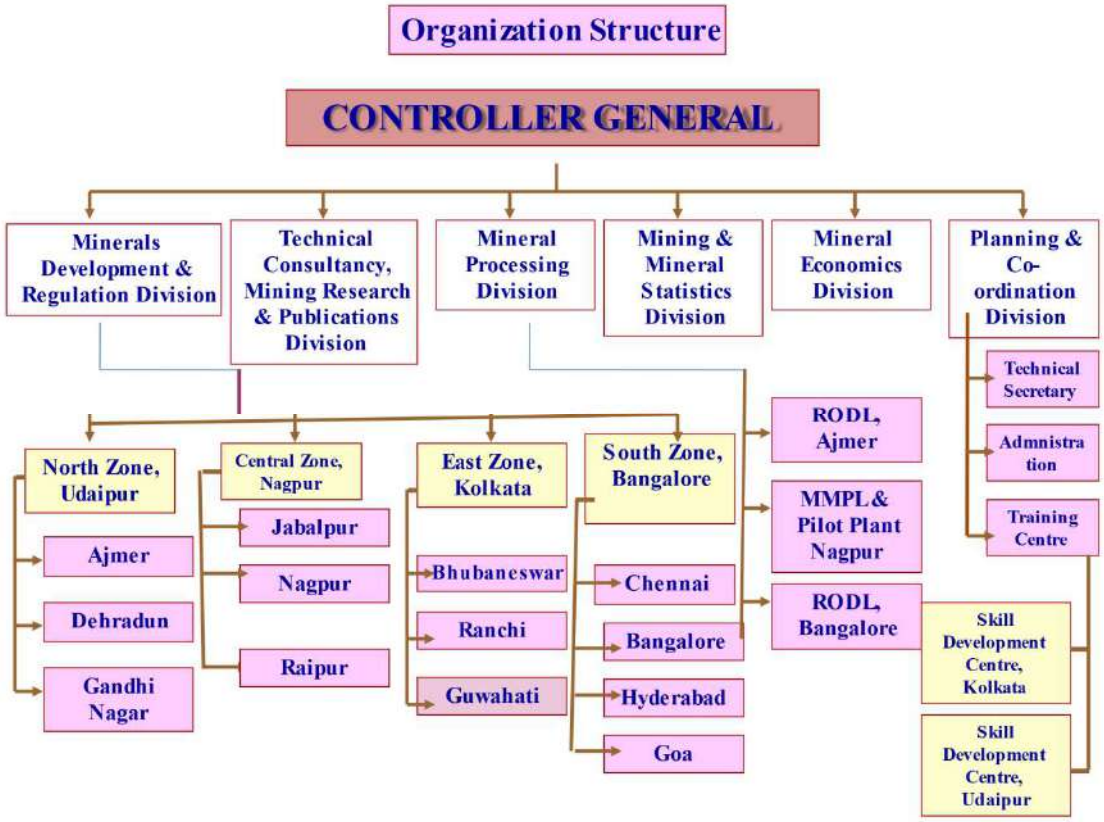
The Ministry of Mines has approved opening up of new regional office at Raipur, Gandhinagar and New Delhi/NCR, upgradation of existing sub-regional office at Guwahati to regional office to cater to the needs of North Eastern Regions. The regional offices at Raipur and Gandhinagar have already been opened. The existing regional offices at Kolkata and Udaipur have been upgraded to the zonal office (East) and zonal office (North) respectively to evenly distribute work load amongst the other two zonal offices located at Nagpur and Bengaluru. Guwahati sub regional office is also upgraded as regional office. For the purpose of skill development an Institute of 'Sustainable Development Framework' at Udaipur and Kolkata and 'Remote Sensing Centre' at Hyderabad have been opened.

2.2 Organizational Structure of IBM

IBM is organized to discharge the functions assigned to it through six technical divisions, which are as follows:

(i) Minerals Development & Regulation Division (MDRD)
(ii) Mineral Processing Division (MPD)
(iii) Mineral Economics Division (ME)
(iv) Technical Consultancy Division (TC)
(v) Mining and Mineral Statistics Division (MMS)
(vi) Planning and co-ordination Division with two sub-divisions viz. (1) Planning and Co-ordination and (2) Administration.

Fig No. 1: The existing set-up is shown in the following organisation chart.



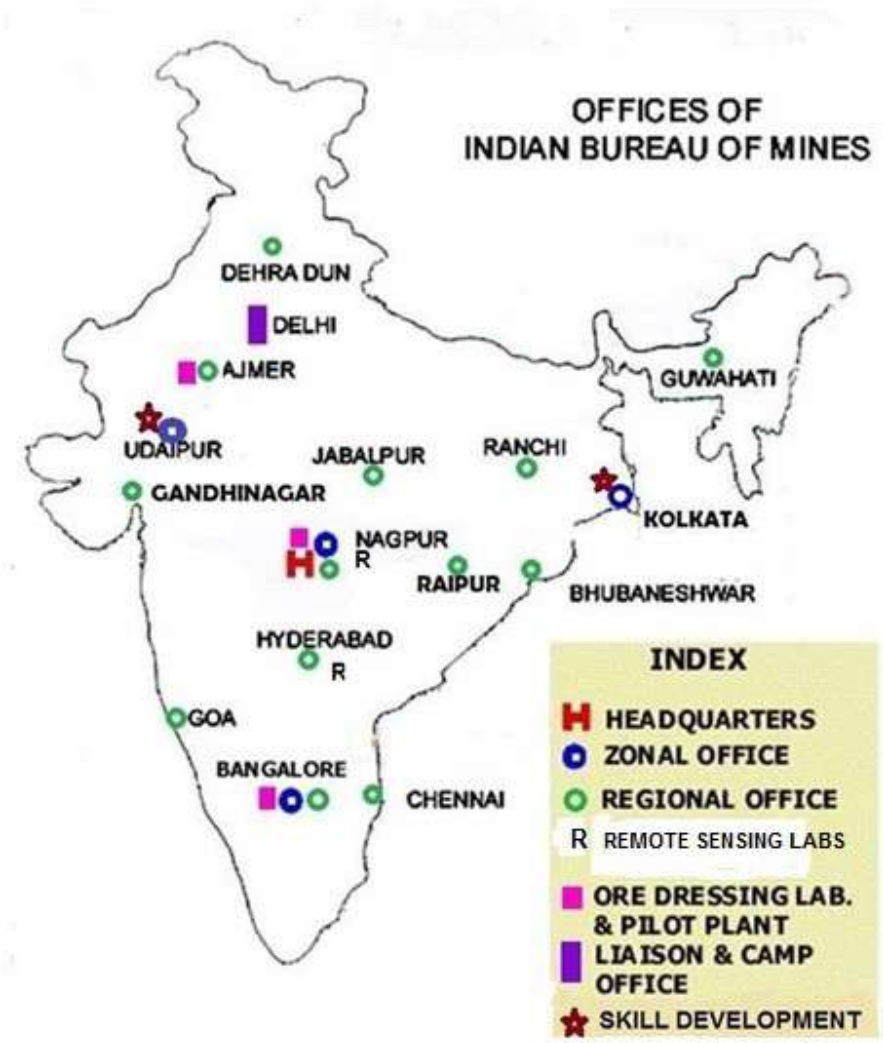
2.3 Modern Mineral Processing Laboratory and Pilot Plant

UNDP aided Modern Mineral Processing Pilot Plant and Analytical Laboratory of IBM is located at MIDC Hingna, Nagpur.

2.3.1 Regional Ore Dressing Laboratories

The Bureau has two Regional Ore Dressing Laboratories and Pilot Plants at Ajmer and Bangalore to cater to the mineral beneficiation needs of the neighbouring areas.

Fig No. 2: The location of Zonal, Regional Offices and Regional Ore Dressing Laboratories are shown in the map.



3.0 Schemes under implementation in IBM

All activities of IBM are being conducted through the following Schemes.

Scheme No 1. Inspection of Mines for scientific and systematic mining, mineral conservation and mine environment

Scheme No 2. Mineral Beneficiation Studies, utilization of low grade and sub grade ores and analysis of environmental samples.

Scheme No 3. Technological Upgradation and Modernization

Scheme No 4. Collection, processing, dissemination of data of mines and minerals through various publications

Scheme No.5. Mining Tenement System(under implementation)

3.1 Brief Description of Objective & Activities of the Schemes

3.1.1 Scheme No.1: Inspection of Mines for Scientific and Systematic mining, mineral conservation and mines environment.

3.1.1.1 Objective:

Promotion of conservation and scientific development of mineral resources and ensuring protection of mines environment in mining area through statutory enforcement as well as through promotional activities by carrying out periodical inspection/study of mines.

3.1.1.2 Brief Activities

Important activities include inspection of mines for enforcement of the provisions of Mineral Conservation and Development Rules, (MCDR) 1988/2017 and relevant provision of Mines and Minerals (Development and Regulation) Act, (MMDR) 1957, Mineral (other than Atomic & Hydro Carbon Energy Minerals) Concession Rule [M(OAHCEM)CR],2016, Environment (Protection) Act, 1986, and rules made there under, Processing and approval of mining plans, review of mining plans, modifications in approved mining plans and mine closure plan, star rating of mines under sustainable development framework, scientific studies (lump-

fineratio, threshold, RMGS etc.,) Task force/ joint inspections with State Govt., handholding with State Governments to facilitate auctioning of mineral blocks, organizing mines environment and mineral conservation weeks to promote awareness to minimize environmental degradation as well as to boost reclamation and afforestation activities, spot guidance to mines management in all the aspects of mineral development followed with issue of violation/suggestions to adopt appropriate technology, launching prosecution against mine owners for violation of provisions of MCDR, 1988/2017 wherever necessary, facilitatinggovernment on savedcases of mineral concessionsand other policy issues etc.

3.1.2 Scheme No. 2: Mineral Beneficiation Studies – utilization of low grade and sub-grade ores and analysis of environmental samples

3.1.2.1 Objective

Most of the mineral deposits found in the nature fall short of the grade required by the consuming industries and therefore needs upgradation by ore dressing process. IBM suggests ways and means for their economic utilization as a part of conservation studies of the department which is a statutory obligation of IBM. This is primarily to help directly or indirectly to the mineral industry to exploit the mineral resources of the country.

3.1.2.2 Brief Activities

Important activities include development of beneficiation process flow-sheet/know how of low grade ores and minerals in laboratory and pilot plant scale and to generate process data/parameters for design of commercial concentrator, development of process parameters for agglomeration studies, mineralogical analysis/examinations, recovery of values from plant tailing and ore slimes, catering to the R & D needs in minerals beneficiation, special studies of Platinum Group of Elements (PGE), Rare Earth Elements (REEs) and technology metals, knowledge sharing with stakeholders, imparting training in mineral processing, mineralogy, chemical/environmental analysis to scientists from overseas and Indian Institutions etc.

3.1.3 Scheme No. 3: Technological upgradation and Modernisation

3.1.3.1 Objectives

(i) Implementation of Mining Surveillance System (MSS), Implementation of Application of Digital Aerial (Drone and Satellite) Images for mines monitoring.
(ii) Consultancy services on charge and promotional basis to mining industry on mining, geological & environmental aspects.
(iii) Development of new mining methods for scientific and systematic development of mineral resources and management of mining wastes.
(iv) Human resources and infrastructure development in IBM.

3.1.3.2 Brief Activities

a) Implementation of MSS which is a satellite-based monitoring system to establish a regime of responsive mineral administration, through public participation, by curbing instances of illegal mining activity through automatic remote sensing detection technology. The advantages of remote sensing technology-based monitoring system are that it is transparent, bias-free and independent system with deterrence effect ('eyes watching from the sky').

b) Implementation of "SudoorDrushti" with National Remote Sensing Centre, Hyderabad, for monitoring of mining activities using satellite imagery and capacity building of IBM officers including technical support for setting up of remote sensing laboratory in IBM. The project would facilitate to monitor periodic changes of the mining areas within the mining lease boundary.

c) Preparation of mineral maps with forest overlays covering the whole country with the details of free holds and lease holds areas and other prospecting mineral deposits, infrastructure etc. These multi mineral leasehold maps on a scale 1:50,000 with forest overlays are required to facilitate early environmental and forest clearance of mining projects by Ministry of Environment and Forests and Climate Change (MoEFCC), generation of environmental base line data for mining projects, preparation of Regional Environment Impact Assessment (REIA), Environment Impact Assessment (EIA) and Environment Management Plan (EMP) for mining

projects as well as risk analysis and preparation of disaster management plan, geotechnical investigations, design of stoping methods and preparation of mining feasibility reports and detailed project reports.

d) To Impart training to scientific, technical and other cadres of IBM and also to persons from the mining industry, state/central govt. organization to update the skill and knowledge as an adjunct to human resources development.

3.1.4 Scheme No.4: Collection, processing, dissemination of data on mines and minerals through various publications

3.1.4.1 Objectives:

IBM collects data on mines and minerals through statutory returns and other means with a view to process, analyze and disseminate the data through various statistical and technical publications **as Indian Minerals Year Book, Monthly Statistics of Mineral Production, Mineral Industry at a Glance, Statistical Profiles of Minerals. IBM publications are available on IBM website through weblink**
"http://ibm.nic.in/index.php?c=pages&m=index&id=68&mid=23927".

3.1.4.2 Brief Activities:

Updation of National Mineral Inventory (NMI) by adopting UNFC system covering non-coal and non-atomic minerals in the whole country. It is a globally understandable system, incorporating existing terms in order to make them comparable and compatible, thus enhancing international communication. The reserves/ resource figures with their unique codes and terminologies clearly demonstrate the procedures adopted in the investigation and evaluation of mineral prospect. This is an essential activity to be continued in tune with the National Mineral Policy, wherein special thrust has been given for attracting private investment.

Collection of data through statutory returns, collection of ancillary statistics on fuels, minor minerals, metals production, mineral trade and market prices of minerals through correspondence with various agencies, collection of information

on mining laws of various countries, market survey of demand and supply of minerals and metals, dissemination of data through periodic publications as Indian Minerals Year Book, Monthly Statistics of Mineral Production, Mineral Industry at a Glance, Statistical Profiles of Minerals etc., publishing state wise/mineral wise Average Sale Price (ASP) of minerals and metals for royalty calculation (disseminated through IBM weblink http://ibm.nic.in/index.php?c=pages&m=index&id=912&mid=23791)

3.1.5 Scheme No. 5: Mining Tenement System (MTS)

3.1.5.1 Objective of the Scheme:

MTS would primarily involve automating the entire mineral concession life-cycle, starting from identification of area and ending with closure of the mine; and connecting the various stakeholders for real-time transfer of electronic files and exchange of data. This shall enable effective management of mineral concession regime and transparency in mining operations, transportation of ore with the help of online electronic weighbridges and check-posts.

In some developed countries like Australia and Canada, a specialized software for processing and procedural part of granting various mineral concessions like RP, PL and ML has been designed and developed which is in operation since long. This system displays the details regarding ownership and other details such as area granted, mineral worked, tenure of the concession, taxes, compliance of rules and regulations, area available for grant, quality and quantity of the ore deposit, area relinquished after reconnaissance of RP and PL, prospecting reports available, details of infrastructure, land details with ownership status, etc. This online computerised system has been found very user friendly, as it provides the information in visual graphic form, known as Geographical Information System (GIS) and textual form. The computerization of land records, processing of applications for various concessions and transparency in the system has drastically reduced the time required for taking decisions in these countries. The information available online has speeded up the decision-making process and has attracted huge investment in mining industry.

3.2 Evaluation of IBM Schemes:

At the beginning of the 15 th Finance Commission period, the IBM schemes haveevaluated by third Party namely Administrative Staff College of India (ASCI). Ministry of Mines, Government of India vide letter No.37/11/2017-Mines IIIdated1.2.2021 has approved for engagement of Administrative Staff College ofIndia (ASCI) for evaluation of the ongoing schemes of IBM. Evaluation Reportsubmitted by ASCI along with Scheme wise inputs in SFC Formats have been submitted to the Ministry.

Ministry of Mines vide letter No.37/11/2017-M.III dated 31.8.2021 conveyed approval for continuation of IBM Schemes in the period of 15th Finance Commission, with a direction to take suitable action on relevant provisions on Mining Technology furnished under Para No.6.3 to 6.5 and 9.2 to 9.4 of NMP 2019 and formulate appropriate Schemes for implementation of the provisions of NMP 2019.Accordingly action is in progress.

3.3 IBM Advisory Board

The formation of an Advisory Board is for strengthening the links between IBM and the various organizations interested in or connected with the functions of the IBM and to enable the Government to have objective appraisal of the effectiveness of the working of the IBM and of the ways and means by which its utility and effectiveness can be continually enhanced.

In view of the major changes in legislative framework brought about by the MMDR Amendment Act, 2015 & MMDR Amendment Act, 2021 & rules made there under, Government vide Order No.35/3/2015-M.III dated 2.7.2021 has reconstituted IBM Advisory Board to provide the appropriate advice to the Government to equip IBM in new scenario for its effective functioning.Action for preparation of Agenda items is in progress.

4.0 IBM performance during 2022-23

4.1 Salient Achievements 2022-23

(i) For promotion of scientific development and conservation of mineral resources and ensuring protection of mines environment in mining areas, IBM carried out **1293** inspection of mines for enforcement of provision of MCDR, 2017 and examination of MP/RMP/Mod.M.P./FMCP, disposed 492 mining plans including review of mining plan and **10** final mine closure plans.

(ii) For up gradation and utilization of low grade and sub-grade ores and minerals, IBM carried out **40** Ore dressing investigations, 23447 chemical analysis and **2886** mineralogical studies.

(iii) Mining Tenement System: In the year 2022-23, the system is being developed through National Informatics Centre (NIC). Returns and Registration modules of Mining Tenement System (MTS) have successfully put on live from 1st May onwards accommodating the submitted returns for the month of April 2022 onwards. Registration, Returns and Mining Plan Modules were launched in 6th Mining Conclave on 12.7.2022. DPR in respect of the other modules is in progress and they will become operational in phased manner. The system will digitize most of the activities in a transparent manner with facility of quick retrieval of data.

(iv) Star Rating of Mines: During 2021-22, 1034 Mines have filed online star rating templates for assessment years 2020-21 under Rule 35 of MCDR, 2017. After validation process, Forty mines securing five Star rating for the reporting year 2020-21 have been felicitated by the Hon'ble Minister of Mines in the 6th Mining Conclave held at New Delhi on 12.7.2022.

For the performance year 2021-22, 1181 lessees have filed SDF templates and 76 mines have got five star rating. Star rated mines are felicitated at the hands of Hon'ble Union Minister of Parliamentary Affairs, Coal &Mines, Shri Pralhad Joshi, during the 75th Foundation Day ceremony of IBM on 1.3.2023.

(v) Mining Surveillance System (MSS): In the fourth phase in 2022-23, 61 preliminary triggers are generated for major minerals and uploaded on the portal for further transmission to the state governments.After field verification in respect of 24 triggers for major minerals have been received out of which unauthorized mining in seven cases of major minerals have been confirmed by the state governments.

(vi) Project "SudoorDrushti": Under the Project "SudoorDrushti" action for setting up of "GIS & Remote Sensing Centre at IBM HQ, Nagpur and at IBM Hyderabad was in progress and installation of the Hardware was over.

(vii) UAV Survey: IBM finalized SOP for carrying out drone survey as per the provisions of Rule 34A of MCDR, 2017.A register of receipt of drone/ satellite data submitted by the lessees under rule 34A of MCDR 2017 is being maintained at IBM. As on March, 2023 as many as 754 mining leases data was received.The Gazette Notification dt 14.02.2023 has been published for submission of Digital Aerial Images to the State Governments while submitting the data to IBM under Rule 34 A of MCDR 2017.As a part of Drone Application implementation, so far cumulative 124 officers of Regional Offices and IBM Head Quarter have been imparted training on the Basics of GIS and Processing of Drone Survey data conducted in thirteen Batches.

(viii) **Workshop on "Digital Aerial Data Submission":**IBM successfully organized a Workshop-cum-Training Programme on "Digital Aerial Data Submission" on 13.01.2023 at its Headquarters in Nagpur. Workshop received overwhelming response from the Mining Industry and about 203 participants from across the country participated. IBM officers in their exhaustive presentations explained the various shortcomings observed in the data being submitted to IBM.

(ix) To sensitize the importance of mineral conservation and protection of environment, Mines Environment and Mineral Conservation Weeks were observed across the Country by all regions.

(x) For dissemination of data and statistics on mines and minerals, IBM released 18statistical & Technical Publications andpublished State **wise/mineral wise Average Sale Price** of Minerals up to January, 2023 and of Metals up to February, 2023 which have been hosted on IBM website.

(xi) **Inputs for Replying Parliament Questions (PQs) & Ministry References:** Inputs for replying 183 PQs and482 Ministry references was furnished to Ministry.

(xii) Updation of National Mineral Inventory: During the year, Compilation of NMI as on 01.04.2020 in all respects and preparation of "NMI at a Glance" as on 01.04.2020 is completed and the same is uploaded on IBM website. For the publication "NMI an Overview as on 01.04.2020", drafting of 35 chapters (out of 46) is completed.

(xiii) Implementation of amended Rule 45 of Mineral Conservation and Development Rules (MCDR) 1988/2017: Rule 45 of MCDR, 1988/2017 has made it mandatory for all mining lease holders, for any person, or company engaged in trading or storage or end use or export of minerals mined in the country to register online with IBM to keep accounts of mineral flow. Up to March, 2023, registration position for major minerals plus 31 minor minerals was that: total 8084 Miners, 535 4units of end users, 10305 traders, 2889 stockiest and 1580 exporters have registered with IBM.

(xiv) IBM created geo-database for multi-mineral leasehold maps with forest overlays in respect of major mineral bearing states which is being updated periodically.

(xv) As part of the capacity building of human resources, IBM conducted 09 training programmes have been organized in which 129 IBM, 21 State Government Officialsand 301 Industry personnel participated and revenue of ₹ 6,02,000/- was generated.

(xvi) **Launch of e-office in HQ IBM:** In compliance to the directions of the Ministry of Mines, e-Office, an online application developed by the National Informatics Centre under the Ministry of Electronics and

Information Technology (MEITY), Govt. of India, to carry out office work has been launched at IBM HQ, Office of Central Zone and Regional Office, Nagpur on 30.09.2022 by Shri Sanjay Lohiya, Additional Secretary & Controller General, IBM. The application is designed with an objective to establish a paperless environment in Government offices, increasing efficiency, transparency, effectiveness, employee convenience and accountability.

(xvii) **Sparrow IPR filing :**As per the extant guideline of Government of India, the functionality of online declaration of Immovable Property Returns (IPR) through SPARROW portal for all Officers and Staff was operational w.e.f. 06.01.2023. The implementation was monitored so as to complete filling up of IPR by all Officers and Staff of IBM for the year ending 31st December 2022, through SPARROW portal only.

(xviii) **IBM restructuring & Expansion:** After the cabinet approval, detailed discipline-wise, revised sanctioned strength of IBM, is notified vide Gazette notification No. 31/72/2009-M.III.Vol.I (part–I) dated 15th May, 2018, published on 17.5.2018.For implementation of new manpower strength, recruitment Rules of some disciplines (mining stream up to CCOM, geology, mineral economics, administration, library stream, Rajabhasha stream, private secretary & stenographers) have been notified and for the other disciplines they are under finalization at various stages.The posts which includes merger or up gradation have not taken up forfilling up for want of revised Recruitment Rules.In respect of the posts of Group B and C, where the authorities of IBM are competent to make appointment, the DPCs are being conducted regularly and for Direct Recruitment the requisitions are being sent to SSC.

During 2022-23, proposals for DPC to 69 posts as per the existing RRs and revised RRs has been sent to Ministry for holding DPCs at UPSC/Ministry in respect of Gazetted posts. Further, In respect of the 47 posts of Group B and C, where the authorities of IBM are competent to make appointment, the DPCs have been conducted during 2022-23.

(xix) Evaluation of IBM's continuing schemes: At the beginning of the 15th Finance Commission period, the IBM schemes have been evaluated by third Party namely Administrative Staff College of India (ASCI). Ministry of Mines vide letter No.37/11/2017-M.III dated 31.8.2021 conveyed approval for continuation of IBM Schemes in the period of 15th Finance Commission, with a direction to take suitable action on relevant provisions on Mining Technology furnished under Para No.6.3 to 6.5 and 9.2 to 9.4 of NMP 2019 and formulate appropriate Schemes for implementation of the provisions of NMP 2019. Accordingly, action is in progress.

(xx) During 2022-23, as per the framework received from Ministry of Mines, all the IBM offices observed SwachhataPakhwada during 16th-30th November 2022 in office premises at IBM Headquarters and in all Zonal/ Regional/ RODL Offices with action points covering:

Plan for Swachhata Pakhwada-2022

1. Dusting, cleaning and rearranging of files/records and replacement of Old and torn file covers with new one.
2. Weeding out unwanted office records/papers/files.
3. Dusting, mopping / sweeping in various sections and cleaning of furniture, cabinets, racks, almirahs, etc.
4. Painting of walls & doors wherever necessary.
5. Deep sanitization and cleaning of office premises including corridors, stairs.
6. Regular cleaning of toilets.
7. Banners, Posters have been displayed at all important places inside and outside the office premises for creating awareness on cleanliness.

IBM Bags 3rd Position–SwachchtaPakhwada : The Ministry of Mines, in recognition of the successful endeavor put forward during Swachchta Campaign, initiated by the Govt of India, by all its Subordinate/Field Offices, felicitated the well-deserved Campaign winners with awards. IBM bagged the 3rd Position in the overall conduct of the campaign. Shri Manish Maindiratta, RCOM, received the award on behalf of IBM from the

Joint Secretary, Smt Farida M. Naik. Dr G.V.G.K. Bhagavan, Technical Secretary, steered the Swachchta Campaign for IBM as its Nodal Officer.

(xxi) **Special campaign 2.0**: During the campaign period 39123 records have been reviewed. Out of which 19453 file have been identified for weeding out and subsequently weeded out. Scrap and obsolete items have been disposed off and Rs 2,58,514/- revenue is generated. 7000 Sq Ft space is freed/ created after record management and scrap disposal. 24 special campaign outdoor programmes have been organized by various regional offices at schools and other public places.

IBM Bags 3rd Position–Swachchta Pakhwada

5.0 Activity wise Performance of IBM 2022-23

The activities of IBM have been conducted through the four continuing schemes encompassing the mandates as enshrined in its charter of functions, by six divisions of IBM. Performance relating to various activities of IBM during the year 2022-23 is given hereinafter.

5.1 Inspection of Mines

During the year 2022-23, total 1293 inspections for enforcement of the provisions of Mineral Conservation and Development Rules (MCDR) 2017 and for examination of mining plans/ review of mining plan /mine closure plans were carried out. Consequent to inspection of mines, 1314 violations were pointed out as against 1847 violations in 2021-22, in respect of 685 mines.Total 1029 violations were rectified during the year. 96 violations were further rectified after issue of show cause notices. Mining operations were suspended under Rule 11(2) of MCDR 2017 in 57 mines for not carrying out mining operations in accordance with the approved mining plan/ review of mining plan and recommended 26 cases for suspension of leases to State Government.

Details of state wise inspections carried out during 2022-23 are indicated in table No. 5.1A and follow up of MCDR administration in the form of violations pointed out etc are shown in table No. 5.1B.

Table No.5.1A: Inspection of Mines carried out by IBM during 2022-23

Sl.No.	State	MCDR	Mining Plan	Total
1	Andhra Pradesh	60	50	110
2	Assam	0	0	0
3	Bihar	0	0	0
4	Chhattisgarh	89	25	114
5	Goa	17	11	28
6	Gujrat	93	43	136
7	Haryana	0	0	0
8	Himachal Pradesh	23	7	30
9	J & K	0	0	0
10	Jharkhand	37	20	57
11	Karnataka	86	36	122
12	Kerala	1	0	1
13	Madhya Pradesh	98	119	217
14	Maharashtra	47	30	77
15	Manipur	0	0	0
16	Meghalaya	16	4	20
17	Orissa	100	32	132
18	Punjab	0	0	0
19	Rajasthan	58	37	95
20	Sikkim	0	0	0
21	Tamil Nadu	63	32	95
22	Telangana	31	9	40
23	Uttaranchal	8	1	9
24	Uttar Pradesh	10	0	10
25	West Bengal	0	0	0
TOTAL		837	456	1293

Note: MCDR includes Stoping inspection, joint inspection with DGM's, ministry reference inspection, MSS Inspection, stock verification inspection etc.

Table No. 5.1B: Principal Violations of MCDR, 2017 detected by IBM during 2021-22 and 2022-23

Rule No	No. of Violations Pointed out 2021-22	No. of Violations Pointed out 2022-23	Rule description
11(1)	482	391	Rule11 (1) - Mining operations in accordance with mining plans
11(3)	02	01	Rule 11 (3) - Submission of Review of Mining Plan / Scheme of mining
20	01	00	Rule 20 - Notice of opening of mine
23	01	00	Rule 23 - Submission of progressive mine closure plan
26 (2)	210	69	Rule 26 (2) - Responsibility of the holder of mining lease to submit yearly report
27(2))	12	72	Rule 27(2) - Submission of Financial assurance
28(1)	21	08	Rule 28 (1) - Notice of temporary discontinuance of mining operations
31(4)	34	34	Rule 31(4) - Maintenance of plans and sections
33	64	52	Rule 33 - Copies of plans and sections to be submitted
35,36,37, 38, 39,40,41, 42,43,44	166	54	**Protection of environment:** Rule 35, 36, 37, 38, 39, 40, 41, 42, 43, 44 - Sustainable mining, removal and utilization of topsoil, Storage of overburden, waste rock Precaution against ground vibrations, Control of surface subsidence, Precaution against air pollution, Discharge of toxic liquid, Precaution against noise, Permissible limits and standards, Restoration of flora respectively.
45(5)(b)	43	110	Rule 45 (5) (b) - Submission of Monthly Return
45(5)(c)	59	27	Rule 45 (5)(c) - Submission of Annual Return
55(1)(c)(i)	52	12	Rule 55(1)(c)(i) - Employment of Whole time Mining Engineer/Geologist
55(1)(c)(ii)	25	20	Rule 55(1)(c)(ii) - Employment of Part time Mining Engineer/Geologist
Others	675	464	
Total	**1847**	**1314**	

5.2 Mining Plan, Review of Mining and Mine Closure Plan

The Mineral (Other than Atomic and Hydro Carbons Energy Minerals) Concession Rules, 2016 and the Mineral Conservation and Development Rules, 2017 stipulate that mining operations are required to be conducted as per an approved Mining Plan and after extraction of minerals, the mines are required to be reclaimed as per an approved Mine Closure Plan. The Mining Plans are approved by the IBM and in case of mines of minor minerals including 31 notified (on 10.02.2015) non-metallic or industrial minerals; the powers have been delegated to respective State Governments. The Mine Closure Plan is required to comprise a Progressive Mine Closure Plan (PMCP) prepared for five yearly periods of the successive Review of Mining Plans which is now a component of Mining Plan and a Final Mine Closure Plan (FMCP), before the final closure of the mine. Mine Closure Plan is expected to address issues relating to environment protection including air, water and land protection, management of topsoil and overburden, reclamation and rehabilitation of land and control on ground vibration, surface subsidence and restoration of flora.

In line with the initiative undertaken by the Government of India for ease of doing business a new system for preparation & submission of Mining Plan /Review of Mining Plan / Modified Mining Plan has been launched under MTS. With the launch of Mining Plan Approval system (MPAS), the entire process of approval of mining plan has become online in digital form. The lessee can submit his mining plan, on the click of the mouse and the process has become simpler and less time consuming.

Till the year 2022-23 (upto 31st March 2023), Financial Bank Guarantees for a value of RS.29,53,30,37,491/- i.e., Rs. 29533.037491crores[as per revised per hectare rate of Rule 27(1) of MCDR, 2017] have been collectedand certificates under Rule 29A of MCR 1960 / 21(4) of MCDR, 2017 have been issued for33cases (excluding 31 minor minerals) of partial or full surrender of lease area.

As per the dashboard of Mining Plan (Including Mining Plan, Review of Mining Plan & Modification of Mining Plans), during the year 2022-23 till March, 2023, IBM approved 492 Mining Plan and 142 Mining plans (Including Mining Plan, Review of Mining Plan & Modification of Mining Plans) are under processing.

Table No. 5.2A: State-wise Mining Plans/Review of Mining Plans / Schemes of Mining/Final Mine Closure Plans approved by IBM during 2022-23

Sr No.	Information about mining plans for the year **2022-2023**	No's
1	Mining Plans Applications Received during the year 2022-2023= **651** Previous Year Mining plans under processing= **130**	**651 +130 Total=781**
2	Mining Plans Approved	**492**
3	Mining Plans Pending & under processing	**142**
3 (i)	Mining Plans Pending for more than 45 days	**71**
3 (ii)	Mining Plans pending less than 45 days	**71**
4	Mining Plans disapproved	**78**
5	Mining Plans Withdrawn	**69**

Note: The data has been reconciled with dashboard of Mining Plan the figures are corrected as per Mining Plan, Review of Mining Plan & Modification of Mining Plans.

5.3 Mineral Concession System

As per the Amendment to MMDR Act in 2015, the system of allocation of Mineral Concession has been changed from first come first serve basis to a transparent and non-discriminatory auction process. The Amendment also has brought in a uniform tenure of 50 years for Mining Leases.

The Mineral (Auction) Amendment Rules, 2022 were notified on 18.02.2022. As per the amended Rules, global positioning system has been allowed for identification and demarcation of the area where a composite licence is proposed to be granted through auction.

The Government has further amended the Second Schedule to the MMDR Act, 1957 for specifying the rate of royalty in respect of Glauconite, Potash, Emerald, Platinum Group of Metals (PGM), Andalusite, Sillimanite and Molybdenum. This would ensure auction of blocks of these minerals/metals thereby reducing their import. Accordingly, the Minerals (Other than Atomic and Hydro Carbons Energy

Mineral) Concession Rules, 2016 has been amended, vide notification dated 15.03.2022 for computation of ASP of metallic minerals, Glauconite and Potash.
The Mineral Conservation and Development (Amendment) Rules, 2022 amended vide notification No. G.S.R. 294(E) dated 11.04.2022, to substitute different grades of iron ore in Forms in Schedule-I.

The Central Government notified the Reimbursement of Exploration Expenditure Rules, 2022 vide notification No. G.S.R.415(E), dated 03.06.2022, in order to prescribe the manner for reimbursement of expenditure incurred towards reconnaissance or prospecting operations. These rules shall be applicable only to such concession holders or applicants who had acquired a right for obtaining a prospecting licence followed by a mining lease or a mining lease, as the case may be, under section 10A (2) (b) of the Act and whose said right has lapsed on the date of lapse.

5.4 Submission of Mining Plan in Online Portal

The online mining plan module has gone live from 12.7.2022 and all mining plan submissions made after 12.7.2022 are accepted in the online portal of MTS i.e.**www.miningplan.ibm.gov.in.**

5.5 Sensitization Workshops/Meetings

As per the charter of Function, IBM to act as a National Technical Regulator in respect of the mining sector, and lay down regulations, procedures and systems to guide the State Governments (first tier of regulation) as well as build up capacity in the system, both for regulatory as well as the developmental work, at the central level as well as at the level of the States. Accordinly IBM organized following Workshops & Meetings.

5.5.1 Virtual Meeting at IBM Bhubaneshwar:

A virtual meeting on stakeholder sensitization on submission of Mining Plan in MTS was conducted on dated 19.07.2022 wherein it was presented about Steps to be taken for online submission of Mining Plan in MTS portal. Total 104 participants from mining industries, lessee, representatives of lessee and QPs attended the programme.

5.5.2 Sensitization Workshop at IBM Raipur:

Sensitization workshop covering two technical sessions namely (i) online filling the Mining Plan on IBM web portal for Industry personal and (ii) GIS and Drone Survey data and their processing, was organized by the Regional Office, Raipur for the mining lease holders and technical persons on 22/07/20022 under the Chairmanship of Shri Arun Kumar, Regional Controller of Mines, IBM Raipur. About 75 persons from different mining organization participated in the workshop.

5.5.3 Video Conferencing session by IBM Jabalpur

Video Conferencing (VC) session was organized by Jabalpur Regional Office of IBM on 29.07.2022 to resolve the various issues being faced by Industry Persons while preparing the mining plan through MPAS in MTS portal. Filling of various sections of the Mining Plan module in MPAS was shown as the live-demo in the test module and elaborated account of about the auto-validation & calculations in the online system during the preparation of the Mining Plan for submission, was given followed by interaction in the form of Q&A. About 97 nos. of industry personnel participated from various States and benefitted by the Video conference.

5.5.4 SDF Workshop at IBM Gandhinagar:

As a part of Azadi Ka Amrit Mahotsav (AKAM) event, IBM organized the Sustainable Development Framework (SDF) Workshop on 31stJuly, 2022 at Veraval Cluster of Mines covering technical presentations by young geologists and Mining Engineers on responsible mining, mining life cycle, and case studies for EIA/EMP & Mineral Conservation, etc. Further, Regional Controller of Mines, Gandhinagar presented technical lecture on “Online submission of Mining Plan” as a part of good governance initiative of IBM. Representatives of Mines and their children who participated in various events on this occasion were felicitated during AKAM events in Gujarat region.

SDF Workshop at Gandhinagar on 31.7.2023

5.5.5 Online Programme on Updation of Form-K

Hand-holding programme through video conferencing on updation of Form-K through online Registration Portal and the New Portal of Mining Plan was arranged on 26 August 2022 by IBM's Gandhinagar Regional Office. The main objective of the hand-holding and sensitization programme was to explain the importance of Form-K updation in Process flow and Data integration and sharing common omissions by the applicants during updation request and offering solution including for that of submission of online mining plan.

Shri P.K. Bhattacharjee, Controller of Mines (MTS), joined and addressed the participants on the importance of data integration and process flow of system in the currently launched portals and also for the upcoming ones. Shri Pushpendra Gaur, Regional Controller of Mines, also addressed the participants during the occasion.

Shri P.K. Bhattacharjee, Controller of Mines (MTS) addressing the participants

Interaction amongst participants

5.5.6 Workshop on Digital Aerial Data Submission

IBM successfully organized a Workshop-cum-Training Programme on "Digital Aerial Data Submission" on 13.01.2023 at its Headquarters in Nagpur. Held under the aegis of IBM's GM&MM Cell headed by Shri S.K. Adhikari, Chief Mining Geologist, the programme witnessed participation of about 200 participants from across the country. The two prime Resource Persons, Shri T.K. Sonarkar, RMG and Shri S.R. Mazumdar, SMG, in their Sessions made brilliant presentations and patiently explained the various shortcomings observed in the data being submitted to IBM. The interactive sessions saw the participants raise intricate queries which were deftly handled by the faculty members. The Concluding Session was chaired by Shri P.N. Sharma, CCOM-MDR and Shri Pankaj Kulshrestha, CCOM-MES, was present as Guest of Honour. Aimed broadly at expanding the knowledge of Drone Data Analytics and Submission of Reports, this Workshop did receive wide appreciation for its Contents, Presentations and Deliberations that took place during the sessions.

Workshop-cum-Training Programme on "Digital Aerial Data Submission" on 13.01.2023 at IBM HQ

5.6 Mines Environment and Mineral Conservation (MEMC) week celebration

IBM plays a key role in fostering greater awareness and inculcates competition amongst the mine owners by organising Mines Environment and Mineral Conservation (MEMC) Week in different mining areas in the country towards the protection and restoration of mine environment with sustainable development.The Indian Bureau of Mines celebrated Mines Environment and Mineral Conservation (MEMC) Week under the territorial jurisdictions of its various regional offices during the year 2021-22for creationand propagation of

awareness on mineral conservation and environmental protection in mining areas.

Celebration of MEMC Week :

5.6.1 MEMC Week 2021-22

1. **Gandhinagar Region:**Final day function was celebrated on 10-04-2022 at Porbandar. Sh. Pankaj Kulshreshtha, CCOM & Sh. Rajnish Purohit, COM (NZ) graced the occasion as Chief Gust & Gust of honor respectively.

2. **Raipur Region:**The final day celebration of the MEMC Week 2021-22 was held on 08th April 2022.

3. **Nagpur Region:**Final day fuction was celebrated on 26.03.2022 at Hotel Airport Center Point Nagpur, [Shri. P.N. Sharma, CCOM(I/C), Chief Guest, Shri. P. Kulshreshtha, CCOM(I/C) & Shri. Abhay Agrawal, COM(CZ) were Guest of Honour and Shri. R.R. Dongre, RCOM was Patron]

4. **Bhubaneshwar Region**: the Final Day function and awards ceremony of the 23rd Mines Environment and Mineral Conservation week, held under the aegis of IBM at Bhubaneswar on 27th May 2022.

5. **Hyderabad Region**: Indian Bureau of Mines takes pride in celebrating the 27th Mines Environment & Mineral Conservation Week (ME & MC) 2021-22 at Hyderabad Region in coordination with JSW Cement Ltd, Nandyal Unit, under the aegis of Mines Environment & Mineral Conservation Council, Hyderadad. The Concluding Day Programme of the 27th MEMC Week is scheduled to be held on 23.04.2022. As per the Invitation sent out, Shri P.N. Sharma, CCOM (I/c) MDR, would grace the occasion as Chief Guest while Shri Pankaj Kulshrestha, CCOM (I/c) MES; Shri V. Jayakrishna Babu, COM (SZ); Shri Veera Babu G., CMO, JSW Cement Ltd; and Shri Hukum Chand Gupta, Chairman, MEMC Week 2021-22 & Unit Head, JSW Cement Ltd, Nandyal Unit, would be the Guests of Honour. Shri Shailendra Kumar, RCOM, IBM, Hyderabad & Patron, MEMC Week 2021-22 along with Shri Ritesh Chattaraj, Senior Manager (Geology) JSW Cement & Secretary, MEMC Week and Shri Anil

Kumar, DGM–Mines, JSW Cement & Convener, MEMC Week would also grace the occasion with their participation.

6. **Dehradun Region:** 30th MEMC week final day function was celebrated in Dehradun on 06-05-2022. Shri Sanjay Lohiya, Additional Secretary, Ministry ofMines, GOI was the Chief Guest of this function. Shri Rajneesh Purohit, COM(NZ) graced the function as the Guest of Honour.

7. **Chennai Region**: 29th ME&MC week of *Chennai* Region for the year 2021-22 was celebrated on 29th May, 2022. The Final day function was hosted by M/s. India Cements Limited, at TSN Community Hall, Cement Nagar, Dalavoi, Ariyalur district of Tamilnadu State.

8. **Ajmer Region** : Final day function of MEMCW 2021-22 was celebrated on 25.08.2022 at Udaipur and hosted by M/s Birla Corporation Limited.

5.6.2 MEMC Week 2022-23

To sensitize the importance of mineral conservation and protection of environment, during 2022-23, All Regions celebrated Mines Environment and Mineral Conservation Weeks were observed across the Country.

1. **Jabalpur Region**: Final day function of 32nd MEMC Week 2022-23 was celebrated on 18.03.2023 at Hotel Pasricha, Jabalpur under the aegis of Indian Bureau of Mines, Jabalpur Region. Sri Abhay Agrawal,COM(CZ) graced the occasion as the chief Guest.

32वें ख़ान पर्यावरण एवं खनिज संरक्षण सप्ताह—समापन समारोह

दिनांक 18 मार्च 2023 की मांगलिक बेला में होटल पसरीचा के मनोहारी प्रांगण में आईबीएम के जबलपुर क्षेत्रीय कार्यालय के 32वें ख़ान पर्यावरण एवं खनिज संरक्षण सप्ताह के पुरस्कार वितरण एवं समापन समारोह मनाया गया। समारोह में श्री अभय अग्रवाल, खान नियंत्रक (मध्यांचल), मुख्यालय नागपुर ने मुख्य अतिथि के रूप में शिरकत की और श्री एमएम अब्दुल्ला - निदेशक (परियोजना एवं योजना), मैसर्स मॉयल लिमिटेड ने विशिष्ट अतिथि के तौर पर कार्यक्रम की शोभा बढ़ाई। सप्ताह में 119 खदानों ने भाग लिया, जिन्हें चार श्रेणियों (I) एक लाख टन से कम वार्षिक उत्पादन (II) एक से दस लाख टन उत्पादन (III) दस लाख

टन से अधिक वार्षिक उत्पादन और (IV) भूमिगत खदानें। पाँच सितारा से पुरस्कृत खदानों को 'अमृत कलश' पुरस्कार से नवाजा गया।इस रंगारंग कार्यक्रम में लगभग 350 खनन पट्टाधारकों, खनिज क्षेत्र के अधिकारी -कर्मचारीवृन्द, कॉलेज छात्र और QPS ने सक्रिय सहभागिता के साथ अपनी उपस्थिति दर्ज कराई।

दिनांक 18 मार्च 2023 जबलपुर क्षेत्रीय कार्यालय के 32वें ख़ान पर्यावरण एवं खनिज संरक्षण सप्ताह के पुरस्कार वितरण एवं समापन समारोह

2. **Hyderabad Region*:*** Final day function of the 28th MEMC week 2022-23 was Celebrated on 05.03.2023 at Hyderabad. The host for the celebrations was M/s NCL Industries Limited. Sri P.N.Sharma,CCOM(I/c)(MDR) graced the occasion as the chief Guest.

3. **Bangalore Region *:***Final day function of MEMC Week 2022-23 was celebrated on 12/03/2023 at Kalburgi District of Karnataka state. Hosted by Kodla Limestone Mine of M/s Shree Cement Limited. Sri V.J.K Babu, COM(SZ) was the chief guest to grace the function.

4. **Chennai Region :** Final day function of MEMC Week 2022-23 was celebrated on 5th March, 2023 at Madurai, hosted by M/s. Ramco Cements Limited. ShriV.JayakrishnaBabu, Controller of Mines (SZ), IBM, Bengaluru graced the function as Chief Guest.

5. **Goa Region*:*** Final day function of 12th MEMC Week 2022-23 was celebrated on 19th March 2023 at Padam Nagar, M/s. J.K.Cement Works, Muddapur,MudholTaluka, Bagalkot District of Karnataka State. On this occasion, Shri. PankajKulshrestha, Chief Controller of Mines (In-charge) (MES)

IBM, Nagpur was present as the Chief Guest, Shri. V.JayakrishnaBabu, Controller of Mines(SZ), IBM, Bangalore was present as Guest of Honor.

दिनांक 19/03/2023 को भारतीय खान ब्यूरो के गोवा क्षेत्रीय कार्यालय के तत्वावधान में 12वें खान पर्यावरण और खनिज संरक्षण सप्ताह का समापन समारोह और पुरस्कार वितरण समारोह मेसर्स जे के सीमेंट वर्क्स, पदम नगर, मुद्दापुर में MEMC परिषद, बागलकोट द्वारा मनाया गया। MEMC Week के समापन समारोह को मुख्य अतिथि के रूप में माननीय मुख्य खान नियंत्रक, भारतीय खान ब्यूरो श्रीमान पंकज कुलश्रेष्ठ साहब एव विशिष्ट अतिथि के रूप मे खान नियंत्रक (साउथ जोन), बेंगलुरु श्री जय किशन बाबु साहब उपस्थित थे। इनके आलावा मंच पर उप खान नियंत्रक और ओआईसी, गोवा क्षेत्रीय कार्यालय श्री नरेश कटारिया, जे के सीमेंट के मैन्युफैक्चरिंग हेड श्री. एस.के. राठौर, जेके सीमेंट वर्क्स मुद्दापुर के यूनिट हेड श्री उमाशंकर चैधरी, MEMC के अगले होस्ट डालमिया सीमेंट (भारत) लिमिटेड के यूनिट हेड श्री प्रभात सिंह और इस सप्ताह के सचिव श्री विक्रम सिंह उपस्थित थे।
कार्यक्रम की शुरुआत ध्वजारोहण के साथ हुई, इसके बाद विभिन्न सेवा प्रदाता कंपनियों द्वारा प्रदर्शित विभिन्न स्टालों का निरीक्षण मुख्य अतिथि द्वारा किया गया। श्री. विक्रम सिंह ने सभा का स्वागत किया और दर्शकों को सचिवीय रिपोर्ट प्रस्तुत की। इसके बाद आईबीएम और अन्य के गणमान्य व्यक्तियों के भाषण हुए। मुख्य अतिथि ने अपने संबोधन के दौरान उल्लेख किया कि छोटे खान मालिकों और लघु इकाइयों के उत्थान के लिए आवश्यक तकनीकी सहायता सुचारू रूप से प्रदान की जा रही है। नियमों और विनियमों का अनुपालन महत्वपूर्ण बिंदु है और साथ ही खनिजों का संरक्षण भी आवश्यक है।

इस समारोह के दौरान, सांस्कृतिक कार्यक्रम टीम ने ष्श्री कृष्ण रासलीलाष् का अभिनय किया, जिसे सभी ने बहुत सराहा और पूरा वातावरण भक्ति से भर गया, मानो भगवान श्री कृष्ण ने सभी को आशीर्वाद दिया हो।

इस सप्ताह में 41 खदानों ने भाग लियाद्य पाँच सितारा से पुरस्कृत खदानों को 'Excellence Award'तक' प्रदान किया गया। इस कार्यक्रम में बागलकोट क्षेत्र, कर्नाटक, महाराष्ट्र के कुछ हिस्सों और गोवा की खानों से लगभग 700 व्यक्तियों ने बड़ी संख्या में भाग लिया। इस आयोजन में खानों को विभिन्न श्रेणियों के पुरस्कार प्रदान किए गए जिन्होंने पर्यावरण और खनिज संरक्षण के लिए अपने उत्तम प्रयासों का प्रदर्शित किया है। कार्यक्रम का समापन राष्ट्रगान के साथ संपन्न हुआ।




19/03/2023 कोभारतीय खान ब्यूरो के गोवा क्षेत्रीय कार्यालय के तत्वावधान में 12वें खान पर्यावरण और खनिज संरक्षण सप्ताह का समापन समारोह और पुरस्कार वितरण समारोह

5.7 New Initiatives by MDR Division

5.7.1 Monitoring of mining activities usingDigital Aerial (Drone and Satellite) Images:

Government of India, Ministry of Mines has amended Mineral Conservation and Development Rules, 2017 in the year 2021 requiring submission of digital aerial images (Drone/Satellite) by the mineral concession holders/preferred bidders to Indian Bureau of Mines (IBM). Every lessee shall submit digital aerial image to IBM. Every lessee shall submit digital aerial image to IBM on or before 1st day of July every year. Further, all mine plans are required to be submitted along with the digital aerial images. The Standard Operating Procedure for submission of digital aerial images to IBM by lessee has been laid down by IBM in April 2022 and made available on IBM website. Till March 2023, the mineral concession holders have submitted their digital aerial images for 754 leases. These digital images are being validated to ensure submission of data as per the SOP.

For capacity building of IBM officials to process the drone and satellite image data on GIS platform, necessary hands on training on “Basics of GIS & Processing of Drone Survey Data” has been commenced from March 2022. A road map has been carved out to train all the technical officials of the Minerals Development and Regulation Division through a series of in-house training program to develop expertise in analysing the aerial images and to make appropriate use of these images in inspection of mines and approval of mining plans. During the year 2022-23, total 124 officers of Regional Offices and IBM Head Quarter were imparted training on the Basics of GIS and Processing of Drone Survey data conducted in Thirteen Batches and One hundren and Twelve working days at GIS & Remote Sensing Centre, IBM, Nagpur.

Geographic information system and Remote sensing centre has been established in Indian Bureau of Mines which is functional since December 2018. The following activities have been carried out on GIS platform.

5.7.2 Preparation of Mineral maps:

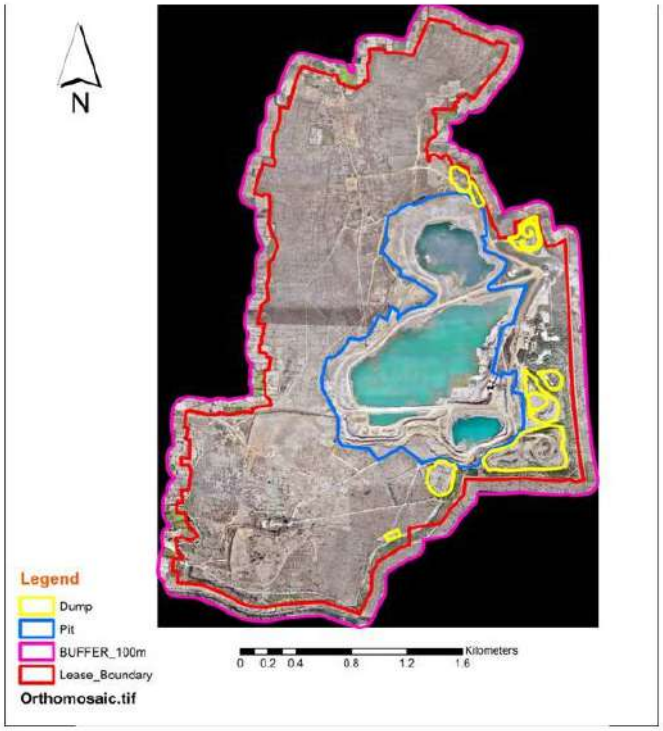
The activity of updation of Multi Mineral Lease hold Maps on GIS platform has been completed in March 2022. Creation of geodatabase in respect of 21 States and one UT viz. Goa, Andhra Pradesh, Kerala, Rajasthan, Madhya Pradesh, Gujarat, Chattisgarh, Telangana, Tamil Nadu, Odisha, Jharkhand, Maharashtra, Karnataka, Bihar, Haryana, Himachal Pradesh, Assam, Meghalaya, Manipur, Uttaranchal & West Bengal states and Jammu & Kashmir (UT) were completed. The geological layer has been imported from the GSI Bhukoshfor all the states and integrated with corresponding GIS database. Plotting of boundaries of 3890 major mineral mining leases is completed and is available on a geospatial platform. Attachment of mine data in respect of the leases has also been accomplished.

5.7.3 Generation of Land use classification map of mining leases on GIS platform:

An activity to generate land-use classification map of mining leases on GIS platform has been started since September 2020. The information of land-use area has been sought from the lessee through regional offices of IBM in .shp/.kml format. The activityinvolvs plotting of land-use classification map on GIS platform checking & correcting KML or SHP file, conversion of KML file to SHP file, calculation of area of each land-use feature in attribute table and attachment of mine data to land-use attribute table.

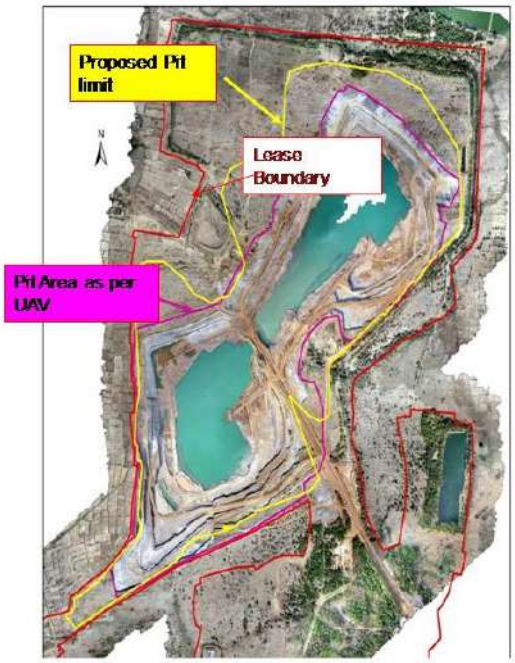
UptoMarch 2023, the land-use data has been received for 1229 mining leases (899Nos. Working; 330 Nos. Nonworking),and processing of data on GIS platform for all 1229 mining leases has been completed.

The geospatial database of land-use was created from the lease-wise details of land put to use for mining activity. This database can be used to generate customized maps & reports viz. state-wise, district-wise, mineral-wise, feature-wise, etc. for land-use classification by query analysis on GIS platform.

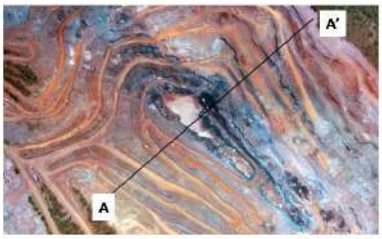


Drone Image of a mine superimposed by GIS layers

Mine Pit Analysis

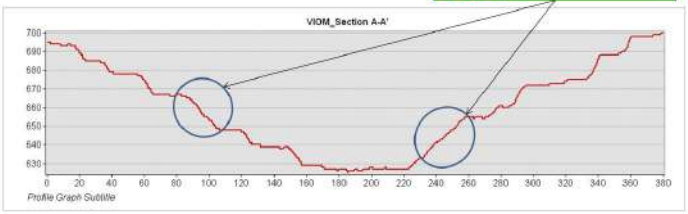


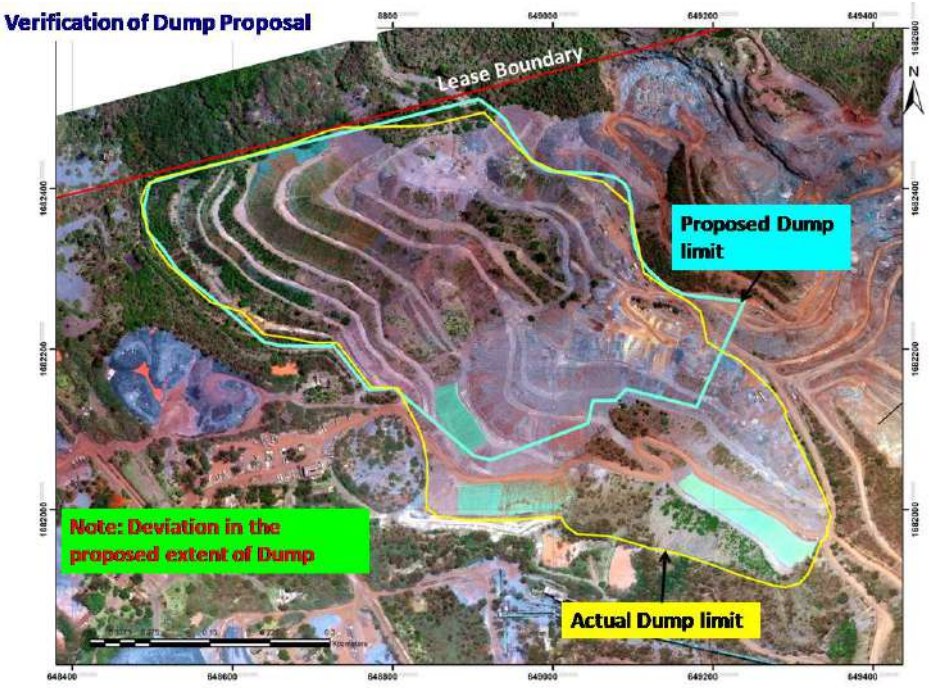
Pit dimensions & volume of excavation		
Area in m2	Area in Ha	Volume cub.m
1412192	141.22	2,34,13,192



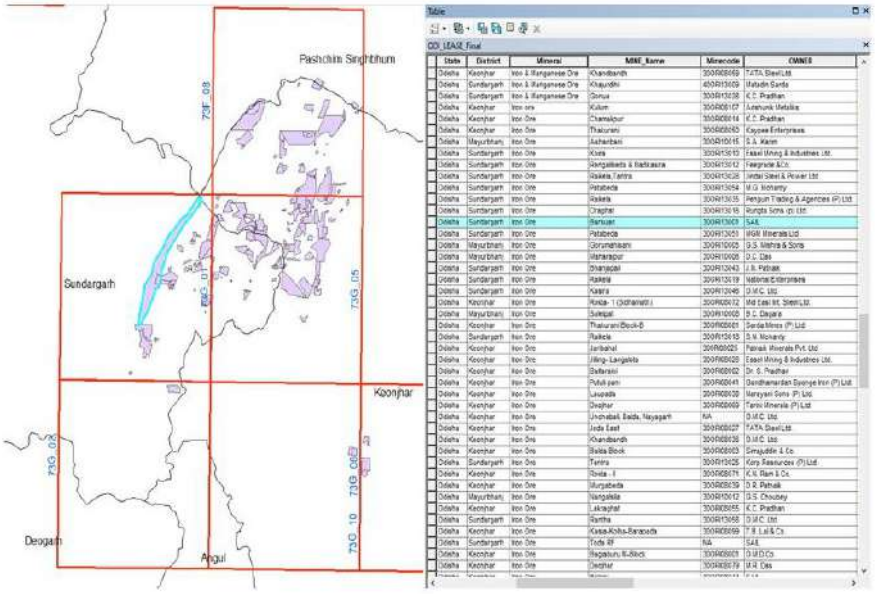
Verification of Benches Height & Width

Note: Height & Width of Benches not maintained as proposed.

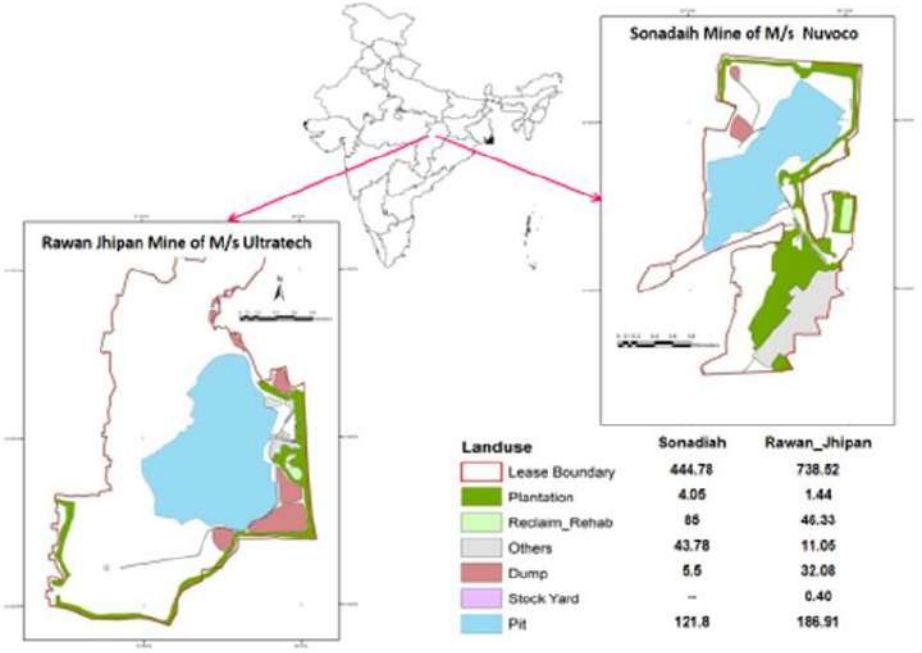




Mine Reclamation & Rehabilitation Analysis



Geospatial database of Mining Leases of Odisha State



Geospatial map showing land use of different mines

5.7.4 Best out of Waste:

National Mineral Policy, 2019 thrusts on having an adequate and effective legal and institutional framework promoting zero-waste mining as the ultimate goal and a commitment to prevent sub-optimal and unscientific mining. In accordance with the National Mineral Policy, 2019, suitable provision has been made under Rule 12(1) (k) of Minerals (Other than Atomic and Hydrocarbons Energy Minerals) Concession Rules, 2016 for use of inferior grade mineral /waste as minor mineral. Overburden or waste rock; mineral below the threshold value, which is generated during the course of mining or beneficiation of the mineral; any minor mineral extracted along with the mineral for which lease is granted; are now allowed to be disposed off with the permission of the concerned State Govt. and in consultation with Indian Bureau of Mines. This has helped in marching towardsthe goal of zero waste mining and for generating the economy out of the dead stock.

5.8 Capacity Building:

Indian Bureau of Mines has been instrumental in capacity building of IBM employees, personnel deployed in mining industry and State Government employees, through it's training programmes. Various trainings imparted include, training on MSS & space application, training on drone surveying, training on GIS, training on reserves/resource classification etc. etc.

i) A preparatory meeting held on 05-08-2022 under the chairmen ship of Smt Farida M Naik Joint Secretary, Ministry of Mines, Govt. of India at GSI Hyderabad in connection with the Mining conclave of State Mining Ministers to be organized on 08th& 09th September-2022 at Hyderabad.

ii) A Joint working group (JWG) meeting was conducted on 17-08-2022 through Google meet by DMG Govt of Andhra Pradesh for discussion on Geological Report and Preparation of blocks for Auction.

5.9 Mineral Beneficiation

Mineral beneficiation studies including mineralogical testing and chemical analysis intimately relates to both conservation and development of mineral resources. During the year 2021-22, **40**ore dressing investigations, **17424**chemical analysis, **2344** mineralogical examinations and 03 in-plant study were completed. Salient Data of Ore Dressing investigations on Iron Ore is available on IBM website on link https://ibm.gov.in/index.php?c=pages&m=index&id=232.

5.9.1 Some of the salient achievements of ore dressing investigations are as follows:

5.9.1.1 IRON ORE:

Bench scale beneficiation studies on a lean grade Iron Ore sample from Khajuraho Stones, ChhatrapurDist, Madhya Pradesh for M/s Sunflag Iron and Steel Co. Ltd. (IBM/NGP/R.I. No. 2249).

A lean grade iron ore sample from Khajuraho stones, Chhatrapur district, Madhya Pradesh was received through M/s Sunflag Iron and Steel Co. Ltd., at the Modern Mineral Processing Laboratory and Pilot Plant, Indian Bureau of Mines, Nagpur for bench scale beneficiation studies. The objective of the investigation was to assess the amenability of the sample to produce an iron concentrate with optimum grade and recovery.

The as received sample assayed 48.18% Fe(T), 12.85% SiO2, 9.80 % Al_2O3, 0.71% TiO2, 0.72% CaO, 0.34% MgO, 0.60% K2O, 0.15% P2O5, 4.11% LOI and Traces of S(T) and Na2O. 1.4.

The sample consisted major amounts of hematite with sub-ordinate amounts of clay (kaolinite) with minor to very minor amounts of mica (muscovite, biotite), quartz/chert, goethite/ limonite, magnetite, rutile and gibbsite. Traces of pyroxene and pyrite were noticed in the sample.

Detailed beneficiation test work comprising of crushing, grinding, sizing, gravity separation and magnetic separation were carried out. The best test comprised of crushing the as received sample to minus 10 mesh, stage grinding the crushed sample to -100 mesh followed by gravity separation employing tabling on the

sand fraction and fine particle recovery by Multi gravity separator (MGS) on slimes. The MGS middling fraction obtained was subjected to Wet Low Intensity Magnetic Separation.

i). A composite concentrate.-I (Table Conc.+ Magnetics of MGS Middlings) assaying 61.59% Fe(T), 3.22% SiO2, 3.09% Al2O3 and 1.31% LOI with Fe(T) recovery of 29.2% and (weight % yield 22.6) could be obtained.

ii) A composite concentrate-II (Table concentrate + MGS concentrate + Mag of MGS Middlings) assayed 60.72% Fe(T), 3.68% SiO2, 3.73% Al2O3 and 1.51% LOI with Fe(T) recovery of 41.9% and (weight % yield 32.9).

The sample is amenable to beneficiation.

IRON ORE:

Beneficiation, Thickening &Filteration studies on a low grade Iron Ore sample from Somalapur (Taluk Sandur), Bellary Dt. for M/s MSPL Ltd, Hospet, Karnataka.

An iron ore sample was received from M/s. MSPL Limited for bench scale beneficiation studies at Regional Mineral Processing Laboratory, Indian Bureau of Mines, Bangalore. The objective of the beneficiation test work is to develop a process flow sheet to produce a pellet grade concentrate having > 63.0 % Fe (T), ~ 5% (Al_2O_{3+} $SiO_{2.}$).

The as received sample assayed 33.17% Fe (T), 50.06% SiO_2, 0.45% Al_2O_3, 0.29% CaO, 0.18% MgO, 0.09% Na_2O, 0.07% K_2O, 0.16% Mn, 0.01% TiO_2, 0.07 S(T), 0.09%P and 3.30% LOI.

The sample consists of major amount of Martitized magnetite/Magnetite, hematite and quartz with minor amount of goethite/limonite, very minor to traces of carbonates, pyrite, clay and ilmenite.

The sample was subjected to various process techniques like dry screening, wet screening, gravity concentration followed by wet low and high intensity magnetic separation, Desliming and flotation. The final composite concentrate obtained by combining the gravity concentrates and regrinding middling magnetic fraction and combined slimes non-floats assayed 63.56% Fe(T), 8.61% SiO_2, 0.28% Al_2O_3 with Fe(T) recovery of 72.7% and weight percent yield was 39.1.

IRON ORE:

Beneficiation studies on an Iron ore sample from Kirloskar Chenakeshwar Mines, Hosdurga, Karnataka for M/s Kirloskar Ferrous Industries Limited, Bevinahalli (Vil. & Po.), Koppal (Taluk & Dist.)., Karnataka .

An iron ore lumps and fines sample was received from Kirloskar Chenakeshwar mines, Hosdurga, Karnataka of M/s. Kirloskar ferrous industries limited, Bevinahalli (vil. & po.), Koppal (taluk & dist.), Karnataka, for beneficiation studies. The objective of the investigation was to produce a concentrate suitable for metallurgical industry with maximum possible recovery.

The as received sample assayed 58.06%Fe(T), 0.99% FeO, 8.21% SiO_2, 1.01% Al_2O_3, 4.62% LOI, 0.43% CaO, 2.27% Mn, 0.44% Na_2O, 0.34% S(T), 0.20% MgO, 0.14% K_2O, 0.001% TiO_2, and traces amounts of P.

The coarse Jig heavies concentrate (-25+6 mm) obtained assaying 64.67% Fe(T), 2.75% SiO_2, 0.76% Al_2O_3 and 3.09 % LOI with Fe(T) recovery of 61.5% (Wt.% yield: 56.9)

The composite concentrate obtained by combining of jig product and magnetic separation magnetic product together assayed 63.75% Fe(T), 3.28% SiO_2, 1.00% Al_2O_3 and 3.72 % LOI with Fe(T) recovery of 93.4 % (Wt.% yield: 87.6).

The process adopted for physical concentration by jigging and wet magnetic separation could achieve the desired specifications of metallurgical grade iron ore concentrate with a maximum recovery.

IRON ORE:

Bench scale beneficiation studies on an Iron Ore sample from Kirloskar Bharath Mines, Sandur, Karnataka for M/s. Kirloskar Ferrous Industries Limited, Bevinahalli, Koppal, Karnataka (IBM/BNG/R.I. No…….946)

The as received sample assayed 59.68% Fe (T), 8.55% SiO_2, 2.40% Al_2O_3, 0.88% Na_2O, 0.32% MgO, 0.25% CaO, 0.01% K_2O, and 2.01% LOI.

Beneficiation test were made employing various beneficiation operations such as dry screening, wet screening, gravity separation, magnetic separation, and

combination of beneficiation operations to reduce alumina and silica bearing minerals so as to explore the possibility of obtaining higher grade for iron making.
Process Route I: Dry screening of as received sample crushed to all – 8 mm followed by Dry magnetic separation on -8 mm+1mm fraction followed by wet screening on composite of –1mm fraction (N-Mag of -8+1mm was reduced to all -1mm and -1mm fraction of dry screening) over 100 mesh size followed by Tabling on -100 mesh size fraction followed by WHIMS on slimes of -100 mesh fraction. The composite concentrates assayed 63.96% Fe (T), 5.52% SiO_2, 1.60% Al_2O_3 and 2.08% LOI with Fe (T) recovery of 92.2% and weight percent yield of 87.1
Process Route II: Gravity separation employing tabling on as received sample ground to all -100 mesh size followed by Wet high intensity magnetic separation (WHIMS) on table rejects A composite concentrate {table heavies and Mag (T.Midd + T.Tails) + Mag(Slimes)}assayed 64.70% Fe(T), 4.54% SiO_2, 1.11% Al_2O_3, and 1.25% LOI with Fe(T) recovery of 90.4% and weight percent yield of 84.4.

IRON ORE :

Bench scale beneficiation studies on an iron ore sample from Huda (Redi), Vengurla, Dist., Sindhudurg, Maharashtra for PrivateIndustry.(IBM/BNG/RI No. 956).

The composite as received sample assayed 55.11% Fe(T), 9.70% SiO_2, 2.78% Al_2O_3, 0.34% FeO, 0.62% Mn, 0.09% P,0.10% CaO, 0.04% MgO, 0.13% Na_2O, 0.09% K_2O, 7.88% LOI, 0.13% S(T) and 0.13% TiO_2.
The composite Magnetic fraction assayed 62.11% Fe(T) with 4.74% SiO_2 with a recovery of 88.0% (Wt.% yield :81.5). The dry cum wet beneficiation process is suitable for a conservation of water and cost effective.

IRON ORE BULK (DRILL CORE):

Bench scale beneficiation studies on an Iron ore bulk sample (Drill Core) from Jalahuri Block, Keonjhar District, Odisha for Geological Survey Of India, Bhubaneswar, Odisha (IBM/NGP/RI No. 2253).

An Iron Ore bulk sample (drill core) from Jalahuri block, Keonjhar district, was received from Geological Survey of India, Bhubaneswar, Odisha, for bench scale beneficiation studies, at the Mineral Processing Laboratory and Pilot Plant, Indian Bureau of Mines, Nagpur.

The objective of the investigation was to study the amenability of the sample for up gradation on bench scale so as to produce a marketable grade iron ore concentrate from a low grade ore.

The as received sample assayed 57.24% Fe(T), 4.25% Al_2O_3, 6.91% SiO_2, 0.96% CaO, 0.37% MgO, 0.34% Na_2O, 0.16% K_2O,traces of TiO_2, P_2O_5, Mn, and S(T) , and 3.76% LOI.

The polished lumps contain predominantly of hematite followed by sub-ordinate amount of goethite+ limonite followed by sub-ordinate amount to minor amount of silicates.

Both dry and wet process routes were applied to upgrade the sample. The best route consisted of,

- Reducing the as received sample to -6.3 mm by stage crushing.
- Wet screening of the -6.3 mm sample on a 6 mesh screen followed by a 30 mesh screen followed by desliming and the composite slimes were separately collected.
- The -6.3 mm+ 6 mesh and -6 mesh + 30 mesh fractions were separately subjected to jigging .
- The sand fraction obtained from minus 30 mesh fraction was subjected to tabling .
- For additional recovery the jig tails from -6.3mm+6mesh and jig bed from -6mesh+30mesh were combined and stage ground in a rod mill to minus 70mesh size. The ground product was subjected to tabling after desliming & the slimes obtained were separately subjected to MGS.
- By the above process route a composite concentrate -1 assaying 62.90% Fe, 2.07% $Al_{2O3,}$ 2.52% SiO_2 and 1.99% LOI with a Fe(T) distribution of 49.5% (Wt% yield :45.3) could be obtained. Another combination involving partial grinding of the jig products gives a concentrate -2 assaying 62.68% Fe, 2.28% $Al_{2O3,}$ 2.80% SiO_2 and 2.23% LOI with a Fe(T) distribution of 61.2% (Wt% yield :56.1).

The sample is amenable to beneficiation.

BHQ IRON ORE:

Bench Scale Beneficiation Studies on a low grade BHQ-Iron Ore sample from Surjagarh Iron Ore Mines, Wooria Hills, Gadchiroli District, Maharashtra for M/s Lloyds Metal and Energy Limited (IBM/RI No. 2256).

A low grade BHQ-Iron ore sample from Surajgarh Iron Ore Mines, Wooria Hills, Gadchiroli district, Maharashtra, was received from M/s Lloyds Metal and Energy Limited, for bench scale beneficiation studies at Modern Mineral Processing Laboratory, Indian Bureau of Mines, Nagpur.
The objectives of the investigation was to study the (i) amenability of the sample to beneficiation on bench scale, and (ii) to develop a process route to produce a marketable grade iron ore concentrate with maximum possible recovery
The as received sample assayed 38.51% Fe(T), 41.32% SiO_2, 1.43% Al_2O_3, 0.18% S(T), 0.03% P_2O_5 and 0.81% LOI. The sample consists predominant amounts of hematite and quartz.

Beneficiation test work comprised of crushing and grinding of the as received sample, subjecting the crushed as well as ground products to gravity and magnetic separation to obtain a final Fe concentrate. The above route yielded a composite concentrate assaying 60.01% Fe(T), 11.55% SiO_2, 1.34% Al_2O_3, 0.72% LOI with Fe(T) distribution of 67.3% (wt.% yield of 43.2)

The sample is amenable to beneficiation and the process route yielded suitable grade with satisfactory recovery of iron values.

BANDED MAGNETITE QUARTZITE (BMQ-A) IRON ORE:

Bench Scale Beneficiation Studies on a Banded Magnetite Quartzite (BMQ-A) Iron ore sample received from M/s Godavari Power &Ispat, Raipur, Chhattisgarh (IBM/NGP/RI No...2251).

A Banded Magnetite Quartzite Iron ore sample labelled as (BMQ- A) from M/s Godavari Power &Ispat, Raipur, Chhattisgarh was received in Modern Mineral Processing Laboratory & Pilot Plant, IBM, Nagpur, for bench scale beneficiation studies. The objective of the study was to upgrade the iron ore value suitable for industrial use at coarser particle size separation employing dry or dry-cum-wet processes.

The as received sample consisted of mostly fines and few lumps ranging in between10 mm and 12 mm size, assayed 40.5% Fe(T), 8.4% FeO, 37.4% SiO_2, 1.5 % Al_2O_3, 0.53%CaO, 0.19% MgO, 0.27% TiO_2,0.2% P, 0.03% K_2O, 0.03% Na_2O, 0.087 Mn, 0.5% LOI.

Mineralogical studies revealed that the as received sample consisted major amounts of martite/martitized magnetite, magnetite and quartz with sub-ordinate amounts of hematite and very minor amounts of goethite, clay and pyrrhotite.

Detailed beneficiation studies like Dry magnetic separation, Wet Magnetic Separation, Dry-cum-wet magnetic separation, crushing, screening etc. were carried out by employing different techniques and varying parameters. Three process routes were planned at three different crushing sizes viz. at -5mm, -1mm and -10#.

(A) Process Route –I

It comprised of crushing of as received sample to -5mm, followed by low intensity dry magnetic separation. The magnetic products (I &II)of -5mm were further ground to -70# and subjected tolow intensity dry magnetic separation. The magnetic products(I & II)of -70#were further ground to -100# and subjected tolow intensity wet magnetic separation.

The composite concentrate of -100# Magnetic Product (I & II) obtained from wet low intensity magnetic separation assayed 63.92% Fe (T), 5.91% SiO_2, 1.15% Al_2O_3 with wt % yield 43.9 and wt recovery of 69.2%.

(B) Process Route –II

(i) It comprised of crushing of as received sample to-1mm, followed by low intensity dry magnetic separation. The magnetic products (I &II)of -1mm were ground to -70# and subjected to low intensity dry magnetic separation. The magnetic products (I &II)of -70# were further ground to -100# and subjected to low intensity wet magnetic separation.

(ii) The composite concentrate assayed 64.58% Fe (T), 6.49% SiO_2, 0.85% Al_2O_3 with wt % yield 43.4 and wt recovery of 69.5%.

(c) Process Route –III

The as received sample was crushed to all -10 # in a laboratory roll crusher and then stage ground to all -70#. The -70 # ground sample was subjected to low intensity dry magnetic separation. The magnetic product from dry low intensity magnetic separation was ground to all -100# and subjected to wet low intensity magnetic separation.

The composite mag. product assayed 65.03% Fe (T), 5.21% SiO_2, 1.01% Al_2O_3 with wt % yield 41.6 and wt recovery of 65.4%.

The sample is amenable to beneficiation. All the three developed process routes yielded desired results with satisfactory recovery.The study revealed that employing dry-cum-wet process suitable Fe(T) grade with good recovery could be obtained for industrial use.

BANDED MAGNETITE QUARTZITE (BMQ-B) IRON ORE:

Bench scale beneficiation studies on a Banded Magnetite Quartzite (BMQ-B) Iron ore sample from M/s Godavari Power &Ispat , Raipur, Chattisgarh .

The objective of the study was to develop process flowsheet to upgrade the iron ore value suitable for industrial use employing dry and dry-cum-wet magnetic separation processes.

The as received sample assayed 34.1% Fe(T), 1.8% FeO, 46.8% SiO_2, 0.9 % Al_2O_3, 0.53%CaO, 0.20% MgO, 0.38% TiO_2,0.1% P, 0.16% Na_2O, 0.06 % K_2O1.6% LOI.

The beneficiation study was carried out at different sizes to assess the amenability and upgradability of Fe(T) with suitable grade, recovery and yield. To achieve this a number of tests were carried out at coarser sizes such as crushing the as received sample to8mm, 5mm, 2mm, 1mm as well as grinding at sizes such as 100# and 200#. The best beneficiation process routes developed are as follows:

(B) Process Route –I

(i) The concentrate of -200# Magnetic Product (I) obtained from wet low intensity magnetic separation assayed 64.87% Fe (T), 5.8% SiO2, 0.8% Al2O3 with wt % yield 10.4 and wt recovery of 18.8%.

(ii) The composite concentrate of -200# Magnetic product (I&II) obtained from wet low intensity magnetic separation assayed 58.32% Fe (T), 14.29% SiO_2, 1.10% Al_2O_3 with wt % yield 20.8 and wt recovery of 33.8%.

(C) Process Route –II

(i) The composite concentrate of -200# Magnetic product (I&II) obtained from wet low intensity magnetic separation assayed 64.7%Fe (T), 5.1 % SiO2, 1.2 % Al_2O_3 with wt. % yield 11.3 and wt. recovery of 20.4%.

(D) Process Route –III

(i) The composite concentrate obtained from tabling assayed 61.4 % Fe (T), 9.2 % SiO_2, 1.18 % Al_2O_3 with wt% yield 25.9 and recovery of 45.0 %.

The sample is amenable to beneficiation. The characteristic of sample is typical having low magnetite/ magnetic component and intricate association of Fe oxide minerals with silicate gangue. All the three developed process routes yielded suitable grade with reasonable recovery.

5.9.1.2 BAUXITE ORE:

Bench scale beneficiation studies on a Bauxite ore sample from Pipariya Mal, Dindhori, Madhya Pradesh for M/s Anand Mining Corporation, Pathak Ward, Katni, Madhya Pradesh (IBM/NGP/RI No. 2259).

The sample assayed 42.36% Al_2O_3, 15.23% Fe(T), 2.17% SiO_2, 1.91% Reactive-SiO_2,6.24% TiO_2, 23.64% LOI, 0.48% CaO, 0.70% MgO, 0.52% P_2O_5 and0.29% V_2O_5.

Beneficiation studies were carried out employing different techniques by varying various parameters to upgrade alumina value. The best results were obtained by the following beneficiation routes-

(A) Dry separation process without grinding :

As received sample crushed to minus ½ inch, followed by dry sieving, crushing of -1/2 inch+5mm to all -5mm followed by dry magnetic separation of -5mm+30# size sample. The composite of -30+200# mesh size sample was subjected to perm roll dry magnetic separation.

The composite of (-5mm+30# and -30+200#) Non-Mag fraction assayed 46.06% Al_2O_3 with recovery of 80.4% and weight yield of 75.3%.

(B) Wet high intensity magnetic separation at minus 70 mesh size :

To further enhance the alumina grade, the as received crushed -10# size sample was ground to all -70# in laboratory rod mill, the ground product was subjected to wet high intensity magnetic separation. The non-magnetic fraction assayed 49.18% Al_2O_3, 10.31% Fe(T) and 1.93% SiO_2 with recovery of 54.2% $Al_2O_3$and weight yield of 46.6%.

Bench scale beneficiation study revealed that the sample is amenable to beneficiation and alumina (Al_2O_3) value is upgradable with high recovery.

5.9.1.3 COPPER & GOLD:

Bench scale beneficiation studies on Copper & Gold sample from AdashBasemetal Complex, G-2 Explored Block, GSI, Bhubaneshwar for Geological Survey of India, Odisha (IBM/NGP/RI No. 2247).

The as received sample assayed 1.20% Cu, 44.56% SiO_2, 8.35% Al_2O_3, 8.01% Fe(T), 8.07% CaO, 6.82% MgO, 0.8% P_2O_5, 1.98% S, 3.98% LOI, 242ppm Ni, 105ppm Co, 0.32ppm Au (by Fire assay method) and 6.4 ppm Ag (by Fire assay method).

The mineralogical studies on the as received sample consist mainly of quartz, feldspars (plagioclase, microcline) and pyroxene with subordinate amount of amphibole and carbonates (calcite, dolomite). Minor to very minor amount of mica (muscovite, biotite), chalcopyrite, pyrite, pyrrhotite, bornite& chalcocite/covellite and traces amount of chlorite, arsenopyrite, magnetite, zircon and tourmaline.

The beneficiation route employed was grinding of the as received -10# crushed sample to 76.8% passing 200 mesh, followed by flotation. The 3rd Cleaner float

assayed 19.4% Cu, 8.2% SiO_2, 28.4% Fe(T), 27.3% S with 83.4% Cu recovery and weight percent yield of 4.9%.

The as received sample also contains about 0.32 ppm Au to recover that, flotation test were carried out and the 2nd cleaner float assayed 3.92 ppm Au with 55.6% recovery and 5.8% weight percent yield.

Alternatively direct cyanidation on the as received sample all passing -100# size, adopting bottle roll procedure for 36 hrs leaching time yielded a recovery of 71.2% Au in the leachate (solution) with the residue assaying 0.1 ppm Au.

COPPER ORE:

Bench scale beneficiation studies on a copper ore sample G-2 Stage Exploration fromMundadevta Copper Block In Baharagora Copper Prospect, Singbhum Copper Belt, East Singbhum (Dist.), Jharkhand forM/s Mineral Exploration and Consultancy Limited (IBM/NGP/RI No.2265)..

The as received sample assayed 1.25% Cu, 55.3% SiO_2,8.37% Al_2O_3, 10.89% Fe(T), 3.81% CaO, 4.79% MgO, 0.87% P_2O_5, 2.14% S(T), 2.28% LOI, 4.1% K_2O, 1.30% Na_2O 692ppm Ni, 124ppm Co, 191ppm Znand 0.26ppm Au.

Chalcopyrite is the major copper contributing mineral along with very minor amounts of chalcociteand covellite minerals.

The detailed beneficiation studies were carried out employing different techniques by varying various parameters to upgrade the copper values, the best beneficiation process route evolved are as follows

(i)The obtained 2nd cleaner float assayed 22.64% Cu, 0.44% Ni and 0.083% Co with recovery of 92.9% Cu, 32.6% Ni and 28.9% Co and weight yield of 5.1%.

(ii)The obtained 3rdcleaner float assayed 26.51% Cu with recovery of 91.7% and weight yield of 4.3%.

Bench scale beneficiation study revealed that the copper sample is amenable to beneficiation and copper value is enhanced to higher grade with very high recovery.

LEAN ORE COPPER:

Bench scale beneficiation studies on a lean ore Copper sample from Tonda Copper Block, Jhunjhunu, Khetri District, Rajasthan for M/s. Mineral Exploration & Consultancy Limited (MECL) (IBM/RI No. 2256).

A lean grade copper ore sample (Drill core) from Tonda copper block, Khetri, Jhunjhunu Dist., Rajasthan of M/s Mineral Exploration Corporation Limited, was received at Modern Mineral Processing Laboratory & Pilot Plant, Indian Bureau of Mines, Nagpur for carrying out bench scale beneficiation studies.

The as received sample assayed 0.28% Cu, 57.08% SiO_2, 9.17% Fe(T), 12.1% Al_2O_3, 1.76% S(T), 1.45% CaO, 3.13% MgO, 3.22% Na_2O, 2.02% K_2O, 0.91% TiO_2, 46.5ppm Pb, 66ppm Zn, 54.8 ppm Mo, 78.36% Acid insolubles and 1.81% LOI.

Chalcopyrite was the main copper bearing mineral present in the sample in very minor amount. Phyrrhotite and pyrite were noticed in very minor to trace amounts. Mica (Muscovite and biotite) and quartz are the predominant gangue minerals in the sample.

The process route evolved consisted of crushing and grinding the as received sample to minus 200 mesh size and subjecting the ground pulp to rougher flotation. The best results obtained on a 2^{nd} cleaner copper concentrate assaying 21.49% Cu and 9.40% AI and 90.8% Cu recovery (Wt.% yield:1.2).

The sample is amenable to beneficiation and a suitable grade copper concentrate could be obtained from a lean copper ore .

RECOVERY OF GOLD ASSOCIATED WITH COPPER ORE:

Beneficiation studies on recovery of Gold associated with Copper Ore sample from Madansahi Block of Geological Survey of India, Bhubaneshwar (IBM/BNG RI No. 951).

The as received sample assayed 0.17 ppm Au, 2.65 ppm Ag, 0.45% Cu and 54.10% SiO_2.

To assess amenability and recovery of Gold, direct cyanide leaching by adopting bottle roll cyanidation leaching procedure yielded gold recovery of about 88% in to the solution with residue assaying of 0.02 g /t Au.

5.9.1.4 MANGANESE ORE:

Bench scale beneficiation studies on a low grade Manganese ore sample from Brazil for M/s RajadhirajTirupani Vinayak Natraj Pvt Ltd., Visakhapatnam, A.P.

Alow gradeManganese ore sample from Brazil was received with an objective to upgrade the Manganese values in the sample.

The sample assayed 22.6% Mn(T), 26.74% MnO_2, 9.75% Al_2O_3, 4.69% Fe(T), 28.92% SiO_2, 0.79% CaO, 0.94% MgO, 0.37% P_2O_5, 1.41% Org.C, 0.63% TiO_2, 0.55% K_2O, 0.16% Na_2O and 10.9% LOI.

Detailed beneficiation studies were carried out employing different techniques by varying various parameters to upgrade Manganese values. The best results were obtained employing process route evolved are as follows:

(A) Gravity concentration process on the wet sieve products of the as received sample followed by wet magnetic separation

(i) The composite of Jig Hutch and Jig Bed assayed 30.43% Mn with recovery of 59% and weight yield of 43.6%.
(ii) The composite of Jig Hutch, Jig Bed, Table Concentrate and Mag fraction assayed 29.67% Mn with recovery of 69.5% and weight yield of 52.7%.

(B) Gravity separation process employing tabling at -100# followed by wet magnetic separation on table products

(i) The table concentrate assayed 30.58% Mn with recovery of 50% and weight yield of 36.1%.

(ii) The composite of table conc. and magnetic fraction (T Midd, T Tails and slimes) assayed 29.14% Mn with recovery of 73.2% and weight yield of 55.5%.

MANGANESE ORE:

Bench scale beneficiation studies on a Manganese Ore sample from Ukwa Mines, Balaghat District, Madhya Pradesh for M/s Manganese Ore India Limited (MOIL) (IBM/NGP/R.I. No. 2262).

The objective of the investigation was to evolve a process flow sheet for up-gradation and recovery of Manganese content.

The "as received" sample assayed 37.42% Mn, 5.39% Fe(T), 20.15 SiO_2, 1.80% Al_2O_3,, 3.51% CaO, 0.50% MgO, 0.18% P,, 0.1% S(T), 1.20% BaO , 0.28% Na_2O, 0.50% K_2O and 4.77 %LOI.

Route. I: The process involving crushing the as received sample to -10 mm size, dry screening followed by jigging at coarse sized products of minus 10+1.7mm. The jig tails and minus 1.7mm sized fraction to stage ground to all passing 0.6mm . The ground product was subjected to tabling followed by Wet High Intensity Magnetic Separation on table slimes and on table tails ground to all passing 48 mesh size.

The final composite Manganese concentrate assayed 40.81% Mn, 6.43% Fe(T), 12.76 SiO_2, 1.56% Al_2O_3 with88.7% Mn recovery (wt% yield 79.5).

Route.II:Theprocess involving crushing the as received sample crushed to -6.25mm (1/4 inch) size, wet screening followed by jigging at coarse sized products of +0.6mm. The jig middling ground to all passing 0.6mm and minus 0.6 sized fraction were subjected to tabling followed by magnetic separation on table slimes .

The final composite Manganese concentrate is assayed 44.61% Mn, 6.80% Fe(T), 9.70 SiO_2, 1.32% Al_2O_3 with 92.3% Mn recovery (wt% yield 77.0)

5.9.1.5 R**OCK PHOSPHATE:**

Bench scale beneficiation studies on Rock phosphate sample from Egypt for M/s. Wilson International Trading (India) Private Ltd., Chennai, Tamil Nadu .

A Rock Phosphate ore sample was received with an objective of the investigation is to evolve a process flow sheet for up-gradation of rock phosphate content with good recovery.

The "as-received" sample assayed 19.31% P_2O_5, 14.86% SiO_2, 1.48% Fe(T), 4.54% Al_2O_3, 33.45% CaO, 4.93% MgO, 0.63 % Mn, 1.24% S(T), 0.14% TiO_2, 0.09 % Na_2O, 0.28% K_2O, and 15.45% LOI.

The Composite concentrate of reverse flotation & WHIMS non-mag assayed 32.23% P_2O_5, 5.66% SiO_2 ,54.85% CaO, 1.61 % LOI with recovery of 53.7% (Wt.% yield 17.0).

5.9.1.6 GRAPHITE:

Bench scale beneficiation studies on a low grade GraphiteSample (G-2 stage) from BurugubandaBlock, EastGodavari dist. Andhra Pradesh, For Geological Survey of India, SR,Hyderabad.(IBM/BNG/RI No.954)

The proximate analysis of the as received samples composite assayed 4.54% F.C., 4.76%V+M (Volatile matter + Moisture), and 90.75% Ash. The ash assayed 71.26% SiO_2, 5.25% Al_2O_3, 3.40% Fe_2O_3, 0.25% Na_2O, 0.18% K_2O, 0.16% CaO, 0.29% MgO, 0.84% TiO_2, 0.11% P_2O_5 and 0.18% S (T).
The flotation test carried out with primary circuit and secondary circuit(coarse circuit and fine circuit)
(i)The coarse circuit combined plus 100 mesh sizes yielded a graphite concentrate (Conc. I to III) assaying 95.34% F.C. with 31.6% F.C. recovery (Wt. % yield: 1.5).
(ii)The cleaner float yielded a minus 100 plus 200 mesh size graphite concentrate (Conc. IV) assaying 89.90% F.C. with 11.9% F.C. recovery (Wt. % yield: 0.6).

(iii)The cleaner float yielded a minus 200 mesh size graphite concentrate (Conc. V) assaying 85.11% F.C. with 9.4% F.C. recovery (Wt. % yield: 0.5).
(iv)The minus 100 plus 200 mesh size fraction graphite concentrate (Conc.VI) assaying 87.72% F.C. with 19.4% F.C. recovery (Wt. % yield: 1.0).
(v)The minus 200 mesh size fraction graphite concentrate (Conc.VII) assaying 86.05% F.C. with 14.8% F.C. recovery (Wt. % yield 0.8).

The combined concentrate (Conc. I+II+III+IV+V+VI+VII) obtained assayed 90.02% F.C with 87.1% F.C. recovery. (Wt. yield: 4.4).

Recovery of by-product.
The composite tails assayed 1.13 ppm Be, 1.3 ppm Ge, 111 ppm La, 145 ppm Ce, 20.04 ppm Pr, 64.13 ppm Nd, 9.42 ppm Sm, 1.72 ppm Eu, 6.59 ppm Gd, 1.12 ppm Tb, 6.98 ppm Dy, 1.6 ppm Ho, 5.5 ppm Er, 0.99 ppm Tm, 6.86 ppm Yb, 1.14 ppm Lu, 1.08 ppm Hf, 0.53 ppm Ta, 25.42 ppm W and 3.35 ppmU.
The composite tail was fraction was subjected to gravity followed by magnetic separation.The nonmagnetic fraction of gravity concentrate assayed 1.04 ppm Be, 5.24 ppm Ge, 3270 ppm La, 6022 ppm Ce, 676 ppm Pr, 2157 ppm Nd, 273 ppm Sm, 5.61 ppm Eu, 151 ppm Gd, 20 ppm Tb, 103 ppm Dy, 20.5 ppm Ho, 68 ppm Er, 11 ppm Tm, 75 ppm Yb, 12 ppm Lu, 92 ppm Hf, 2 ppm Ta, 109 ppm W and 49 ppm U (Wt.% yield: 1.0).

The study indicates that there is a possibility of recovering stratrgic minerals like REE (La through Lu) and other associated valuable metals from the graphite tails.

GRAPHITE ORE:

Bench scale beneficiation studies on a lean grade Graphite sample from Behermunda graphite project, Nabarangapur district, Odisha (IBM/NGP/RI. No. 2263).

The Proximate analysis of original sample assayed 2.28% Fixed Carbon (F.C), 94.83% Ash, 2.89% Volatile Matter+ Moisture.The original sample assayed 76.18% SiO_2 (Total), 9.37% Al_2O_3, 3.94% Fe_2O_3, 1.68% CaO, 2.38% MgO, 5.45% LOI, 23 ppm Co, 50 ppm Mo, Sulphur (T) and TiO2 of traces amount, V_2O_5 and Li Not deductible.

By employing Flotation test the Composite Concentrate (I+II)assayed 58.46% F.C. with 50.8% F.C. recovery and the Wt. % yield is 2.0.

GLAUCONITIC SANDSTONE:

Bench scale beneficiation studies on a low grade Glauconitic Sandstone, G-3 level exploration sample from Bhalukona Block, Mahasamund District, Chhattisgarh for Geological Survey of India, Raipur (IBM/NGP/RI No. 2264).

The as received sample assayed 0.3% K_2O, 2.35% Fe_2O_3, 1.42% Al_2O_3, 93.14% SiO_2, 0.49% CaO, 0.50% MgO, 0.01% $Na_2O$and 0.88% LOI respectively.

Detailed beneficiation studies comprising grinding, screening, magnetic separation process etc.were employed by varying different parameters for concentration of Glauconite. The best results were obtained in the following developed process route:

The magnetic product (glauconite concentrate) obtained from -70# fraction assayed 4.4% K_2O, 15.76%Fe_2O_3, 45.62% SiO_2, with Glauconite content of 70-75% and wt% yield of 1.4.

ROCK PHOSPHATE:

Bench scale Beneficiation studies on Rock Phosphate sample from Jhamarkotra Mines, Udaipur District, Rajasthan for Private Industry. (IBM/AJM/RI No. 682).

The as received sample assayed 14.9% P_2O_5, 47.50% SiO_2, 5.47 % Fe_2O_3,3.90% Al_2O_3, 23.5% CaO, 0.50 % MgO,0.26% TiO_2, 0.83 % K_2O,0.1 % Na_2O.

Beneficiation study comprising crushing, grinding and froth flotation on the as recived sample route yielded a Vth cleaner Phosphate concentrate assaying 32.5% P_2O_5 with 60.0 % P_2O_5 recovery (wt.% yield: 28.2).

5.9.2 SUBMISSION OF STUDY REPORT TO DGM's, ROYAL GOVT. OF BHUTAN:

The Report of Investigation on Mineralogical studies to assess the amenability to beneficiation on two iron samples submitted to Department of Geology and Mines, Royal Govt. of Bhutan on 11.11.2022.

5.9.3 Technical Guidance for Plant Operation

A team of IBM Officers that included Shri V.A. Sontakkey, Ore Dressing Officer, Dr L.N. Padhi, Deputy Ore Dressing Officer and Shri S.S. Chachane, Mechanical Supervisor, visited Naokari Limestone Mines & Unit Awarpur Cement Works of M/s UltraTech Cement Ltd, Chandrapur, on 20th May 2022 and offered expert technical guidance to resolve the problems encountered during the initial stage of plant operations. The Team was also accompanied by Dr R.K. Mishra and Shri Balram Singh of M/s UltraTech Cement Ltd during the mines visit.

Visitto Naokari Limestone Mines of M/s UltraTech Cement Ltd, Chandrapur

5.10 Beneficiation studies of Mineral deposits set for auction

As per the amended Act, all exploration reports need to be made UNFC (2009) compliant before auctioning of mineral blocks, for which mineral beneficiation study is an important aspect. The exploration indicates only the geological aspect. Beneficiation study indicates the viability of the block for commercial operations in view of feasibility and economics. Thus, beneficiation study has paramount and crucial role for the development of mineral deposits in India.

Since the year 2016, IBM has been carrying out laboratory scale beneficiation studies on all G2 Level of exploration samples of GSI and MECL.

5.11 National Mineral Inventory (NMI)

The NMI is based on UNFC system which is being used for making various decisions in the mining and exploration sectors by the domestic/foreign investors. Such a system has wide ramifications of use in different kinds of decision making and policy formulation concerning not only minerals but allied fields as well. NMI provides valuable database that enables planning, development and judicious management of the country's mineral resources. IBM in consonance with the contemporary demands in the Mineral & Mining Sector and in accordance with its mandate and functioning role as National Mineral Information Repository elicits cooperation & support from all Agencies engaged in different stages of exploration, i.e., reconnaissance, prospecting and mining, in collecting/collating data which after due process of analysis & vetting are woven into NMI database.

During the year, Quinquennial updation of NMI as on 01.04.2020 for 46 major minerals was completed. The updation work involved processing, generation of outputs and preparation of comparative statements for finalization of NMI as on 01.04.2020 in respect of 46 major minerals. A Publication titled "National Mineral Inventory as on 01.04.2020 – At a glance" was completed and uploaded in IBM Website. Work on another publication "National Mineral Inventory as on 01.04.2020 – An Overview" is under progress and drafting of 35 chapters (out of 46) is completed.

5.12 Statistical Publications

IBM disseminates statistical information on mines, minerals, metals and mineral-based industries through various publications. Information on mineral production, stocks, dispatches, employment, inputs in mining, mining machinery and related matters received from the mine owners on statutory basis under the MCDR, 1988 and ancillary statistics on metals production, mineral trade and market prices of minerals, revenue from the mining sector, rent, royalty and cess on minerals, etc from other agencies is compiled regularly by IBM.

5.12.1 Monthly Statistics of Mineral Production (MSMP)

This monthly publication contains information on Index of Mineral Production, state-wise mineral production and value, average sale price of minerals by grades etc.

5.12.2 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.

5.12.3 Indian Mineral Industry at a Glance (Annual)

This publication provides time series data on production of minerals, metals and mineral based products, consumption of minerals, labour employment and external trade. In addition, information on mining machinery, consumption of explosives, mining leases and afforestation in metalliferous mines are also presented for the latest year.

The statistical publications released during the year 2022-23 include Statistical Profiles of Minerals 2020-21, Monthly Statistics of Mineral Production (MSMP) up to March,2022,Average Sale Price statement of Minerals up to the months of January 2023& Average Sale Price statement of Metals up to the month of February 2023.

5.13 Consultancy Service

IBM provides technical consultancy services on prescribed charges for geological appraisals, survey of the areas, preparation of feasibility study reports, environment impact assessment and environment management plan, selection of suitable mining equipmentevaluation of feasibility report prepared by other consultants, financial institutions, etc. etc.

During the year 2022-23, Report of Regional Mineral Development study for effective utilization of low grade iron ore fines dumps (as available) in M/s. SAIL, Bhilai and Rajhara sector (Chhattisgarh) which has been taken up in 2021 has been completed & report under finalization. Further action for formulation of appropriate Scheme for implementation of provision of NMP 2019, compilation of best Mining Practices in the form of Technical Publication was in progress and 03 Sample cases have been submitted for approval.

5.14 Technical Publications

IBM brings out technical publications relating to mines and minerals, mineral-based industries, trade, beneficiation, R&D activities, etc.

5.14.1 Indian Mineral Yearbook (IMYB)

IMYB is a flagship publication of IBM which is brought out in three (3) volumes. It consists of Part I having as many as 11 General Chapters, Part II consists of 18 Reviews on metals and alloys and Part III consists of 30 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 as well as International.

Total 59 reviews of IMYB 2020 (Advance Release) in respect of General/Metals & alloys/Mineral were prepared, technically edited, finalized and sent to Publication section for print-release after consolidation of all chapters with the statistical data. Total 59 reviews of IMYB 2020 (Advance Release) were uploaded on IBM Website.

Preparation of IMYB, 2021, was taken up for three separate volumes, viz. Volume-I for General Reviews, Volume-II for Metals &Alloys and Volume-III for Mineral Reviews. Total 52 reviews of IMYB 2021(Advance Release) were uploaded on IBM Website. Preparation of remaining reviews is under progress.

5.14.2 BULLETIN OF MINERAL INFORMATION (BMI)

Bulletin of Mineral Information (BMI) is a half yearly Bulletin, published by IBM, a sole publication in the country of its nature, which provides information to mine owners and mining industry on court decision concerning mineral legislation, trade policy on minerals & metals; trends in mining lease and prospecting licenses along with R/P granted for mineral based industries in the country; the month wise production of various mineral based products and also high lights status of mineral and mining industries both in domestic & foreign sector.

In a nutshell, this publication provides concise & synthesized knowledge and information on mining of various metallic / industrial minerals of the country, explored through its respective mines. Bulletin on Mineral Information Oct.21 to Mar.22& April 2022 to September, 2022 issues released during the year.

5.14.3 BULLETIN OF MINING LEASES AND PROSPECTING LICENCES.

The Bulletin of Mining Leases and Prospecting Licenses contains information on mining leases, prospecting Licenses as well as reconnaissance permits. The bulletin provides the distribution pattern of mining leases spread over in as many as 23 states with its break-ups into state-wise, district-wise, mineral-wise and sector-wise (Public & 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 Lease and Prospecting Licenses 2021was released during the year.

5.15 Activities carried out by GM&MM Cell, IBM, Nagpur

5.15.1 Scanning of toposheets for Digital Library of toposheets:

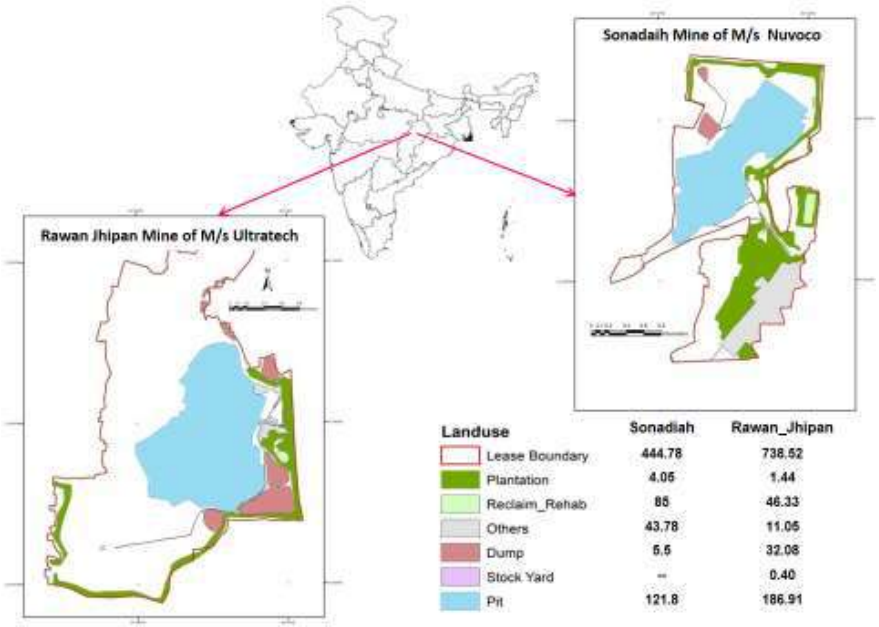
There are about 14000. An activity of scanning of toposheets available in IBM HQ in .tiff format and keeping all the soft files in the server was undertaken by the cell from January 2019. Up to March 20223 scanning of 15895 nos. of toposheet has been completed and the toposheets are now available in a digital format for use by the cell.

5.15.2 Generation of Land use classification map of mining leases on GIS platform:

An activity to generate land-use classification map of mining leases on GIS platform has been started since September 2020. The information of land-use area has been sought from the lessee through regional offices of IBM in .shp/.kml format. The activities involved plotting of land-use classification map on GIS platform checking & correcting KML or SHP file, conversion of KML file to SHP file, calculation of area of each land-use feature in attribute table and attachment of mine data to land-use attribute table.

Up to March 2023, the land-use data has been received for 1229 mining leases out of which processing of data on GIS platform for all 1229 mining leases is carried out.

The geospatial database of land-use was created from the lease-wise details of land put to use for mining activity. This database can be used to generate customized maps & reports viz. state-wise, district-wise, mineral-wise, feature-wise, etc. for land-use classification by query analysis on GIS platform.



Geospatial map showing land use of different mines

5.16 Training

The Training Centre of IBM is headed by the Officer In-charge (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, state govt officers people from North-Eastern States and persons engaged in mining industry including overseas with the objective to provide them adequate orientation and updation in their fields of work.

5.16.1 Skills for which Training required for other stakeholders connected to IBM are:

Implementation of provisions of MMDR Amendment Act, 2015 and subordinate legislation framed there under; preparation of Mining Plan/Mining Scheme, including Mine Closure Plan, Mine Reclamation and Rehabilitation; Sustainable Development Framework and Star Rating System for Mines; Mining Surveillance System; Mineral Resources as per United Nations Framework Classification (UNFC); Technological improvements and innovative advances in the areas of mineral processing and beneficiation.

During the year 2022-23, 09 online programmes have been conducted in which a total of 129 IBM Personnel, 301 Industry Officials and 21 State Govt Officials participated and revenue of Rs.6,02,000/- was generated.

5.16.2 **Training Synergy with other Organizations**: IBM makes its presence in the meetings as organized by GSI/ MECL for its active participation, towards synergic approach. Further, IBM officials are participating in various Training Programmes conducted by other Institutes. IBM is routinely organizing training programmes on the Basics of Geographic Information System and Processing of Drone Survey data on GIS platform at GIS centre, IBM, Nagpur for IBM officers every month Since April 2022 and up to March, 2023, 124 officers have been trained.

5.16.3 **IBM training modules on iGOT platform**: IBM had initiated its efforts to upload its training modules on iGOT platform during 2020-21 by identifying lectures under different modules and with regard to videography of the same. As per the Ministry's letter No. A-33/2//2021-ESTT. Dated 05.07.2022 regarding uploading of training courses on iGOT portal, three topics/modules are identified

for IBM for lecture videos i.e. (a) Mining reforms, (b) process of Mining lease to LoI& (c)Mining plan Approval. Therefore, IBM has initiated the process for preparing the lecture videos through training centre& expertise available in IBM, and prepared training videos related to the topics, however, due to large file size the lecture video could not be uploaded to the portal. Further, preparation of more lecture videos is in progress.

5.16.4 Training Programmes conducted during 2022-23:

5.16.4.1 e-Training on "Data Requirement and Methodology of Calculation of Average Sale Price of Minerals and Preparation of IBM Publications

The Training Centre, IBM, Nagpur, organized an e-Training programme on "Data Requirement and Methodology of Calculation of Average Sale Price (ASP) of various Minerals and Preparation of Indian Minerals Yearbook, Bulletin of Mineral Information & Mining Lease Directory" from 20th to 22nd April, 2022 (through Video Conferencing through NIC). A total of 40 IBM Officials from all offices of IBM participated in this Training Programme. The training was conducted in 6 sessions in three days. The details of the presentations and topics covered were as follows:

1. An Overview of Publications prepared by ME Division – presented by Dr S.K. Shami, ME(I)

2. Methodology of Preparation of Indian Minerals Yearbook – presented by Shri Jaypal G. Padole, DME(I),

3. Preparation of All India Mining Lease (ML) Directory – presented by Shri A.D. Selokar, ME(I).

4. Average Sale Price (ASP) for MCDR Minerals & Metals – presented by Dr P.K. Jain, Ex CME and Consultant

5. Data Requirement and Methodology of Calculation of ASP – presented by Shri Anil H. Ramteke, Director, MMS Division

6. Data Requirement and Methodology of Calculation of ASP – presented by Shri M.M. Chaskar, AME(S)

All the participants were provided with the Course Materials through email. Shri B.B.K. Sahu, Regional Controller of Mines & In-charge of Training Centre provided the overall guidance. Dr S.K. Shami, Mineral Economist, ME Division,

was the Course Director for the programme while Shri Madan Kalwit, Assistant Mining Engineer, Training Centre, worked as Course Co-ordinator. Shri Yogesh Mathare of NIC provided the technical support for the video conferencing.

e-Training on "Data Requirement and Methodology of Calculation of Average Sale Price of Minerals and Preparation of IBM Publications

5.16.4.2 IBM organized Training Programme on Latest Amendments in MMDR Act and Rules made there under for Capacity Building of State Govt (Directorate of Geology & Mining) Officials of South Zone from 19th to 20thMay, 2022 in which 21 officers participated. Cumulatively, till May, 2022, 02 training programmes have been organized in which 40 IBM and 21 State Government Officials participated.

5.16.4.3 IBM organized Induction E-Training Programme on "Preventive Vigilance for IBM Officials" from 15th to 16thMay, 2022 in which 33 officers participated.

E-training Programme on "Induction Training on Preventive Vigilance for IBM Officials"

As per the annual training calendar of IBM for 2022-23 approved by the Controller General, IBM, the Training Centre, IBM, Nagpur, organized an online e-Training Programme through Video Conferencing on "Induction Training on Preventive Vigilance for IBM Officials " from 15th to 16th June, 2022 under the direction of Shri B.B.K. Sahu, Regional Controller of Mines & I/c Training Centre and Shri V.D. Godghate, Chief Vigilance Officer, IBM. A total of 33 IBM Officials from all offices of IBM participated in this training programme. The training was conducted in four sessions in two days on various topics relating to preventive vigilance aspects. The topics dealt with in the Training Programme included:

1. "Administrative Vigilance and Preventive Vigilance" by Shri V.D. Godghate, Chief Vigilance Officer, IBM.

2. “CCS (CCA) Rules, 1965 and CCS (Conduct) Rules, 1964” by Shri Ashutosh Mishra, Chief Administrative Officer, IBM.
3. “Procedures for e-procurement of Goods & Services on Govt. e-Marketplace (GeM) ” by Shri S.K. Chourey, Stores Officer, IBM
4. “Preventive Vigilance” by Shri B. Sivakumar, Chief Manager (Mining), Vigilance Department, Western Coalfields, Nagpur (Guest Faculty)

At the end of two-day programme, a valedictory function was held which was attended by Shri P.N. Sharma, CCOM (I/c) –MDR, Shri P. Kulashreshtha, CCOM (I/c) – MES, Shri V.D. Godghate, Chief Vigilance Officer and Shri B.B.K. Sahu, Regional Controller of Mines & (I/c) Training Centre. Shri P.N. Sharma advised all participants to follow all the procedures and adhere to the framework of functions. Shri Kulashrestha brought out to the notice of all participants the importance of bonafide and malafide intentions and cautioned all to follow the rules scrupulously. Shri Godghate thanked all the participants and requested them to suggest any changes required for future such programmes.

Shri Madan Kalwit, AME, Training Centre worked as Course Co-ordinator. Shri Yogesh Mathare of NIC provided the technical support for the Video Conferencing.

E-Training Programme on “Preventive Vigilance for IBM Officials

5.16.4.4 IBM organized Training Programme on “Online Filing and Processing of Monthly and Annual Returns under MCDR, 2017 and Data requirement for Average Sale Price (ASP) of various minerals” for Industry personnel on 21st& 22ndJune, 2022 at Udaipur. Cumulatively, till June, 2022, 04

training programmes have been organized in which 73 IBM, 138 Industry and 21 State Government Officials participated.

5.16.4.5 Training cum workshop on "Concept of Sustainable Development Framework and Star Rating Reporting System", was organized at Skill Development Centre, Kolkatta on 17-18thAugust, 2022 for Industry personnel in which 91 Industry personnel participated and Revenue of Rs. 182,000/- was generated. Cumulatively, till July, 2022, IBM organized 05 training programmes in which 73 IBM, 141 Industry and 21 State Government Officials participated and revenue of Rs.282,000/- was generated.

5.16.4.6 During the month, three training programmes viz 1.e-Training Programme on "Online filing of star rating templates" was organized from 11th to 12thOctober, 2022 at Hyderabad for Industry personnel in which 75 Industry personnel participated and Revenue of Rs. 1,50,000/- was generated.

5.16.4.7 E-Training programme on "Stoping practices and examination/scrutiny of stoping notices received under MCDR, 2017" was organized by Skill Development Centre (SDC) IBM Udaipur from 11th to 12th October, 2022, in which 25 IBM officers participated.

5.16.4.8 E-Training programme on "Store purchase procedure and e-procurement through Government Market place (GEM) for IBM officials on 13th& 14thOctober, 2022 at IBM Nagpur in which 31 IBM officials participated. Cumulatively, till October, 2022, IBM organized 08 training programmes in which 129 IBM, 216 Industry and 21 State Government Officials participated and revenue of Rs.432,000/- was generated.

5.16.4.9 During the month, e-training programmes on "New Mining Plan Format, Preparation of PMCP/FMCP" was organized from 16th to 17thNovember, 2022 at Skill Development Centre Udaipur for Industry personnel in which 85 Industry personnel participated and Revenue of Rs. 1,70,000/- was generated. Cumulatively, till November, 2022, IBM organized 09 training programmes in which 129 IBM, 301 Industry and 21 State

Government Officials participated and revenue of Rs.6,02,000/- was generated.

5.17 Measures for Abatement of Pollution and Environmental Protection

The IBM undertakes inspections/ studies for the enforcement of provisions of MCDR, 2017 which include provision on protection of mine environment to ensure that due care is being taken by the mine operators. During inspection it ensures that mine operators are taking due care for preservation and utilization of top soil, storage of overburden / waste rocks, reclamation and rehabilitation of land, precaution against ground vibration, control of ground subsidence, abatement measures against air, water- and noise pollution, restoration of flora, etc. in addition to other conservation and developmental measures. Necessary guidance to mine managements/ operators are also given for systematic and scientific development of mine including protection of environment. Whileapproving the mining plans, Review of mining plans 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.

5.18 Revenue Generation

IBM generates revenue through consultancy, training, statutory processing and sale of publications &data etc. Revenue generated during 2022-23isRs. 552.872lakhs comprising Rs. 139.49 lakhs from mineral processing assignments; Rs. 407.35lakhs from processing of mining plans/review of mining plans, Rs. 6.02 lakhs from Training Fee and balance Rs. 0.012lakhsfrom sale of publications, mineral inventory data etc.

5.19 Computerization

5.19.1 The Regional (Except Raipur & Gandhinagar RO) /Zonal offices and Headquarters of IBM have been linked through a sophisticated system based on client server architecture established with the help of BRGM, France. Proposal for connecting Raipur & Gandhinagar RO with said system along with VC facility is under process. IBM has well established LAN facility, besides WAN system to

communicate and exchange data with Regional, Zonal offices and Headquarter offices. In all RO/ZO offices, VC facility is operational.

5.19.2 The Web Portal of IBM i.e.https://www.ibm.gov.in provides information on IBM's history, functions, organization, divisions of IBM and its activities, jurisdiction of regional and zonal offices, services offered by IBM. The upgradation of existing web portal is going on, which facilitates stakeholders with updated and faster information.

5.19.3 The domain https://ibmregistration.gov.inis functional for grant of IBM Registration number and https://ibmreturns.gov.inis also functional for facilitating the stake holder to submit the monthly and annual returns online and for further communications with stake holders in case of refer back cases.

5.19.4 After introduction of online submission of returns system consequent to the amendments to Rule 45 of MCDR, 1988 vide notification No. 75(E) dated 9th February, 2011, the mine owners have commenced submission of monthly and annual returns online. IBM is monitoring and guiding/ encouraging the mine owners and their representatives for online submission of returns.

5.19.5 Submission of Returns:

After introduction of online submission of returns system consequent upon amendment to Rule 45 of MCDR, 1988 vide notification No. 75(E), dated 9thFebruary, 2011, the mine owners have commenced submission of monthly and annual returns online. IBM is monitoring and guiding/ encouraging the mine owners and their representatives for online submission of returns. The month-wise monthly returns submitted online are given in **Table –5.14 A**

Table 5.14 A

Month-wise Returns Submitted online

Sl No.	Month	No. of monthly returns received online
1	April, 2022	1894
2	May, 2022	1776
3	June, 2022	1842
4	July, 2022	1873
5	August, 2022	1818
6	September, 2022	1876
7	October, 2022	1863
8	November, 2022	1874
9	December, 2022	1852
10	January, 2023	1817
11	February, 2023	1843
12	March 2023	1846

5.19.6 Registration under Rule 45

The status of registration under Rule 45 of MCDR 1988 and **Online Registration of Mines / Leases as on 31.3.2023 is as follows:**

Online Registration of Miners, End Users, Traders, Stockiest and Exporters (Including 31 minor minerals)

Serial Number	Particulars	Status at the end of March, 2023
1	No. of Miners	8084
2	No. of End Users	5354
3	No. of Traders	10305
4	No. of Stockiest	2889
5	No. of Exporters	1580
	TOTAL	**28212**

5.20 Mining Tenement System (MTS)

6.81Mining Tenement system (MTS) is a flagship project of Indian Bureau of Mines and it's a unique online based application. With MTS, IBM envisions digitizing its internal processes of the core modules which in turn can induct a workflow-based system to increase the efficiency and transparency in its charter of functions. As part of this project, IBM also envisions conducting enhancements, wherever applicable.

During the National Mining Conclave held on 12th July 2022 in New Delhi. The following three modules were launched by the Hon'ble Minister Mines, Coal and Parliament Affairs

Module1: Registration under Rules 45 of MCDR 2017
Module2: Monthly and Annual Return filing under Rule 45 of MCDR 2017
Module3: Mining Plan Approval System (MPAS) for submission of Mining Plan in the online module.

With the launch of Mining Plan Approval system (MPAS), the entire process of approval of mining plan has become online in digital form. The lessee can submit his mining plan, on the click of the mouse and the process has become simpler and less time consuming. This will be step forward toward digital India mission.

Detailed Project Report (DPR) for development of remaining modules is under progress.

5.21 Sustainable DevelopmentFramework (SDF)

Star Rating System: A good governance initiative is designed as a tool for evaluation of the performance of lease operators on the various parameters encompassed by the Principals of the Sustainable Development Framework (SDF) approved by Ministry of Mines in 2011 in line with the National Mineral Policy 2008. Thus it can be viewed asa mapping of mining footprints from the view point of Sustainability.

The system has been developed primarily on the basis of self-assessment followed by validation by Indian Bureau of Mines along-with provisions for third party auditing as may be considered fit by Ministry of Mines.The Star rating has

been mandated by rule 35 of newly notified MCDR 2017.All the mine operators are mandated to achieve four or five star ratings within a stipulated time period of two years from the date of commencement of mining operations or the date of notification of the rules (i.e. March 2017) whichever is later in accordance with rule 35 of MCDR 2017. Failing which Mining operations are liable to be suspended.A system of third party auditing of theaward of rating system and the processimplementation is also proposed.

Following are the anticipated outcomes of the Star rating system:

- Reduced environmental and social conflicts in areas awarded for mining.
- Greater clarity for all concerned stakeholders, on risk levels of mining lease areas.
- Potentially reduced delays in obtaining clearancesenvironmental, forest) for mines.
- Improved protection of high risk areas in terms of environment and social considerations.
- A Regional Mineral Development Plan for selected mining areas and addressing key regional and cumulative impacts of mining through coordinated and collective action.
- Opportunity for clustering of small operators to become more competitive, and compliant.
- A robust E&S Management framework in mining companies.
- A disclosure process that provides stakeholders with relevant and timely information, and allows issues to be raised in engagement forums.
- Enhanced control on illegal mining activities through intensive stakeholder scrutiny by publishing details on mining activity in public domain.
- Intensive use of geo-spatial and geo-scientific information at mine level for assessment, planning, management and monitoring of the mining sector.
- Stronger monitoring and assurance systems and processes and
- SDF reporting on governance and ethical practices.
- The critical analysis of the Star rating templates will result into -
- Identification of the thrust areas for policy formulation
- The resource base creation for investment opportunity in the field of exploration, mining, mining as a hub for green energy development, mine water management, skill development requirements and efforts, the use and scope of space and digital technology
- Dissemination of best practices in the field of mining and allied activities.

- Critical analysis of mining activities in our country vis a vis global mining practice.
- Issues related to Raw material Security in country.

Based on evaluation of the performance of lease operators on the various parameters encompassed by the Principals of the Sustainable Development Framework (SDF) approved by Ministry of Mines, validation of self-assessed templates was carried out by IBM and accordingly rating was given as 0 to 5. The year wise 5 Star Rated mines are given below.

Year	5 Star Rating
2014-15	10
2015-16	32
2016-17	57
2017-18	57
2018-19	52
2019-20	40
2020-21	40
2021-22	76

The mine operators are felicitated for achieving 5 star rating at National Conclave on Mines and Minerals.

- The 5 star rated mines for the years 2014-15 were felicitated at Mining Conclave held at Raipur on 4-5 July, 2016.
- The 5 star rated mines for the years 2015-16 were felicitated at Mining Conclave held at New Delhi on 15thFebruary, 2017.
- The 5 star rated mines for the years 2016-17 were felicitated at Mining Conclave held at New Delhi on 20thMarch, 2018.
- The 5 star rated mines for the years 2017-18, 2018-19 and 2019-20 were felicitated by Shri Pralhad Joshi, Hon'ble Minister of Mines in Mining Conclave held at hotel The Ashok, New Delhi on 11 November, 2021.
- The 5 star rated mines for the years 2020-21 were felicitated at 6th Mining Conclave held at New Delhi on 12th July, 2022.
- The 5 star rated mines for the years 2021-22 were felicitated at IBM's 76th Foundation Day Celebration at Nagpur on 1.3.2023.

5.22 Mining Surveillance System (MSS)

Mining Surveillance System (MSS) is a satellite-based monitoring system which aims to establish a regime of responsive mineral administration by curbing instances of illegal mining activity through automatic remote sensing detection technology.

- Ministry of Mines & Indian Bureau of Mines (IBM) have developed the MSS, with assistance from Bhaskaracharya Institute for space applications and Geo-informatics (BISAG), Gandhinagar and Ministry of Electronics and Information Technology (MEITY).

- The system works on the basic premise that most minerals occur in the continuity and their occurrence is not limited to the lease area but is likely to extend in the vicinity. The MSS checks a region of 500 meters around the existing mining lease boundary to search for any unusual activity which is likely to be illegal mining. Any discrepancy is found is flagged-off as a trigger.

- The MSS is a transparent & bias-free system, having a quicker response time and capability of effective follow-up. The deterrence effect of 'Eyes watching from the Sky' would be extremely fruitful in curbing instances of illegal mining.

- A user friendly mobile app for MSS has been created and launched on 24th January, 2017 at Gandhinagar for enabling public participation in assisting the governments endeavor to curb illegal mining, which was being used by the inspecting officials to submit compliance reports of their inspections.

- In the initial phase, a total of 296 triggers across the country covering a total area of 3994.87 hectares wherein, 47 unauthorized mining have been confirmed after inspection of the triggers by the state government officials.

- The training of all the States for its adoption of the MSS for minor minerals has also been done.

- In the second phase, 52 major mineral triggers, have been detected from the 3280 plotted leases (Working Mines 1689 plotted out of 1694 and Non-Working Mines 1596 plotted out of 2129) across the country, out of which 45

have been verified by the State Governments and in 5 cases unauthorized mining activities have been identified.

- Similarly, in respect of minor minerals, so far, 130 triggers have been generated, out of which104 have been verified and in 9 cases unauthorized mining activities have been identified.

In the third phase in 2021-22, 177 preliminary triggers are generated for major mineralsand uploaded on the portal for further transmission to the state governments of which 97 triggers have been verified by State Governments so farand in 12 cases unauthorized mining activities have been identified.

In the fourthd phase in 2022-23, 61 preliminary triggers are generated for major mineralsand uploaded on the portal for further transmission to the state governments of which 24 triggers have been verified by State Governments so farand in 07 cases unauthorized mining activities have been identified.

Summary of Phase wise triggers generated is given below:

	Triggers Generated	Triggers Verified	Unauthorized Mining confirmed
Phase-I (Major) (2016-17)	296	286	47
Phase-II (Major) (2018-19)	52	45	5
Phase-II (Minor) (2018-19)	130	104	9
Phase-III (Major) (2021-22)	177	97	12
Phase-IV (Major) (2022-23)	61	24	07

5.23 Swachata Pakhawada

Swachata Pakhawada has been organised from 16thNovember, 2022 to 30thNovember, 2022 at Head Quarter as well as at regional offices under Swachhata Action Plan 2022-23. A consolidated report has also been sent to Ministry. More details are included in the chapter on Celebrations by IBM.

6.0 IBM Budget 2022-23

During the Annual Plan 2022-23, Ministry had allocated ₹ 113 crores including ₹ 96.77 crores for Establishmentand ₹ 16.23 crores for IBM Activities, which is further reduced to ₹ 103.20 crores at RE stage including ₹ 90.36 crores for Establishment and ₹ 12.83 crores for IBM Activities.

(Rupees in crore)

Head	B. E.	R.E	Expenditure (Up to March 2023)
Establishment	96.77	90.365	8671.65
IBM Activities	16.23	12.835	909.63
Total	**113.00**	**103.20**	**9581.28**

6.1 SCHEME-WISE FINANCIAL PERFORMANCE OF IBM DURING 2022-23

(Rs. In Lakhs)

Sl. No.	Name of the Schemes	2022-23			
		Proposed BE	BE	RE	Actual Expenditure (uptoMar., 2023)
1	2	11	12	13	14
1	**Establishment**	9777.00	9677.00	9036.50	8671.65
2	**Scheme No. 1 :**Inspection of Mines for Scientific & Systematic Mining, Mineral Conservation & Mines Environment.	400.00	161.00	156.00	146.66
3	**Scheme No. 2 :** Mineral beneficiation Studies-Utilisation of Low grade & Sub-grade ores & analysis of Environmental samples	269.00	62.00	52.00	44.02
4	**Scheme No. 3 :** Technological Upgradation &Modernisation.	274.00	63.00	59.50	44.38
5	**Scheme No. 4 :** Mines & Minerals through various Publications	192.00	42.00	41.00	35.72

6	**Scheme No. 5 :**Computerised Online Register of Mining Tenement System	500.00	500.00	392.00	198.67
7	**Information Technology**	100.00	56.00	56.00	55.67
8	**Swachhta Action Plan**	10.00	10.00	10.00	9.94
9	**Training**	20.00	10.00	5.00	4.96
10	**Tribal Area Sub-Plan**	145.00	70.00	0.00	0.00
11	**Special Component Plan for Scheduled Castes**	281.00	135.00	0.00	0.00
12	**Revenue (NER)**	144.00	143.00	143.00	133.91
13	**Works Outlay (Major Works)**	1.00	1.00	0.00	0.00
14	**Motor Vehicles**	100.00	1.00	0.00	0.00
15	**Machinery &Equipments**	750.00	350.00	350.00	235.70
16	**Other Capital Expr. (NER)**	194.00	19.00	19.00	0.00
	TOTAL :	**13157.00**	**11300.00**	**10320.00**	**9581.28**

6.2 Audit paras:

43 Audit paras raised by Internal Audit were pending as on 31.03.2023 and compliance/reply is being submitted by the concerned offices for settlement of the same.

CAG Audit Para

As on 31 March 2023, 'Nil' CAG audit paras are pending as per records of this office.

7.0 Human Resources in IBM

The Bureau has a total sanctioned strength of 1477 consisting of various disciplines as mining engineers, geologists, ore dressing, chemical, metallurgical engineers, mineral economists, statisticians, administrative officers and supporting staff.

7.1 Ministry vide orders as recorded below accorded sanctions for entrusting additional charge of top most level posts in IBM:

7.1.1 Additional charge of CG:

Ministry of Mines vide letter No.26l3l2020-M.IIIdated.16.03. 2021 conveyed the ex-post facto approval accorded by the Appointment Committee of the Cabinet (ACC) towards the entrustment of additional charge of the post of Controller General, Indian Bureau of Mines, (IBM) to Shri Sanjay Lohiya, IAS Joint Secretary Ministry of Mines for a period of nine months w.e.f.15.11.2020,ortill appointment of a regular incumbent to the post, or until further order, whichever is the earliest.

Ministry of Mines vide letter No.26l3l2020-M.III dated.284.08.2021 conveyed the approval of the Appointment Committee of the Cabinet (ACC) for extension of the additional charge of the post of the Controller General, Indian Bureau of Mines to Shri Sanjay Lohiya, IAS Joint Secretary Ministry of Mines w.e.f 15.08.2021 or till appointment of a regular incumbent to the post, or until further order, whichever is the earliest.

Ministry of Mines vide letter No.26l3l2020-M.III dated.28.06.2022conveyed the approval of the Appointment Committee of the Cabinet (ACC) for extension of the additional charge of the post of the Controller General, Indian Bureau of Mines to Shri Sanjay Lohiya, IAS Joint Secretary Ministry of Mines for the period of six monthsw.e.f 15.05.2022 or till appointment of a regular incumbent to the post, or until further order, whichever is the earliest.

Ministry of Mines vide letter No.26l3l2020-M.III dated.16.01.2023conveyed the approval of the Appointment Committee of the Cabinet (ACC) for extension of the additional charge of the post of the Controller General, Indian Bureau of Mines to

Shri Sanjay Lohiya, IAS Joint Secretary Ministry of Mines for the period of nine monthsw.e.f 15.11.2022 or till appointment of a regular incumbent to the post, or until further order, whichever is the earliest.

7.1.2 Additional charge of CCOM (MDR) Post

Ministry of Mines vide letter No.26/7/2019 M.III dated 16.6.2021 conveyed the approval of the Appointment Committee of the Cabinet (ACC) for extension of the additional charge of the post of the Chief Controller of Mines (MDR), Indian Bureau of Mines to Shri P.N. Sharma, COM, IBM for a further period of one yearw.e.f 01.11.2020,or till the appointment of a regular incumbent to the post, or until further order, whichever is the earliest.

Ministry of Mines vide letter No.26/7/2019 M.III dated 28.6.2022 conveyed the approval of ACC for extension of theadditional charge of the post of Chief Controller of Mines (MDR), Indian Bureau of Mines(IBM) entrusted to Shri P.N. Sharma, Controller of Mines, in his substantive scale of pay i.e. Level 14 for a further period of 01 year w.e.f. 01.05.2022, or till the appointment of aregular incumbent to the post, or until further orders, whichever is the earliest.

7.1.3 Additional charge of CCOM (ME&S) Post

Ministry vide letter No.26/2/2018-M.III dated 07.04.2022 conveyed for the approval of ACC for extension of the additional charge for the post of the Chief Controller of Mines (MES), Indian Bureau of Mines to Shri Pankaj Kulshreshtha, COM, IBM for a further period of 1 year w.e.f23.3.2022or till the appointment of a regular incumbent to the post, or until further order, whichever is the earliest.

Ministry vide letter No.26/2/2018-M.III dated 12.04.2023 conveyed for extension of additional chargeof the post of the Chief Controller of Mines, Indian Bureau of Minesto Shri Pankaj Kulshrestha, COM, IBM w.e.f. 23.03.2023 till thefurther order.

7.1.4 Additional charge of Director (MPD) Post

Ministry vide letter No.26/4/2020-M.III 19.4.2021 conveyed approval of the Appointment Committee of the Cabinet (ACC) to assign the additional chargefor

the post of the Director (Ore Dressing), Indian Bureau of Mines to Dr. (Smt.) S.M.Lal, CODO, IBM for a period of nine months w.e.f. 1.12.2020 or till appointment of a regular incumbent to the post, or until further order, whichever is the earliest.

Ministry vide letter No.26/4/2020-M.III dated 17.08.2021 conveyed for extension of additional charge of the post of the Director (OD), IBM to Dr. (Smt.) S.M.Lal, CODO, IBMw.e.f 01.09.2021 till the further order.

Ministry vide letter No.26/4/2020-M.III dated 08.02.2022 conveyed Ex-post facto approval of ACC for extension of additional charge of the post of the Director (OD), IBM to Dr. (Smt.) S.M.Lal, CODO, IBM for a period of 01.09.2021 to 30.09.2021.

Ministry vide letter No.26/4/2020-M.III dated 08.02.2022 conveyed approval of ACC for the assignment of additional charge of the post of the Director (OD), IBM to Dr.Dilip Ranjan Kanungo, Suptdg. Officer (Ore Dressing), IBM for a period of one year with immediate effect or till appointment of a regular incumbent to the post, or until further order, whichever is the earliest.

Ministry vide letter No.26/4/2020-M.III dated 13.01.2023 conveyed approval for extension of additional charge of the post ofthe Director (OD) to Dr.Dillip Ranjan Kanungo, Superintending Officer (OD), IBM w.e.f.04.02.2023 till the further order.

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

Ministry of Mines had constituted a Committee vide its Resolution No. 16(27)/2009-M.VI dated 23-07-2009 for the Review and Re-structuring of the Functions and Roles of Indian Bureau of Mines (IBM) in terms of the policy directions given in the National Mineral Policy and the Mines and Minerals (Development and Regulation) Act and Rules framed there under.

2. The Committee submitted its Report to the Government of India on 4.5.2012 suggesting for overall restructuring of the IBM. It recommended the creation of 933 posts in addition to the existing strength of 1477. Ministry of Mines reviewed the recommendations of the Committee in the wake of significant changes in the legislative framework by the Government. Ministry optimized the proposal without considering increase in sanctioned strength. The proposal was examined

in consultation with the Department of Expenditure, Ministry of Finance. The proposal was finalized with the creation, abolition and up-gradation of posts under various disciplines of IBM keeping the expenditure revenue neutral by way of matching saving through surrender of 180 Group 'A' (level 10) posts of Geological Survey of India, an Attached Office of Ministry of Mines.

3. The Department of Expenditure accorded approval to the proposal and suggested that the posts to be surrendered will be done gradually as and when the incumbents retire on superannuation or otherwise or are promoted.

4. The Cabinet approval was also accorded in consonance with the Department of Expenditure instructions vide OMNo. 7(I)/E.Coord-I/2017 dated 12.04.2017 for creation/ upgradation/ abolition of posts of the level of Joint Secretary and above.

After the Cabinet approval, detailed discipline-wise, revised sanctioned strength of IBM, is notified vide Gazette Notification No. 31/72/2009-M.III.Vol.I (part–I) dated 15th May, 2018, published on 17.5.2018.

Consequent to gazette Notification, the Bureau has a total sanctioned strength of 1477 consisting of704 Gazetted (Group A – 459& B – 245) and 773 Non-Gazetted (Group B – 257, Group C -516) posts. Consequent to gazette notification following actions have been initiated:

1. Office Orders issued regarding re-designation pertaining to the post merged, merged & upgraded etc in accordance with the notification.
2. Internal Committee has been constituted in IBM under the chairmanship of CCOM in charge for implementation of restructuring for deciding re-deployment of man power and amending codified duties in respect of employees of IBM.

3. 138 posts have newly been created under the different cadres of IBM. For initiation of recruitment process as per Restructuring of IBM, new set of recruitment rules in respect of over 80 posts/designations in 17 disciplines had been uploaded in the IBM's Website for inviting stakeholders' comments & then finalized after incorporating comments and after due approval of concerned authorities like DoPT, UPSC and DoLA, recruitment

rules of 70 posts have been revised and notified by the Ministry from 2019 till date.

4. As per the provisions contained in RRs, direct recruitment requisitions have been submitted to UPSC for 108 posts and to SSC for 228 posts. UPSC has already given advertisement for the vacancies of 63 posts in the employment news.

5. During 2021-22, proposals for DPC to 89 posts as per the existing RRs and revised RRs has been sent to Ministry for holding DPCs at UPSC/Ministry in respect of Gazetted posts.

6. Meanwhile some of the posts went under "deemed abolished" as per guidelines of Ministry of Finance. Hence, the revival proposal had to be taken up with the Ministry of Finance through Ministry of Mines. Accordingly, 335 posts, 242 posts and 108 posts were revived in April, 2021, August 2021 and February, 2022 respectively.

7. In respect of the 74 posts of Group B and C, where the authorities of IBM are competent to make appointment, the DPCs have been conducted during 2021-22.

8. During 2022-23, proposals for DPC to **69** posts as per the existing RRs and revised RRs has been sent to Ministry for holding DPCs at UPSC/Ministry in respect of Gazetted posts.

9. Further, In respect of the **47** posts of Group B and C, where the authorities of IBM are competent to make appointment, the DPCs have been conducted during 2022-23.

10. New Recruitment, Promotions, Retirement during 2022-23 are as follows:

S.No	Group	New Recruitment	Promotions	Retirement
1	Group A	01*	39	25
2	Group B	29	20	21

	(Gaz&Non Gaz)			
3	Group C	43	23	22
	Total	**73**	**82**	**68**

* Short term contract for 3 years.

Sanctioned and filled up strength as on 31.3.2023 is given in the below table.

Employment of Personnel in IBM as on 1.3.2023

Group	Sanctioned strength	Total No. of employees in position	Number of Personnel					
			SC	ST	OBC	EWS	Women	Physically Handicapped
A	459	151	19	06	33	00	06	00
B	502	232	24	13	43	03	38	09
C	516	281	48	18	88	01	37	10
Total	**1,477**	**664**	**91**	**37**	**164**	**04**	**81**	**19**

7.3Redressal of Public Grievances

At the beginning of the year 06 grievance cases were pending at various stages. During the year 2022-23,69 new grievance petitions were received. So far 75cases have been disposed off including grievance cases pending at the beginning of the year.Online facility for Registration of Public Grievances has already been provided by linking IBM website with the Grievance Portal of DoPT" PROGRAMS".

7.4Vigilance cases

The Vigilance Awareness Week was observed during the period from 31.10.2022to06.11.2022 in IBM HQ at Nagpur and in all zonal/regional offices of Indian Bureau of Mines as per directive of CVC.

7.5Gender Equality

Women employees constitute about 12 percent of filled up strength of IBM. Training is imparted to women employees in the field of technical as well as

administrative matters.A Committee has been constituted in IBM to redress the complaints made by the victims of sexual harassment at work place in a time bound manner.

7.6 RTI Applications

Indian Bureau of Mines (IBM) has appointed Central Public Information Officers and Appellate Authorities. During the year 2022-23 (1st April 2022 to 31st March 2023), the Bureau received 482 applications under the RTI Act, which were timely responded. 32Appeals received against the decisions of the CPIOs were disposed of by the concerned Appellate Authorities within the stipulated time frame.

Status of disposal of RTI Applications/1st Appeal/2nd Appeal is given in following tables:**Table 7.6.1**

RTI Application/Request Status (w. e. f. 1st April, 2022 to 31st March, 2023)

Organization	No. of Cases					Pendency			
	Previous Pendency	No. of RTI Application/ Request during the period	Disposal	Information denied u/s 8(1), 9, 11, 24 & others of RTI Act	Balance	0-3 months	4-6 months	7-9 months	10-12 months
IBM	09	482	432	8	51	51	Nil	Nil	Nil

Source: Information received from designated CPIO/AA of IBM.

Table 7.6.2

RTI I st Appeal Request Status (w. e. f. 1st April, 2022 to 31st March, 2023)

Organization	No. of Cases					Pendency			
	Previous Pendency	No. of I st Appeal received during the period	Disposal	No. Appeal rejected/Inf. denied u/s	Balance	0-3 months	4-6 months	7-9 months	10-12 months
IBM	1	32	31	5	2	2	Nil	Nil	Nil

Source: Information received from designated CPIO/AA of IBM.

Table 7.6.3

CIC 2nd Appeal Status (w. e. f. 1st April, 2022 to 31st March, 2023)

Organization	No. of Cases				
	Previous Pendency	No. of 2nd Appeals filed in CIC	Decided		Balance
			In favour of Appellant	In favour of Organization	
IBM	Nil	11	Nil	11	Nil

Source: Information received from designated CPIO/FAA of IBM.

7.7Reservation of Vacancies for persons with Disabilities

IBM is strictly following the various instructions of the Government issued from time to time regarding reservation of vacancies for PWD,s in respect of Group 'A' and 'B' Gazetted posts. As on 31st March 2023, 19physically handicapped persons were under employment in IBM.

7.8Welfare activities for SC/ST, women, Minorities and PWD,s:

For Women: A committee under sexual harassment of Women at Workplace (Prevention, Prohibition and Redressal) Act, 2013 has been constituted in IBM to redress the complaints made by the victim of sexual harassment at work place in a time bound manner.

7.9 Rozgar Mela –IBM Issues Offer Letters

Under Mission Recruitment drive of Government of India, Indian Bureau of Mines issued 109 Offers of Appointment on 22.11.2022 which included 64 MTS and 45 Stenographers in 2nd Tranche of Mission Recruitment at CRPF, Nagpur, Ajmer and Kolkata. During the RojgarMela held on 22.11.2022, 02 candidates received Offer of Appointment at Ajmer from Hon'ble Minister for Railways, Shri Ashwini Vaishnaw, 05 candidates received Offer of Appointment from the dignitaries of CRPF at Nagpur, 01 candidate received the Offer at Kolkata.

Rozgar Mela: Candidates received appointment letters

As part of the Mission Recruitment launched by the Hon'ble Prime Minister, the 3rd tranche of Rozgar Mela was organized on 20 January 2023. IBM, in separate functions organized in Nagpur and Ajmer, issued a batch of Offers of Appointment to selected candidates. Special Dignitaries and Senior Officers of IBM took part in the Rozgar Mela Event and handed over the Letters of Appointment to the worthy candidates.

3rd tranche of Rozgar Mela was organized on 20 January 2023

8.0 Indian Bureau of Mines: Celebration of events

8.1 131st Birth Anniversary of Dr Babasaheb Ambedkar

IBM at its Headquarters in the evening of 20th April 2022, in a elaborately decked up conference hall that got thronged up by enthusiastic audience witnessed the unfolding of a gala event accompanied by musical delights and inspiring speeches delivered in the honour of the Father of Indian Constitution Baratratna Dr B.R. Ambedkar.

Prof. (Dr) SukhdeoThorat, former Chairman, University Grants Commission, New Delhi, and a Padmashree Awardee, graced the function as Chief Guest. Dr Thorat in his professorial eloquence delivered a fine and awe-inspiring speech delving into some of the rare facts of history and shored up a tribute for Dr Ambedkar describing that the contributions of Dr Ambedkar toward Nation-building videlicet shaping India's Economic policy, Water & Irrigation policy, introducing reforms in the Banking Sector, building National Institutions/formulating Legal Instruments to safeguard democracy, propelling the causes of the women, under-privileged and the downtrodden, policies on Labour laws etc. are often not talked about—Dr Thorat further regrettably added that though Dr Ambedkar has come to be known as a Global Leader and is worshipped by the masses, his gigantic contributions toward Nation-building do not get their due reflection in the public-understanding.

Adorning the dais as Guest of Honour of the function was the Ex-Mayor of Nagpur city, Shri Dayashankar Tiwari, who in his inimitable style captivated the audience with a sublime exposition on Dr Ambedkar. Quoting from the annals of history, Shri Tiwari spoke on various sterling facets of Dr Ambedkar and glorified the contributions of Dr Ambedkar and described Dr Ambedkar as an avatar in fullest human glory.

The President of the Function, Shri Pankaj Kulshrestha, CCOM (I/c)–MES, in his speech thanked the visiting dignitaries for taking out time to participate in the grand function and briefly encapsulated the facets of Dr Ambedkar and the admirable effect he had and presently has in the consciousness of every thinking Indian.

Earlier the function commenced with the garlanding of the Portrait of Dr Ambedkar and welcoming of the guests and dignitaries who adorned the dais which was followed by speeches of Shri V.M. Rotke, Secretary and Shri R.R. Dongre, President of Dr Babasaheb Ambedkar Smruti Samiti, IBM. Elegantly compered by SmtPradnya Deo, Asst Editor & Vice-President of the Samiti, the programme, interspersed with musical rendition of Bhim Geet, drew to close with the presentation of Vote of Thanks.

Dignitaries on the Dias and IBM Family

8.2 Yoga Day, 21 June, 2022

Indian Bureau of Mines observed International Yoga Day on 21st June 2022, at its Headquarters and all its Regional Offices. Enthusiastic participants from all offices of IBM gathered in their respective premises to actively take part in yoga programmes organized and performed various asanas.

Further, as per directions of the Ministry, Senior officers of IBM HQ joined GSI and Mineral Exploration and Consultancy Limited (MECL), for celebration of International Yoga Day, 21 June, 2022 at MECL premises. The programme was graced by Padmashri Dr.VikasMahatme, Member of Parliament Rajya Sabha. A message by Hon'ble Minister of State (Railways, Coal & Mines) Shri RaosahebDanve Patil was read out. Live address of Hon'ble Prime Minister Shri Narendra Modi was also watched by the participants. The Yoga Session was conducted in association with the Swami Janardan Yogabhyasi Mandal, Nagpur.


Glipmses of Yoga Day Celebration at IBM


Glipmses of Yoga Day Celebration at IBM

8.3 Azadi ka Amrut Mahotsav (AKAM)

As Part of AKAM Iconic Week Celebrations (11-17th July, 2022), Ministry of Mines organized 6th National Conclave on Mines & Minerals in New Delhi on 12.7.2022. Union Minister of Mines, Hon'ble Shri Pralhad Joshi inaugurated 'Iconic Week Celebrations' by traditional Lamp Lighting in presence of Secretary (Mines), Shri Alok Tandon, and other senior officers of the Ministry. Union Home Minister Hon'ble Shri Amit Shah addressed the Conclave as the Chief Guest.

Forty mines securing five Star rating for the reporting year 2020-21 have been felicitated and three modules of Mining Tenement System namely Registration, Returns and Mining Plan Approval System (MPAS) were launched by Hon'ble Union Minister of Mines, Coal, and Parliamentary Affairs Shri Pralhad Joshi in the 6th Mining Conclave held at New Delhi on 12.7.2022.

	
Hon'ble Union Minister @JoshiPralhad and MoS @raosahebdanve inaugurated the 6th National conclave on mines and minerals 2022 by traditional lamp lighting at Dr. Ambedkar International Centre, New Delhi	Shri Alok Tandon, Secretary, @MinesMinIndia addressing on automation in mining at 6th National Conclave on mines and minerals, New Delhi
	
India is one of the fastest growing economies in the world – Home Minister Amit Shah	Hon'ble Union Minister @JoshiPralhad and MoS @raosahebdanve visited DMF stalls of 7 best performing states which have utilized their share of DMF fund in a meaningful and effective manner.

8.4 76th Independence Day

8.4.1 IBM joined the rest of the country in celebrating the 75th Anniversary year celebrations of India's Independence Day. Every IBMite with soulful pride and immense fervor observed the 75th Anniversary year of India's Independence. Entire IBM, its Headquarters, IBM's Modern Mineral Processing Laboratory & Pilot Plant at Hingna, Nagpur and all Zonal/Regional Offices across the country, sparkled with patriotic splendor decked up with colourful festoons and decorated with dazzling illuminations to mark the occasion.

At IBM HQ, the celebrations of the 76th Independence Day were pristinely arranged and the National Flag was hoisted by Shri P.N. Sharma, Chief Controller of Mines (I/c) –MDR amidst august gathering of senior officers of IBM, former distinguished colleagues and esteemed guests. IBM also took it upon itself with pride the observance of Har GharTiranga initiative –the campaign initiated by the Government of India to allow the unfurling of the National Flag at every home.




Glimpses of Independence Day Celebration at IBM

8.4.2 76th Independence Day Celebrations at IBM's MMPL&PP, Hingna

This year, for the first time, the National Flag was hoisted at IBM's MMPL&PP, Hingna, on the 15th of August 2022. Dr D.R. Kanungo, Suptdg Officer (Ore Dressing) & Director (I/c), took the podium to hoist the National Flag. All the officers and staff with festive enthusiasm participated in the programme. Glimpses of the programme are as follows:

Glimpses of Independence Day Celebration at IBM MMPL

8.5 Grand Finale of Smart India Hackathon 2022

Smart India Hackathon 2022 (Software Session pertaining to problem statements of Ministry of Mines) was organized at Vijayawada, Andhra Pradesh during 25th and 26th of August 2022.Dr V.G.K. Bhagavan Gumma, Superintending Mining Geologist and Technical Secretary to CG IBM was nominated as a subject expert/ evaluator on behalf of Ministry of Mines. Dr Bhagavan has attended the same at Vijayawada. After brief inauguration, coding session has started from 10.00 am on 25.08.2022 and ended at 5.30 pm on 26.08.2022 consisting of three rounds of evaluation by experts and jury panel. There were three problem statements pertaining to Ministry of Mines viz. (i) Recycling App, (ii) Grade wise iron ore accounting from mine to end point to protect loss of revenue to state and (iii) Interpretation of geological, geophysical and geochemical data sets using AI/ ML to carve out new mineral potential areas. Total ten (10) teams from various parts of the country had participated and enthusiastically shown their skills and possible extent solutions. Prime Minister Shri Narendra Modi interacted with the Teams through virtual mode on 26.8.2022. Most of the teams have good knowledge on problem statements and studied well before reaching this grand finale. Hackathon was concluded on 26.08.2022 at 7.30 pm with a formal valedictory function and award ceremony.

	
Students explaining their Model	Hon'ble PM interacting with students

8.6 Fit India Run at IBM HQ on 2.10.2022

IBM in heartfelt commemoration of Gandhi Jayanti and Azadi Ka Amrut Mahotsav organized successfully a Fit India Run programme at IBM HQ Nagpur on 2.10.2022. Officers and Staff participated enthusiastically in the event and contributed for swachhata awareness.

8.7 The National Unity Day or Rashtriya Ekta Diwas 2022

The Rashtriya Ekta Diwas provides an opportunity to reaffirm the inherent strength and resilience of our nation towards upholding the unity, integrity, and security of our country. IBM by taking pledge celebrated Rashtriya Ekta Diwas 2022 on October 31st to commemorate the 147th birth anniversary of India's first Home Minister, Sardar Vallabhbhai Patel, the Iron man of India.

8.8 Vigilance Awareness Week 2022

8.8.1 At IBM HQ: Vigilance Awareness Week 2022 was celebrated at IBM from 31.10.2022 to 6.11.2022. Various programs such as Essay, Debate, Quiz, Poster, Slogan, Speech competitions were organized at IBM HQ and Zonal / regional / Sub-Regional Offices of IBM on the occasion of Vigilance Awareness Week, 2022.

Inauguration of Vigilance Awareness Week 2022 at IBM took place on 31.10.2022 amidst the gracious presence of Shri P.N Sharma, CCOM (MDR), Shri Pankaj Kulshrestha, CCOM (MES), Dr Y.G. Kale, COM and Shri Vinod DayashankarGodghate, CVO. Snatches of the program are reflected below:


Vigilance awareness Week: Administering of Integrity Pledge

8.8.2 Vigilance Awareness Week, 2022 at MMPL, Hingana: The Mineral Processing Division of IBM observed Vigilance Awareness Week 2022 between 31 Oct. and6 Nov. 2022. Observance of the Week commenced with administering of Integrity Pledge by Dr Dilip R Kanungo, Director (OD) I/c and Shri V.A. Sontakkey, ODO & HOO (MPD). Several competitions – Elocution, Quiz and Essay writing – on the theme of Vigilance Awareness were organized and prizes were distributed to the winners during the concluding day programme. A few glimpses captured are hereunder:

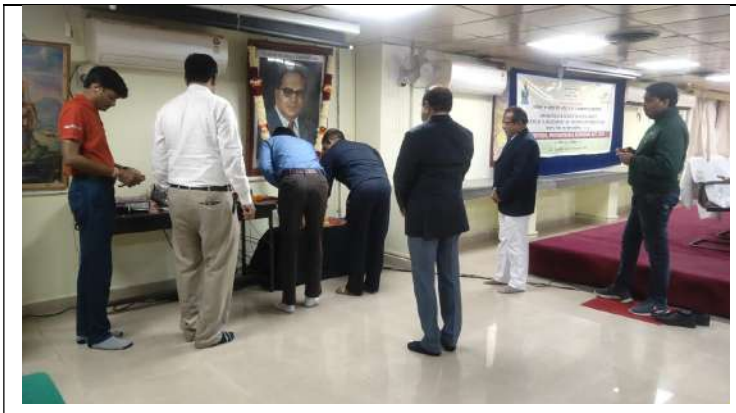
Vigilance awareness Week: Administering of Integrity Pledge	Prize Distribution at MMPL

8.9 Constitution Day 26th Nov.2022

As per directions of the Ministry of Mines, the Samvidhan Diwas (constitution Day) was celebrated on 26th November to commemorate the adoption of the constitution of India and to honour and acknowledge the contribution of

Founding Fathers of the constitution, on the subject of "India- the Mother of Democracy", by reading the Preamble of the constitution in both Hindi & English.

8.10 Mahaparinirvan Diwas of Dr. B.R. Ambedkar : On Mahaparinirvan Diwas of Dr. B.R. Ambedkar, homage was paid to the Chief Architect of Indian Constitution, on 6.12.2022 at IBM Headquarters, by Shri Sanjay Lohiya, Additional Secretary & Controller General (I/c), IBM and all Senior Officers. The portrait of Dr Babasaheb Ambedkar was garlanded, and floral tributes were offered during the occasion



Shri Sanjay Lohiya, Add. Secretary & CG (I/c), IBM offering floral tributes

8.11 Sensitization Programme against Sexual Harassment of Women at Workplace : IBM in cue with the instructions received from the Ministry organised an Awareness Programme in respect of the Sexual Harassment of Women at Workplace (Prevention, Prohibition and Redressal) Act 2013 on 07 December 2022.The programme held under the stewardship of the President of the function, Shri P.N. Sharma, CCOM—MDR (I/c) was graced by Adv Renuka Sirpurkar, Practicing Lawyer at High Court, as Chief Guest. Shri Pankaj Kulshrestha, CCOM—MES (I/c), was present as Guest of Honour along with Dr Jyoti Srivashtava, Chairperson of Internal Complaint Committee.

	
Adv Renuka Sirpurkar, Lawyer at High Court addressing IBM Family	Rangoli apt for the occasion

8.12 IBM Celebrates 74th Republic Day

8.12.1 India's 74th Republic Day was celebrated at all IBM offices including its Headquarters with pride and gaiety. This year at IBM Headquarters, Dr Y.G. Kale, COM (TMP) took the podium to unfurl the National Flag. Dr Kale subsequently addressed the gathering of senior officers & staff and assembled guests.

	
Republic Day at IBM HQ	

8.12.2 74वां गणतंत्र दिवस – अयस्क प्रसाधन प्रभाग

दिनांक 26 जनवरी, 2023 को भारतीय खान ब्यूरो के अयस्क प्रसाधन प्रभाग, एमआईडीसी, हिंगणा स्थित प्रांगण में प्रात:8:30 बजे 74वां गणतंत्र दिवस हर्षोल्लास मनाया गया । इस अवसर पर डॉ. दिलीप रंजन कानुनगो, निदेशक (अयस्क प्रसाधन), प्रभारी के हस्ते ध्वजारोहण किया गया ।

ध्वजारोहण कार्यक्रम समापन के पश्चात डॉ. दिलीप रंजन कानुनगो द्वारा भारतीय खान ब्यूरो में भर्ती एवं प्रमोशन प्रक्रिया आदि के बारे में अवगत कराया गया । साथ ही सभी अधिकारियों एवं कर्मचारियों को एक जुट होकर टीम भावना से अभिभूत होकर कार्य करने का अनुरोध भी किया । कार्यक्रम की सफलता हेतु सभी अधिकारी एवं कार्मिकों को भी धन्यवाद दिया गया ।


74वां गणतंत्र दिवस – अयस्क प्रसाधन प्रभाग

8.13 IBM Sports Meet

The 29th All India IBM Sports Meet was organized at IBM Udaipur from 4.1.2023 to 6.1.2023. At inaugural ceremony on 04.01.2023 the Sports Meet was declared open by the Chief Guest, Shri P.N. Sharma, CCOM (MDR), IBM. The event commenced with the lighting of traditional lamp, unfurling of the flag and administering of pledge to the assembled sports persons who congregated at Udaipur from all IBM offices across the country.

Administering the Pledge

Ready Steady Go.. Glimpses of Sports Meet

Veledictory Function & Prize Distribution

Prize Distribution | **Cultural Programme**

8.14 CELEBRATION OF IBM's 75th FOUNDATION DAY

8.14.1 IBM HQ: In commemoration of its 75 years of dedicated service to the Nation in the field of Mineral Conservation, Development & Regulation, Indian Bureau of Mines celebrated its Foundation Day on 1st March 2023 in a grand scale at National Fire Service College auditorium, Rajnagar, Nagpur.

Hon'ble Union Minister of Parliamentary Affairs, Coal & Mines, Shri Pralhad Joshi, was the Chief Guest and Shri Vivek Baradwaj, Secretary, Ministry of Mines was the Special Guest of the function. Additional Secretary & Controller General (I/c), IBM, Shri Sanjay Lohiya and dignitaries from the Ministry of Mines, New Delhi, State Departments & Public Sectors and Mining Industry joined IBM on this day-long event which included Award ceremony of 76 five Star-Rated mines. In this occasion, a commemorative Postal "My Stamp" & Souvenir have been released. Presentations on Best Practices by Star Rated Mines and on Drone Survey and Online Mining Plan approval System by IBM were also made.An Exhibition of Stalls set up by the Mining and Mineral Agencies at the venue was inaugurated by the Secretary (Mines), Shri Vivek Baradwaj.

The Hon'ble Minister in his address urged IBM and the mining Industry to improve efficiency so as to raise the contribution of the Mineral & Mining Sector to 2.5% of the Country's GDP by 2025-26. Echoing the Hon'ble Prime Minister's vision of achieving AtmaNirbhar Bharat, the Hon'ble Minister of Mines advised the mining fraternity to Think Big to Achieve Big. Elaborating on the Hon'ble Prime Minister's long-term ambition to make India completely self-reliant by the Centenary Year of India's Independence, i.e., 2047, the Minister earmarked the targets that need to be met and expressed that Ministry of Mines under his leadership is geared up and oriented to meet these mighty challenges. The Hon'ble Minister of Mines, graciously, presented Awards to the five Star Rated Mines in recognition of their notable contributions in achieving the desired sustainable development targets in their respective Mine region.

The Hon'ble Minister during the occasion released the Special Commemorative Customary My Stamp brought out by IBM along with the Postal Department of Nagpur Region. Smt Shobha Madhale, Post Master General, GPO-Nagpur Region shared the dais during the occasion of Stamp Release.

The Hon'ble Minister congratulated IBM for achieving this feat of 75 years of dedicated service to the nation and complimented every official who made this happen. The Minister also released a Souvenir brought out by IBM to mark its 75th Anniversary.

Shri Vivek Bhardwaj, Hon'ble Secretary (Mines), during the Forenoon Session, inaugurated the Exhibition of Stalls set up by the Mines/Mineral Agencies and presided over the technical sessions for presentations by selected Mining Companies on Best Practices adopted in their respective Mine-areas and Technical Presentations by IBM presented by Shri S.K. Adhikari, CMG, on the topic "Applications of Drone Survey in Mining Sector" and by Shri P.K. Bhattacharjee, COM (MTS), on the topic "Online Mining Plan Approval System".

Secretary (Mines) in his address presented a broad spectrum of reforms and initiatives taken by Ministry of Mines in recent years as well various strategies evolved to develop and reform the functioning of the mining sector of the country. Secretary Mines appreciated the best practices by star rated companies as Carbon Foot Print Reduction, Suraksha Card, employment to local population, women empowerment in hardcore mining etc. While praising IBM for its sine qua non role, Secretary Mines added that IBM should now aim at becoming International Bureau of Mines. He also mentioned about how the delegation of ministry of Mines including IBM representatives, helped EL Salvador in closing abandoned mines.

Shri Sanjay Lohiya Additional Secretary & Controller General (I/c), IBM highlighted the contribution of IBM in tune with the series of reforms in the mining sector since 2015 as implementation of Star Rating System, Mining Surveillance System (MSS), SudoorDrushti in collaboration with ISRO, Mining Tenement System, Average Sale Price (ASP), Online Mining Plan approval System, new initiatives as Drone Technology, etc.

Shri P.N. Sharma, Chief Controller of Mines in charge MDR Div., gave the welcome address while Shri Pankaj Kulshreshtha, Chief Controller of Mines in charge MES proposed the vote of thanks.

IBM officers/officials at IBM HQ/Central Zone/Nagpur Regional Office/Modern Mineral Processing Lab.& Pilot plant enthusiastically participated in the function

whereas those at Zonal Regional offices jointed virtually to witness the milestone celebration. Large number of retired officers, including 91 years old Ex. Controller General Shri D.N.Bhargav, also blessed the occasion.

	
Hon'ble Minister of Mines, Secretary (Mines) with Controller General in charge & Senior IBM officers	Release of Postal Stamp
	
Hon'ble Minister of Mines visiting Exhibition	Postal Stamp on IBM
	
Felicitation of Hon'ble Minister of Mines	Felicitation of Ex.Controller General, IBM Shri D.N.Bhargava by Secretary (Mines)

Welcome to Secretary (Mines) by CMG, IBM

Technical Session chaired by Secretary (Mines)

Felicitation of Five Star Rated Mines

After grand celebration at IBM HQ on 1.3.20213, IBM's 76th Foundation Day was also celebrated at various Regional offices during the month of March, 2023.

8.14.2 Jabalpur Regional Office: भारतीय खान ब्यूरो की स्थापना के स्वर्णिम 75 वर्ष पूर्ण करने के पावन अवसर पर मुख्यालय के निर्देशानुसार जबलपुर क्षेत्रीय कार्यालय में दिनांक 06/03/2023 को खनिज दिवस मनाया गया जिसमें 'भारतीय सर्वेक्षण कार्यालय जबलपुर' के निदेशक श्री संदीप श्रीवास्तव ने कार्यक्रम में मुख्य अतिथि के रूप में शिरकत की। स्वास्थ्य शिविर आयोजित किया गया जिसमें स्वास्थ्य वार्ता के साथ अन्य स्वास्थ्य संबंधी जांचें की गई। पधारे हुए आईबीएम के सेवानिवृत्त कर्मचारी-अधिकारियों का माल्यार्पण के साथ तिलक - साफा पहनाकर स्वागत किया गया। कार्यक्रम में आईबीएम के 75 वर्ष के गौरवशाली यात्रा की डॉक्युमेंट्री प्रदर्शित की। वर्ष 1948 से 2023 तक के महानियंत्रक महोदयों की जानकारी देते हुए पिछले दो वर्षों में जबलपुर कार्यालय की उपलब्धियों पर प्रकाश डाला गया। पधारे हुए अतिथियों के उद्बोधन, उनको स्मृति चिन्ह प्रदान करने और दोपहर के भोजन के पश्चात "आईबीएम खेलो होली" के साथ समारोह का समापन किया गया।

Foundation Day celebration at Jabalpur Regional Office

8.14.3 Gandhinagar Regional Office:भारतीय खान ब्यूरो की स्थापना के स्वर्णिम 75 वर्ष पूर्ण करने के पावन अवसर पर मुख्यालय के निर्देशानुसार जबलपुर क्षेत्रीय कार्यालय में दिनांक 06/03/2023 को खनिज दिवस मनाया गया जिसमें 'भारतीय सर्वेक्षण कार्यालय जबलपुर' के निदेशक श्री संदीप श्रीवास्तव ने कार्यक्रम में मुख्य अतिथि के रूप में शिरकत की। स्वास्थ्य शिविर आयोजित किया गया जिसमें स्वास्थ्य वार्ता के साथ अन्य स्वास्थ्य संबंधी जांचें की गई। पधारे हुए आईबीएम के सेवानिवृत्त कर्मचारी-अधिकारियों का माल्यार्पण के साथ तिलक - साफा पहनाकर स्वागत किया गया। कार्यक्रम में आईबीएम के 75 वर्ष के गौरवशाली यात्रा की डॉक्युमेंट्री प्रदर्शित की। वर्ष 1948 से 2023 तक के महानियंत्रक महोदयों की जानकारी देते हुए पिछले दो वर्षों में जबलपुर कार्यालय की उपलब्धियों पर प्रकाश डाला गया। पधारे हुए अतिथियों के उद्बोधन, उनको स्मृति चिन्ह प्रदान करने और दोपहर के भोजन के पश्चात "आईबीएम खेलो होली" के साथ समारोह का समापन किया गया।

इस कार्यक्रम में IBM की 75 वर्ष की गौरव-यात्रा के वृतांत का विडियो दिखाया गया। वर्तमान वैधानिक प्रावधानों के परिदृश्य में ड्रोन सर्वे के processed data संबन्धित विशेष सावधानियों एवं MPAS में on-line Mining Plan में data - validation पर चर्चा की गई । साथ ही GSI द्वारा गुजरात राज्य में संभाव्य प्रोस्पेक्ट विशेष रुप से REE एवं PGE संबंधित खनिजों पर प्रकाश डालते हुए ज्ञानवर्धक जानकारी दी गई । इसके अतिरिक्त 5 स्टार खानों द्वारा best-practices साझा किए गए । इस कार्यक्रम में सम-सामयिक विषयों को भी सम्मिलित किया गया। जिसमें मिलेट्स (millets) के संबंध में इसके प्रकार, उपयोगिता एवं प्रयोग की विधि पर विशेषज्ञ द्वारा जानकारी दी गई । साथ ही साइबर क्राइम से जागरूकता विषय पर पुलिस उप-अधीक्षक द्वारा साइबर-क्राइम के प्रकार व उनसे बचने व सजग बने रहने संबन्धित बहुत उपयोगी एवं रोचक प्रस्तुतीकरण दिया गया।

Foundation Day celebration at Gandhinagar Regional Office

8.14.4 Goa Regional Office:भारतीय खान ब्यूरो की स्थापना के 75 वर्ष (प्लेटिनम जयंती) पूर्ण करने के शुभ अवसर पर मुख्यालय के निर्देशानुसार क्षेत्रीय कार्यालय गोवा में दिनांक 10/03/2023 को खनिज दिवस मनाया गया स 'खान सुरक्षा महानिदेशालय, कार्यालय गोवा' के निदेशक श्री विनोदानंद कालुंदिया ने कार्यक्रम में मुख्य अतिथि के रूप में तथा श्री प्रेम प्रकाश, क्षेत्रीय खान नियंत्रक, रायपुर कार्यालय विशेष अतिथि के रुप में उपस्थित हुए । इस कार्यक्रम में पधारे हुए आईबीएम के सेवानिवृत्त कर्मचारी-अधिकारियों का माल्यार्पण के साथ साफा पहनाकर स्वागत किया गया। इस कार्यक्रम में आईबीएम के 75 वर्ष के गौरवशाली यात्रा तथा वर्ष 1948 से 2023 तक के महानियंत्रक महोदयों की जानकारी साझा की गई । इस कार्यक्रम में गोवा कार्यालय की उपलब्धियों पर प्रकाश डाला गया। सभी अधिकारियों कर्मचारियों एवं अतिथियों के विचार और उद्बोधन के बाद उनको स्मृति चिन्ह प्रदान किया गया स दोपहर के भोजन के पश्चात समारोह का समापन किया गया। पक्षियों के लिए दाने तथा पानी की व्यवस्था की गई जो की पूरी गर्मी जारी रहेगी ।

Foundation Day celebration at Goa Regional Office

8.14.5 Raipur Regional office: The Raipur Regional Office of IBM celebrated the 75th Anniversary of IBM's Foundation Day on 16.03.2023. Shri Anurag Diwan, Jt Director, DMG, Chhattisgarh, graced the occasion as Chief Guest. Major highlights of the day were a Power-point presentation, video display on the Journey of IBM and a Technical Session on "Online Submission of Mining Plan". About 40 Qualified Persons took part in the session.

Foundation Day celebration at Raipur Regional Office

8.14.6 Bengaluru Zonal /Regional Office &MMPL : The 75th Foundation Day of Indian Bureau of Mines was celebrated in Bangalore on 09th March, 2023. Shri.K.S.Raju, Former Controller General graced the occasion as Chief Guest and Smt.Indira Ravindran, Former Controller General-in-Charge also graced the occasion as Guest of Honour. After video display on journey of IBM technical session on "High lights of some best beneficiation studies on different category of minerals" was presented by Dr.V.A.J.Aruna SO(OD). Best Mining practices of Industry were presented by officials from Mining Industry from M/s SMIORE, M/s Nadeem Minerals, M/s BKG Mining Private Limited. Former Officers and staff along with the present employees of IBM attended the function with full enthusiasm.

8.15 Celebration of International Women's Day at IBM HQ

International Women's Day is observed every year on 8th of March. IBM, this year, on 10 March 2023 organised a function at its Headquarters in Nagpur as part of the observance of International Women's Day. Smt Poonam Kandelwal, Chartered Accountant & Head of Market Development, VCats, graced the function as Chief Guest and Dr Praveen Sahave, Abhyudaya Ayurvedic and Laser Hospital, Nagpur, was the Special Guest for the occasion. Shri P.N Sharma,

CCOM—MDR (I/c) graced the celebration as President of the function. Dr Jyothi Srivastava, Senior Chemist & President of Women's Day Organising Committee, IBM, delivered welcome address.

SmtKandelwal, brought to the fore the need for women to be well-informed and to be, as far as possible, financially independent. Stressing on the purpose that woman among the 'Haves' must hand-hold and support the 'Have-nots', she said, striving for a society where women have the freedom to express and do things on an equal footing as that of men will yield to betterment of not only the family but also the community as a whole. Dr Praveen Sahave, in his speech spoke on lifestyle diseases—their causes and ways to prevent them from Ayurvedic perspective.

Shri P.N. Sharma, praised the Women of IBM and congratulated the Organising Committee for organizing the function in a grand manner. Earlier, the dignitaries on the dais lit the traditional lamp and garlanded the portrait of the most venerable Smt Savitribai Phule.

Celebration of International Women's Day at IBM HQ

Felicitation of IBM Women Employees retiring in 2023

8.16 Swachhata Pakhwada-2022

During 2022-23, as per the framework received from Ministry of Mines, all the IBM offices observed Swachhata Pakhwada during 16th-30th November 2022 in office premises at IBM Headquarters and in all Zonal/ Regional/ RODL Offices with action points covering:

8.16.1 Plan for Swachhata Pakhwada-2021

Plan for Swachhata Pakhwada-2022

- Dusting, cleaning and rearranging of files/records and replacement of Old and torn file covers with new one.
- Weeding out unwanted office records/papers/files.
- Dusting, mopping / sweeping in various sections and cleaning of furniture, cabinets, racks, almirahs, etc.
- Painting of walls & doors wherever necessary.
- Deep sanitization and cleaning of office premises including corridors, stairs.
- Regular cleaning of toilets.
- Banners, Posters have been displayed at all important places inside and outside the office premises for creating awareness on cleanliness.

8.16.2 IBM Bags 3rd Position–Swachchta Pakhwada

The Ministry of Mines in recognition of the successful endeavor put forward during Swachchta Campaign, initiated by the Govt of India, by all its Subordinate/Field Offices felicitated the well-deserved Campaign winners with awards. IBM bagged the 3rd Position in the overall conduct of the campaign. Shri Manish Maindiratta, RCOM, received the award on behalf of IBM from the Joint Secretary, Smt Farida M. Naik. A proud moment for Team-IBM indeed. Kudos to Dr G.V.G.K. Bhagavan, Technical Secretary, who steered the Swachchta Campaign for IBM as its Nodal Officer.

	
IBM Bags 3rd Position–Swachchta Pakhwada	Shri Manish Maindiratta, RCOM, received the award on behalf of IBM from the Joint Secretary, Smt Farida M. Naik

The details of daily activities were uploaded on Swachh Samiksha portal. A brief of activities carried out in mines under the aegis of various regional offices is enclosed at **Annexure 1.**

8.17: Special campaign 2.0: During the campaign period 39123 records have been reviewed. Out of which 19453 file have been identified for weeding out and subsequently weeded out. Scrap and obsolete items have been disposed off and Rs 2,58,514/- revenue is generated. 7000 Sq Ft space is freed/ created after record management and scrap disposal. 24 special campaign outdoor programmes have been organized by various regional offices at schools and other public places.A brief of activities carried out at HQ, IBM and in various regional offices is enclosed at **Annexure 2.**

8.18 Important Meetings

8.18.1 Regional Zonal heads meeting

Shri Sanjay Lohiya, Additional Secretary, Ministry of Mines and Controller General (In-charge) IBM chaired meeting of divisional heads of IBM Headquarter and Zonal-Regional heads of IBM on 13.07.2022 at New Delhi. While appreciating the efforts of IBM officers for achieving the targets as assigned for the year 2021-22, he insisted that in the changing scenario IBM too have to accept the changes.

CG IBM reviewed the status of validation of mines for star rating, Status of Satellite / drone Image submission by lessees under the provisions of MCDR'17, the progress of e-office implementation, penalty provisions, area reservations etc and directed to monitor progress of auction blocks till its operationalization. He also constituted a committee of IBM officers for review of star rating templates.

8.18.2 Meetings attended by IBM Officers

- Shri M.G. Raut, Ore Dressing Officer attended BIS Virtual meeting of CED 55 as Committee member from IBM on 16.06.2022.
- Shri. R.R. Dongre, RCOM, attended meeting on Joint Working Group at Mumbai on 20.06.2022.
- On 11.07.2022 both the CCOM (I/c), & all COM's &RCOM'sattended training programme on New Mining Plan online module regarding functional aspects of the module held at atDr. Ambedkar International Centre, New Delhi.
- On 12.07.2022 both the CCOM (I/c), & all COM's &RCOM'sattended 6th National Conclave on Mines & Minerals (NCCM) held at Dr. Ambedkar International Centre, New Delhi.
- On 13.07.2022 both the CCOM (I/c), & all COM's & RCOM's attended Zonal/Regional Heads meeting under the chairmanship of Shri Sanjay Lohiya, Addl. Secretary, Ministry of Mines & CG, IBM
- **Bangalore –** On 31/08/2022 Shri Suresh Prasad, RCOM and Dr.Sudhakara T.L., SMG attended the 58th meeting of SGPB Committee Kerala at Thirvanthapurama, Kerala.
- **Ranchi –** 26th SGPB meeting held with Government of Jharkhand on 17/08/2022.

- Ranchi – 26th SGPB meeting held with Government of Jharkhand on 17/08/2022.
- Two meetings on Geological Report Evaluation Committee held with Government of Jharkhand on 10/08/2022 &18/08/2022
- **Chennai Region -** Technical Committee Meeting was held on 07.09.2022 in the office of the Commissioner of Geology & Mining, Government of Tamilnadu to discuss about exploration reports furnished by GSI and MECL and discuss on the plan of action on the auctionable blocks.
- **Jabalpur –** Shri Madhavrao Sabre, SMG attended 56th SGPB meeting at DGM, Bhopal on 05 September 2022 under chairmanship of Shri Sukhveer Singh, Principal Secretary, Govt. of M.P. Mineral Resources Department.
- Shri T.K.Sonarkar,SMG attended the 18th CGPB meeting of Committee VII on Air Borne Survey and Remote Sensing on 19.09.2022 through Video Conferencing.
- **Jabalpur Region –** *Rcom Jabalpur carried out 7 inspections of Silica Sand Mines in Prayagraj district of U.P. State as NGT Delhi committee member for OA No. 203/2021
- **Bangalore Region -**Shri Suresh Prasad, RCOM and. Dr.Omkesha Murthy M.G, RMG, attended the meeting with Secretary to the Government, C & I Department, (MSME & Mines), GoK at VikasaSouda, Bangalore on 29.10.2022 to discuss on the issues regarding Iron ore lumps and fines dispatched from MSPL leases.
- On 04/11/2022 Parliamentary committee on Raj Bhasha visited Bangalore IBM Office for inspection at Hotel ITC Windsor Manor, officials from Minisrty of Mines, IBM, HQ and IBM Bangalore were present during the inspection.

  Shri SHAKIL ALAM, Economic Adviser, Ministry of Mines
  Shri Ashok Prasad, AD, MoM
  Dr. Y G Kale, COM and Raja
  Shri VJ K BAbu COM
  Shri V A J Aruna SOOD
  Shri Suresh Prasad, RCOM and other officials of IBM Bangalore.
- **Bangalore Region -** • Shri VJK, Babu, COM(SZ), Shri Suresh Prasad, RCOM and Dr.Sudhakara T.L. SMG, attended the 'Investor conclave on commercial coal mine auctions and Opportunities in Mining Sector' and 'Auction Review Meeting of Karnataka' on 03/12/2022 at ITC Garrdenia Hotel, Bangalore.

- **Bangalore Region -**Dr.Sudhakara T.L., SMG attended the Ore Evaluation Committee Meeting (C-Category Mine) at DMG, Karnataka held on 27/02/2023.
- **Bangalore Region-**Dr.Sudhakara T.L., SMG attended the Technical Committee meeting at DMG, Karnataka held on 10/03/2023 to discuss about the Geological Report preparation of the blocks given for exploration to KIOCL and MECL.
- Shri. S. K. Adhikari, CMG attended the 50th Technical-cum-Cost Committee meeting of National Mineral Exploration Trust at New Delhi on 02.03.2023 and 03.03.2023.
- Shri. S. K. Adhikari, CMG attended the 2nd meeting of **Scrutiny Committee of Experts (SCE) for the National Geoscience Awards 2022 at New Delhi on 06.03.2023**
- Shri. S. K. Adhikari, CMG attended the 51st Technical-cum-Cost Committee meeting of National Mineral Exploration Trust held on 28.03.2023 and 29.03.2023 at Hyderabad.

8.19 Visitor to IBM from Ministry of Mines

8.19.1 VISIT OF HON'BLE MINISTER OF MINES TO IBM, BENGALURU:

Shri.Pralhad Joshi, Honourable Minister of Parliamentary Affairs &Mines visited IBM, Bengaluru on 25.11.2022 and launched Portal for reading the Preamble and Online Quiz on the Constitution of India on the occasion of Constitution Day to be observed on 26th November 2022.

8.19.2 Visit of Shri Vivek Bharadwaj, IAS, Secretary to Govt. of India, Ministry of Mines to IBM HQ Nagpur on 05.12.2022

Indian Bureau of Mines was honored by the visit of the Secretary, Ministry of Mines, Government of India, Shri Vivek Bharadwaj on 5.12.2022 and of Addl. Secretary & Controller General (I/c), Shri Sanjay Lohiya, on 5 & 6.12.2022 at its Headquarters, Nagpur. A Review Meeting with the Senior Officers of IBM was chaired by the Secretary during his visit at IBM wherein he showed keen interest on regulatory responsibilities of IBM officers, modalities of SDF Star rating, Schedule of charges for IBM services, IBM publications etc. Action on relevant points as per directions of Sec. (M) vide approved minutes of review meeting is in progress.

During their visit, the Secretary (Mines) and Addl. Secretary & Controller General (I/c), planted saplings at IBM HQ campus as a part of ongoing Special Campaign. While at IBM, the Secretary (Mines), visited IBM's Mineral Processing Division and IBM's Geographic Information System & Remote Sensing Centre and was apprised of their role and functions.

Visit of Shri Vivek Bharadwaj, IAS, Secretary to Govt. of India, Ministry of Mines and Shri Sanjay Lohiya, Additional Secretary to Govt. of India & Controller General In Charge to IBM HQ Nagpur on 05.12.2022 Indian Bureau of Mines was honored by the visit of the Secretary, Ministry of Mines, Government of India, Shri Vivek Bharadwaj on 5.12.2022 and of Addl. Secretary & Controller General (I/c), Shri Sanjay Lohiya, on 5 & 6.12.2022 at its Headquarters, Nagpur. A Review Meeting with the Senior Officers of IBM was chaired by the Secretary during his visit at IBM wherein he showed keen interest on regulatory responsibilities of IBM officers, modalities of SDF Star rating, Schedule of charges for IBM services, IBM publications etc. Action on relevant points as per directions of Sec. (M) vide approved minutes of review meeting is in progress. During their visit, the Secretary (Mines) and Addl. Secretary & Controller General (I/c), planted saplings at IBM HQ campus as a part of ongoing Special Campaign. While at IBM, the Secretary (Mines), visited IBM's Mineral Processing Division and IBM's Geographic Information System & Remote Sensing Centre and was apprised of their role and functions

Plantation at IBM HQ Premises by Sec(M) & Addl. Sec. & CG(I/c) IBM

Interaction with IBM Officers & chairing Review Meeting

	
Interaction with IBM Officers	Visit to Remote Sensing lab.

8.19.3 Visit of JS & FA to IBM HQ

Ms. Nirupama Kotru, Joint Secretary &Financial Advisor, Ministry of Mines visited IBM HQ Nagpur on 15.07.2022. A presentation on IBM activities including human resource and budget was made by Technical Secretary, IBM. Madam Kotru also participated in plantation drive at IBM campus.

8.19.4 Study Visit of the Standing Committee on Coal, Mines and Steel to Udaipur/Chittorgarh, Mumbai, Ahmedabad and Kevadia from 30.08.2022 to 03.09.2022

Standing Committee on Coal, Mines and Steel visited mining areas in and around Chittorgarh City (100Kms) on 30.08.2022 and held informal discussions with the representatives of Ministry of Culture, Ministry of Mines, Indian Bureau of Mines, Archeological Survey of India, State Government of Rajasthan (Department of Mining and Department of Environment) and Ministry of Environment, Forest and Climate Change (MoEFCC) on "Measures for Abatement of Pollution due to Mining Activities and Environmental Protection in and around Chittorgarh City and Fort. IBM made a presentation and submitted background note on the subject.

8.19.5 Foreign Visits of IBM officers

8.19.5.1.ShriP.N.Sharma, CCOM In charge (MDR Division) participated in 18th Annual General Meeting of Intergovernmental Forum (IGF-2022) on Mining, Minerals, Metals and Sustainable Development, during the period 7-10 November 2022 at Geneva, Switzerland as a part of Indian Delegation led by Shri Sanjay Lohia, Addl. Secretary, Ministry of Mines.

8.19.5.2. Shri Abhay Agrawal, COM (CZ) participated in International Mining & Resources Conference 2022 (IMARC-2022) during the period 2-4 November, 2022 at Sydney, Australia as a part of Indian delegation led by Shri Vivek Bharadwaj, Secretary (Mines). Shri Agrawal also attended the JWG meeting held on 01.11.2022, at the office of CMO, Sydney, Australia.

International Mining & Resources Conference 2022 (IMARC-2022)

8.19.5.3. Shri Shailendra Kumar, RCOM (Hyderabad) and Shri Deb Durlabh Dash, SMG (Raipur) visited El-Salvador during the period from 03.10.2022 to 07.10.2022 as team members to suggest remedial measures for systematic closure of abandoned gold and silver mines at El-Salvador. Report on the remedial measures was submitted on 21.11.2022.

Visit of Shri Shailendra Kumar, RCOM (Hyderabad) & Shri D. Dash, SMG (Raipur) to El-Salvador

8.20 **Representation on Committees**

1. Shri Abhay Agrawal, Controller of Mines (CZ) was nominated as Member Secretary of the Sub-Committee constituted under Chairpersonship of Joint Secretary (Policy) Ministry of Mines, as per the decision taken in the first meeting of the Granite and Marble Development Council, vide order no.1/17/2015-M.VI dated 17th March 2022.
2. Controller General in charge, IBM nominated Dr.V.A.J.Aruna, Suptdg. Officer (Ore Dressing), RMPL, Bengaluru and Shri Shailendra Kumar,R COM, Hyderabad for Preliminary Scrutiny Committee for the projects received under Science & Technology Programme Scheme of Ministry of Mines, in response to Ministry's Letter No.Met 4-14/5/2022 dated 6.04.2022.
3. Controller General in charge, IBM nominated Shri P.N.Sharma, Chief Controller of Mines, in charge, IBM as representative of IBM & Ministry of Mines on the Committee constituted by CPCB for identification of mines for backfilling of mine voids with ash or mixing of ash with overburden dump, as per notification No. 5481(E) dated 31.12.2021 regarding ash utilisation from coal or lignite based thermal power plants.
4. Controller General in charge, IBM nominated Shri Pankaj Kulshreshtha, Chief Controller of Mines, in charge, IBMon the Committee for identification of Critical and Strategic Minerals, constituted under the chairpersonship of Dr. Veena Kumari Dermal, JointSecretary, Ministry of Mines to discuss the status, process, and strategy for identification of critical and strategic minerals.
5. Ministry of Mines nominated Shri Pankaj Kulshreshtha, Chief Controller of Mines, in charge, IBMon the Committee for Examining the issue of Double Taxation and developing NMI constituted vide O.M.No.16/40/2021-M.VI dated 6thApril, 2021 having tenure upto 30th June, 2022.
6. Ministry of Mines nominated S/Shri P.N.Sharma, Chief Controller of Mines, in charge, IBM and Abhay Agrawal, Controller of Mines (CZ), IBM as members on the Committee constituted under Chairpersonship of Joint Secretary (Policy) Ministry of Mines, for examining introduction of intermediary timelines for various actions to be completed after declaration of successful bidder till execution of mining lease and to

facilitate timely production and dispatch from mine, vide O.M. No.16/28/2023-Mines VI dated 7th March, 2023.

7. Controller General in charge, IBM nominated Dr.Y.G.Kale, Controller of Mines (TMP Division) IBM as a Member and Shri Abhay Aggrawal, Controller of Mines (CZ) as Alternate Member for new Expert Appraisal Committee (EAC) for non-coal minerals.
8. Controller General, in charge IBM had constituted the Committee for revision of schedule of charges of IBM vide OM No..T-45006/CGBM/2012 Nagpur dated 22.12.2022 with following composition:

Chairman

Dr D.R. Kanungo, SO(OD) & Director I/c, MP Division

Members

1. Dr S.K. Jha, Superintending Mining Geologist, GMMM Cell
2. Shri B.B. Sahu, Regional Controller of Mines & OIC (Trg. Centre)
3. Shri K.K. Tardia, Regional Controller of Mines, TMP Division
4. Dr S.K. Shammi, Mineral Economist (Int.), ME Division
5. Shri L.B. Toal, Ore Dressing Officer, MP Division - Member Secretary

The Committee submitted its Report to Controller general, in charge IBM which was later forwarded to Ministry for approval vide IBM's letter M-11015(1)/MPD/2022-23 dated10.04.2023

8.21 Seminar/Symposium/Workshops

- **National Seminar on " Chattisgarh basin and its environs: Geology, Structure, Economic & Strategic Mineral Deposits and Future Perspective"**
  Dr. L.N. Padhi, DODO attended two days National Seminar on " Chattisgarh basin and its environs: Geology, Structure, Economic & Strategic Mineral Deposits and Future Perspective" organized by Atomatic Minerals Directorate for Exploration and Research, RTM University and Geological Survey of India at Dr. A.K. Dorle Pharmacy Auditorium, Department of Pharmaceutical Sciences, RTMN University, Nagpur on 5th& 6th August, 2022.

- **<u>'MINCON-2022'- A CONFERENCE & EXHIBITION ON MINES, MINERALS &METAL :</u>**
  Dr.Dillip R. Kanungo, Director (OD) I/c, IBM attended inaugural function of 'MINCON-2022"- a Conference & Exhibition on Mmines, Minerals & Metal

on 14th,15th& 16th Oct 2022 at Nagpur. Shri Pralhad Joshi, Hon'ble Union Minister of Parliamentary Affairs, Coal and Mines, Govt. of India was the Chief Guest of the function.

- **PARTICIPATION IN MBD-2022 CONFERENCE & PRESENTATION OF TECHNICAL PAPERS:**

  Shri V.A. Sontakkey, ODO, Shri L.B. Toal, ODO & Shri Santosh Pani, DODO from MMPL & PP, Mineral Processing Division, IBM, Nagpur attended and presented a following technical papers in the International Conference & Exhibition " **Mineral Business Development-2022 (MBD-2022)** " from 10-11 November, 2022 at Nagpur.

  i. Utilization of lean grade iron ore resources of India- The way forward
  by S.Pani, V.A. Sontakkey, D.R. Kanungo & S. Lohiya.

  ii. Significance of Mineralogical Characteristics in Beneficiation of low grade Iron ores- A comparative study on ores of Eastern India
  by S.K. Nanda, L.B. Toal, D.R. Kanungo & S. Lohiya.

  iii.Beneficiation of low grade Graphite ore and recovery of Vanadium as a by-product from Central India Graphite deposit-
  by S. Pani,S.K. Nanda, V.A. Sontakkey, L.B.Toal, D.R. Kanungo & S. Lohiya.

9.0 Work related to Hindi

हिंदी का प्रगामी प्रयोग

भारतीय खान ब्यूरो अपने मुख्यालय तथा सभी अधीनस्थ कार्यालयों में भारत सरकार की राजभाषा नीति को प्रभावी ढंग से कार्यान्वित कर रहा है। भारतीय खान ब्यूरो का मुख्यालय नागपुर, महाराष्ट्र में है जो 'ख' क्षेत्र में स्थित है। 06 अधीनस्थ कार्यालय 'क' क्षेत्र में, 01 अधीनस्थ कार्यालय 'ख' क्षेत्र में तथा शेष 08 अधीनस्थ कार्यालय 'ग' क्षेत्र में स्थित है। भारतीय खान ब्यूरो के सभी अधीनस्थ कार्यालयों ने राजभाषा विभाग के वार्षिक कार्यक्रम उल्लिखित लक्ष्यों को प्राप्ति कर लिया है। वर्ष 2022-23 के दौरान हिंदी कार्यान्वायन से संबंधित प्रगति का विवरण निम्नप्रकार है :-

- **विभागीय राजभाषा कार्यान्वयन समिति की 121 वीं बैठक** श्री पी .एन .शर्मा, मुख्य खान नियंत्रक (प्रभारी) की अध्यक्षता में दिनांक 06/04/2022 को महानियंत्रक महोदय के सभाकक्ष में आयोजित की गई।

विभागीय राजभाषा कार्यान्वयन समिति, भा. खा.ब्यू.(मुख्यालय), नागपुर की 121वीं बैठक (06.04.2022)

- **संसदीय राजभाषा समिति की तीसरी उप समिति द्वारा क्षेत्रीय कार्यालय, देहरादूनका राजभाषा निरीक्षण -:** संसदीय राजभाषा समिति की तीसरी उप समिति द्वारा क्षेत्रीय कार्यालय, देहरादून का दिनांक 14/05/2022 को राजभाषा निरीक्षण किया गया । इस हेतु निरीक्षण प्रश्नावली के मुख्यालय से संबंधित जानकारी के 03पृष्ठ तैयार किए गए एवं उक्त निरीक्षण से संबंधित अन्य आवश्यक कार्य किए गए। भारतीय खान ब्यूरो मुख्यालय नागपुर से उक्त निरीक्षण के दौरान श्री पंकज कुलश्रेष्ठ, मुख्य खान नियंत्रक

(प्रभारी) उपस्थित थे । देहरादून क्षेत्रीय कार्यालय की ओर से श्री मनीष क.मेंदीरत्ता, क्षेत्रीय खान नियंत्रक एवं अन्य अधिकारी उपस्थित थे ।

- **भारतीय खान ब्यूरो, मुख्यालय, नागपुर में हिंदी कार्यशाला का आयोजन :-**

भारत सरकार की राजभाषा नीति एवं हिंदी के प्रचार – प्रसार व प्रगति के उद्देश्य को ध्यान में रखते हुए भारतीय खान ब्यूरो, मुख्यालय, नागपुर में दिनांक 09 जून, 2022 को अधिकारियों एवं कर्मचारियों हेतु हिंदी कार्यशाला का आयोजन किया गया। इस हिंदी कार्यशाला में कुल 19 अधिकारियों एवं कर्मचारियों ने उत्साहपूर्वक भाग लिया।

हिंदी कार्यशाला में भारतीय खान ब्यूरो कार्यालय के डॉ. वाय. जी. काले, खान नियंत्रक एवं राजभाषा अधिकारी ने' हिन्दी के प्रगामी उपयोग में गोवा कार्यालय के अनुभव श्री सतीश चौरे, भंडार अधिकारी ने खरीद–बिक्री प्रक्रिया एवं भंडार संबंधी नियम तथा श्री दिनेश कुमार, वरिष्ठ प्रशासनिक अधिकारी ने प्रशासनिक मामलों में 'हिंदी का महत्व' विषय पर अपने व्याख्यान दिये।

अपने व्याख्यान में डॉ. वाय. जी. काले, खान नियंत्रक एवं राजभाषा अधिकारी ने कार्यशाला के आयोजन के उद्धेश्य एवं महत्ता बताते हुए अपने कार्यकाल के दौरान गोवा क्षेत्रीय कार्यालय में किए गए हिन्दी के उल्लेखनीय कार्यों से उपस्थितो को अवगत कराया साथ ही राजभाषा के नियमो, अधिनियमों एवं अनुच्छेदों की विस्तृत जानकारी देते हुए डॉ. मृदुला सिन्हा की 'हिन्दी भारत माता की बिंदी' कविता भी सुनायी।

श्री सतीश चौरे, भंडार अधिकारी ने अपने व्याख्यान में खरीद– बिक्री प्रक्रिया संबंधी नियमों व प्रक्रियाओं की एवं जेम पोर्टल संबंधी जानकारी दी। साथ ही धनराशि के व्यय एवं भुगतान संबंधी सामान्य सिद्धांतों की जानकारी देते हुए निविदा तथा इलेक्ट्रॉनिक्स रिवर्स ऑक्शन पर विस्तार से बताय।

श्री दिनेश कुमार, वरिष्ठ क अधिकारी ने अपने व्याख्यान में प्रशासन का महत्व, उसकी भूमिका, उपयोगिता एवं उसका अर्थ बताते हुए इस की आवश्यकता की जानकारी उपस्थितों को दी।साथ ही धारा 3(3) के उल्लंघनों एवं विभिन्न पदों की भर्ती से संबंधित विस्तृत जानकारी दी।

कार्यशाला के पश्चात प्रतिभागियों से कार्यशाला के विषय में उनकी प्रतिक्रियाएं भी प्राप्त की गई। सभी प्रतिभागियों ने सकारात्मक प्रतिक्रियाएं व्यक्त करते हुए कार्यशालाओं की संख्या बढ़ाने के सुझाव दिए। इस प्रकार हिंदी कार्यशाला सफलतापूर्वक संपन्न हुई।
अंत में श्री अभिनय कुमार शर्मा, संपादक ने सभी उपस्थितों का धन्यवाद दिया।

भा. खा.ब्यूरो, मुख्यालय, नागपुर में हिंदी कार्यशाला का आयोजन (9.6.2022)

- **भूवनेश्वर क्षेत्रीय कार्यालय का राजभाषा कार्यान्वयन संबंधी निरीक्षण :-** डॉ. वाय. जी. काले, खान नियंत्रक (टी.एम.पी.) एवं राजभाषा अधिकारी द्वारा दिनांक : 26/05/2022 को भूवनेश्वर क्षेत्रीय कार्यालय का राजभाषा कार्यान्वयन संबंधी निरीक्षण किया गया एवं निरीक्षण रिपोर्ट भेजी गई ।
- **हैदराबाद क्षेत्रीय कार्यालय का राजभाषा कार्यान्वयन संबंधी निरीक्षण :-**डॉ. वाय. जी. काले,खान नियंत्रक (टी.एम.पी.) एवं राजभाषा अधिकारी द्वारादिनांक: 07/07/2022 को हैदराबाद क्षेत्रीय कार्यालय का राजभाषा कार्यान्वयन संबंधी निरीक्षण किया गया एवं निरीक्षण रिपोर्ट भेजी गई।
- हिंदी शिक्षण योजना, नागपुर के अंतर्गत हिंदी पारंगत प्रशिक्षण के उपरांत कार्यालय के 07 कार्मिकों ने सफलता पूर्वक परीक्षा उत्तीर्ण किया।
- **जबलपुर कार्यालय में हिंदी कार्यशाला का आयोजन :-**

  जबलपुर कार्यालय में दिनांक 08.09.2022 को एक दिवसीय हिंदी कार्यशाला का आयोजन किया गया जिसमे हिंदी शिक्षण योजना के सहायक निदेशक श्री घनश्याम प्रसाद नामदेव ने यूनिकोड के उद्भव, आज तक की यात्रा और कार्यालय में इसके दैनंदिन कार्यों में बेहतर प्रदर्शन के लिए कैसे उपयोग करें। दूसरे सत्र में श्री माधवराव साबरे, वरिष्ठ खनन भूवैज्ञानिक ने एमसीडीआर के तहत खदान निरीक्षण में विभिन्न पहलुओं को ध्यान में रखने बाबत जानकारी दी। सभी कार्यालय कर्मियोंइस कार्यशाला से लाभान्वित हुए।

जबलपुर कार्यालय में हिंदी कार्यशाला का आयोजन (8.9.2022)

- **<u>भारतीय खान ब्यूरो मुख्यालय में हिंदी पखवाड़ा समारोह - 2022</u>(Rajbhasha Fortnight)**

- भारतीय खान ब्यूरो में दिनांक 14 सितम्बर 2022 से 29 सितम्बर 2022 तक हिंदी पखवाड़ा का आयोजन किया गया। इस वर्ष हिंदी दिवस राजभाषा विभाग के निदेशानुसार केंद्रीयकृत रूप से सूरत में आयोजित किया गया। भारतीय खान ब्यूरो की ओर से डॉ. वाय. जी. काले, खान नियंत्रक एवं राजभाषा अधिकारी एवं श्री गुमनाराम, उपखान नियंत्रक,क्षेत्रीय कार्यालय गांधीनगर ने सूरत में आयोजित हिंदी दिवस तथा अखिल भारतीय राजभाषा सम्मलेन में भाग लिया। हिंदी पखवाड़े के दौरान विभिन्न हिंदी विषयक प्रतियोगिताएं आयोजित की गयीं । विभिन्न हिंदी विषयक प्रतियोगिताओं मेंभारतीय खान ब्यूरोके कार्मिकों ने बढ़चढ़कर हिस्सा लिया ।
- दिनांक 30/09/2022 को श्री पंकज कुलश्रेष्ठ, मुख्य खान नियंत्रक (प्रभारी) की अध्यक्षता में हिंदी पखवाड़ा - 2022 का समापन एवं पुरस्कार वितरण समारोह आयोजित किया गया । इस अवसर पर मॉयल लिमिटेड के अध्यक्ष-सह प्रबंध निदेशक श्री मुकुंद पी. चौधरीमुख्य अतिथि के रूप में उपस्थित थे । साथ ही डॉ. वाय. जी. काले, खान नियंत्रक (टी.एम.पी.) एवं राजभाषा अधिकारीएवं अन्य वरिष्ठ अधिकारी तथा कार्मिक भी इस अवसर पर उपस्थितथे । कार्यक्रम के आरम्भ में माननीय गृह एवं सहकारिता मंत्री, माननीय संसदीय कार्य कोयला एवं खानमंत्री तथा मंत्रिमंडल सचिव का सन्देश मंचासीन अधिकारीयों द्वारा वाचन किया गया ।
- हिंदी पखवाड़ा समापन समारोह के अवसर पर भारतीय खान ब्यूरो नागपुर की हिंदी गृह पत्रिका 'खान भारती' - 2022 का विमोचन भी किया गया । इसके पूर्व सभा को संबोधित

करते हुए मुख्य अतिथि श्री मुकुंद पी. चौधरीने राजभाषा हिंदी की महत्ता पर प्रकाश डाला और हिंदी गृह पत्रिका 'खान भारती' - 2022 की प्रशंसा की ।

- हिंदी पखवाड़े के समापन समारोह
- हिंदी पखवाड़े के समापन समारोह के दौरान जबलपुर क्षेत्रीय कार्यालय की राजभाषा हिंदी की गृह- पत्रिका मेकलसुता के प्रथम संस्करण का विमोचन मुख्य अतिथि श्री संतोष कुमार पटले, जबलपुर क्षेत्रीय प्रमुख, DGM के कर कमलों से श्री नरेश कुमार कटारिया, प्रभारी - IBM गोवा क्षेत्रीय कार्यालय की उपस्थिति में संपादित किया गया।
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<tr><td colspan="2">भारतीय खान ब्यूरो मुख्यालय में हिंदी पखवाड़ा समारोह - 2022</td></tr>
<tr><td>  </td><td>  </td></tr>
<tr><td>क्षेत्रीय कार्यालय गांधीनगर में राजभाषा पखवाड़ा समापन समारोह की कुछ झलकियां जिसमें कुछ नवाचार भी किए गए</td><td>जबलपुर क्षेत्रीय कार्यालय की राजभाषा हिंदी की गृह- पत्रिका मेकलसुता के प्रथम संस्करण का विमोचन</td></tr>
</table>

- **सुरत, गुजरात में हिंदी दिवस कार्यक्रम का आयोजन :**राजभाषा विभाग, गृह मंत्रालय, नई दिल्ली द्वारा केंद्रीकृत रूप से हिंदी दिवस का शुभारंभ 14 सितंबर, 2022 को सुरत, गुजरात में किया गया । उक्त कार्यक्रम में भारतीय खान ब्यूरो की ओर से डॉ. वाय.

जी. काले,खान नियंत्रक (टी.एम.पी.)एवं राजभाषा अधिकारीतथा श्री गुमना राम उप खान नियंत्रक ने भाग लिया ।साथ ही दिनांक 15 सितम्बर 2022 को संपन्न हुए द्वितीय अखिल भारतीय राजभाषा सम्मलेन में उक्त अधिकारियों ने भाग लिया The Committee of Parliament on Official Language inspected IBM's Bengaluru Regional Office today. The Committee on the whole expressed satisfaction over the workings and nature of functioning of IBM. Glimpses captured during the occasion are as below:

राजभाषाविभाग, गृहमंत्रालय,नईदिल्लीद्वारा केंद्रीकृत रूप से हिंदीदिवसकाशुभारंभ सुरत,गुजरात 14.09.2022)

- **भारतीय खान ब्यूरो, मुख्यालय, नागपुर में हिंदी कार्यशाला का आयोजन**

भारत सरकार की राजभाषा नीति एवं हिंदी के प्रचार - प्रसार व प्रगति के उद्देश्य को ध्यान में रखते हुए भारतीय खान ब्यूरो, मुख्यालय, नागपुर में दिनांक 15 दिसंबर 2022 को अधिकारियों एवं कर्मचारियों हेतु हिंदी कार्यशाला का आयोजन किया गया। इस हिंदी कार्यशाला में कुल 18 अधिकारियों एवं कर्मचारियों ने उत्साहपूर्वक भाग लिया।हिंदी कार्यशाला में भारतीय खान ब्यूरो कार्यालय के श्री गौरव शर्मा, खनिज अर्थशास्त्रीने 'भारतीय खान ब्यूरो को प्रस्तुत किए जाने वाले महत्वपूर्ण दस्तावेज' तथा श्री अशोक नायक, प्रबंधक (राजभाषा), भारतीय रिजर्व बैंक, ने 'राजभाषा नीति' एवं श्री असीम कुमार, कनिष्ठ अनुवाद अधिकारी ने 'वर्तनी एवं वाक्य संरचना' विषय पर अपने व्याख्यान दिये।


भा. खा.ब्यूरो, मुख्यालय, नागपुर में **हिंदी कार्यशाला का आयोजन**(15.12.2022)

- **भारतीय खान ब्यूरो की पत्रिका 'खान भारती' नराकास पुरस्कार से सम्मानित**

वर्ष 2021 के लिए नगर राजभाषा कार्यान्वयन समिति नागपुर, (का-2), द्वारा भारतीय खान ब्यूरो, मुख्यालय की पत्रिका 'खान भारती अंक-7' को प्रथम प्रोत्साहन पुरस्कार से सम्मानित किया गया। इस पुरस्कार को भारतीय खान ब्यूरो, नागपुर की ओर से श्री अभिनय कुमार शर्मा, संपादक एवं श्रीमती मिताली चटर्जी, वरिष्ठ अनुवाद अधिकारी द्वारा नगर राजभाषा कार्यान्वयन समिति की दिनांक 19/12/22 को आयोजित छमाही बैठक में ग्रहण किया गया। विदित हो यह पुरस्कार खान भारती के ई-पत्रिकाई-फ्लिप बुक प्रारूप को प्राप्त हुआ है। बैठक की अध्यक्षता डॉ. मनोज कुमार, अध्यक्ष नराकास (का-2) द्वारा दी गई। बैठक में नराकास (का-2) से जुड़े कार्यालयों के वरिष्ठ अधिकारियों एवं कर्मचारियों ने प्रतिभाग किया।

वर्ष 2021 के लिए न.रा. का. स. नागपुर, (का-2), द्वारा भा. खा. ब्यू.मुख्यालय की पत्रिका 'खान भारती अंक-7' को प्रथम प्रोत्साहन पुरस्कार

- नगर राजभाषा कार्यान्वयन समिति जबलपुर (कुल 48 कार्यालय) की दिनांक 16.12.2022 को पश्चिम-मध्य रेल मुख्यालय द्वारा आयोजित 11वीं बैठक में भारतीय खान ब्यूरो के जबलपुर क्षेत्रीय कार्यालय को प्रथम राजभाषा ट्रॉफी से सम्मानित किया गया।

भारतीय खान ब्यूरो के जबलपुर क्षेत्रीय कार्यालय को प्रथम राजभाषा ट्रॉफी

- **विभागीय राजभाषा कार्यान्वायन समिति की दिनांक 05.01.2023 को 124 वीं बैठक का आयोजन** :- विभागीय राजभाषा कार्यान्वययन समिति की 124 वीं बैठक श्री पंकज कुलश्रेष्ठ, मुख्य खान नियंत्रक (प्रभारी) की अध्यक्षता में दिनांक 05.01.2023 को आयोजित की गई। सर्वप्रथम राजभाषा अधिकारी द्वारा समीक्षाधीन तिमाही के दौरान हिंदी सम्बन्धी कार्यों का विवरण सभा के समक्ष पढ़कर सुनाया गया। साथ ही उन्होने यह भी सूचित किया कि वर्ष 2021 के लिए नगर राजभाषा कार्यान्वथयन समिति नागपुर, (का.2) द्वारा भारतीय खान ब्यूरो, मुख्यालय की पत्रिका "खान भारती अंक-7" को प्रथम प्रोत्साहन पुरस्कार से सम्मानित किया गया है तथा राजभाषा विभाग, गृह मंत्रालय द्वारा क्षेत्रीय कार्यालय भुवनेश्वर को राजभाषा के सर्वश्रेष्ठ कार्यान्वयन के लिए वर्ष 2020-21 के लिए द्वितीय पुरस्कार और वर्ष 2021-22 के लिए प्रथम पुरस्कार प्राप्त हुआ है। इसके अतिरिक्त नगर राजभाषा कार्यान्वयन समिति, जबलपुर द्वारा वर्ष 2021-22 के लिए राजभाषा हिन्दी में उत्कृष्ट कार्य के लिए भारतीय खान ब्यूरो के जबलपुर क्षेत्रीय कार्यालय को प्रथम पुरस्कार दिया गया है। इसके लिए अध्ययक्ष महोदय और उपस्थित सभी सदस्यों ने इस उपलब्धि पर बधाई दी।
- बैठक में पिछली बैठक में लिए गए निर्णयों पर की गई अनुवर्ती कार्रवाई पर चर्चा की गई। मुख्यालय नागपुर में बोर्ड, नामपट्ट इत्यदि क्षेत्रीय भाषा में लिखे जाने के संबंध में राजभाषा अधिकारी ने सूचित किया कि त्रिभाषा बोर्ड एवं नामपट्ट हेतु भंडार अनुभाग द्वारा कार्रवाई की जा रही है।

- हिंदी पत्राचार, राजभाषा का सरलीकरण, ई-ऑफिस में टिप्पणी की गणना एवं त्रिभाषा नेमप्लेट का उपयोग इत्यादि विषयों पर विस्तृत चर्चा कीगई ।
- अंत में अध्यक्ष महोदय एवं सभी सदस्यों का आभार श्री अभिनय कुमार शर्मा, संपादक, द्वारा व्यक्त किया गया ।

विभागीय राजभाषा कार्यान्वयन समिति, भा. खा.ब्यू.(मुख्यालय), नागपुर की 124 वीं बैठक (05.01.2023)

- गुवाहाटी क्षेत्रीय कार्यालय का राजभाषा कार्यान्वयन संबंधी निरीक्षण -: भारतीय खान ब्यूरो मुख्यालय द्वारा दिनांक:13/01/2023 को गुवाहाटी क्षेत्रीय कार्यालय का राजभाषा कार्यान्वयन संबंधी निरीक्षण किया गया एवं निरीक्षण रिपोर्ट भेजी गई । निरीक्षण के पूर्व दिनांक:12/01/2023 को उक्तग कार्यालय में हिंदी कार्यशाला का भी आयोजन किया गया।

- **खान मंत्रालय की दिनांक 15.02.2023 को आयोजित ऑनलाइन समीक्षा बैठक**:-खान मंत्रालय द्वारा दिनांक 15.02.2023 को श्री शकील आलम , आर्थिक सलाहकार, खान मंत्रालय की अध्यक्षता में राजभाषा कार्यान्वयन से सम्बंधित ऑनलाइन समीक्षा बैठक का आयोजन किया गया जिसमे भारतीय खान ब्यूरो मुख्यालय, नागपुर सहित सभी आंचलिक/ क्षेत्रीय कार्यालयों/ खनिज प्रसंस्करण प्रयोगशाला, आदि के वर्ष 2021 - 2022 के दौरान राजभाषा सम्बन्धी कार्यों की समीक्षा की गई।उक्त बैठक में भारतीय खान ब्यूरो मुख्यालय, नागपुर से डॉ. वाय. जी. काले, खाननियंत्रक एवं राजभाषा अधिकारी ने भाग लिया।बैठक हेतु मुख्यालय स्तर पर आवश्यक कार्य किये गए।सभी आंचलिक/ क्षेत्रीय कार्यालयों/ खनिज प्रसंस्करण प्रयोगशाला, से निर्धारित प्रपत्र में वर्ष2021 - 2022 के लिए हिंदी कार्यों के आंकड़े मंगाए गए और उन्हें संग्रहित कर खानमंत्रालय को भेजागया।उक्त आंकड़े एक्सेल फॉर्मेट में भी भेजे गए।बैठक में खानमंत्रालय द्वारा दिए गए सुझावों पर अमल करने एवं अनुवर्ती कार्रवाई हेतु अनुदेश सभी कार्यालयों को प्रेषित कर दिए गए हैं।

दिनांक 03 मार्च 2023 को रायपुर छतीसगढ़ में आयोजितमध्य तथा पश्चिम क्षेत्रों का राजभाषा सम्मेलन:

क्षेत्रीय कार्यालय गोवा, भारतीय खान ब्यूरो को वर्ष 2021-2022 के दौरान संघ की राजभाषा नीति के उत्कृष्ट क्रियान्वयन के लिए भारत सरकार गृह मंत्रालय राजभाषा विभाग द्वारा पश्चिम क्षेत्र स्थित केंद्रीय कार्यालयों की श्रेणी में प्रथम स्थान राजभाषा पुरस्कार प्रदान किया गया। रायपुर में दिनांक 03/03/2023 को आयोजित क्षेत्रीय राजभाषा सम्मेलन में माननीय गृह राज्य मंत्रीश्री अजय कुमार मिश्रा जी के कर कमलो से पुरस्कार स्वरूप क्रमशः शील्ड तथा प्रमाण पत्र प्राप्त करते हुए कार्यालय प्रमुख श्री नरेश कुमार कटारिया, उप खान नियंत्रक तथा श्री आर. सी. महतो, कनिष्ठ अनुवाद अधिकारी।

क्षेत्रीय कार्यालय गोवा, भा. खा. ब्यू. को वर्ष 2021-2022 के दौरान संघ की राजभाषा नीति के उत्कृष्ट क्रियान्वयन के लिए भारत सरकार गृह मंत्रालय राजभाषा विभाग द्वारा पश्चिम क्षेत्र स्थित केंद्रीय कार्यालयों की श्रेणी में प्रथम स्थान राजभाषा पुरस्कार प्रदान

- **भारतीय खान ब्यूरो, मुख्यालय, नागपुर में दिनांक 16/03/2023 को हिंदी कार्यशाला का आयोजन**

भारत सरकार की राजभाषा नीति के कार्यान्वयन एवं हिंदी के प्रचार-प्रसार व प्रगति के उद्देश्य को ध्यान में रखते हुए भारतीय खान ब्यूरो, मुख्यालय, नागपुर में दिनांक 16 मार्च, 2023 को अधिकारियों एवं कर्मचारियों हेतु हिंदी कार्यशाला का आयोजन किया गया।

हिंदी कार्यशाला में वेस्टर्न कोलफील्ड लिमिटेड के डॉ. मनोज कुमार, सचिव नराकास ने राजभाषा नीति, श्री राजीव कुमार, मुख्य प्रबंधक(राजभाषा), बैंक ऑफ इंडिया ने हिन्दी भाषा तथा श्री असीम कुमार, कनि. अनुवाद अधिकारी ने हिन्दी तिमाही रिपोर्ट आदि विषयों पर अपने व्याख्यान दिए। इस हिंदी कार्यशाला में कुल 28 अधिकारी एवं कर्मचारियों ने उत्साहपूर्वक भाग लिया।

भारतीय खान ब्यूरो, मुख्यालय, नागपुर में दिनांक 16/03/2023 को हिंदी कार्यशाला का आयोजन भारत सरकार की राजभाषा नीति के कार्यान्वयन एवं हिंदी के प्रचारद्दप्रसार व प्रगति के उद्देश्य को ध्यान में रखते हुए भारतीय खान ब्यूरो, मुख्यालय, नागपुर में दिनांक 16 मार्च, 2023 को अधिकारियों एवं कर्मचारियों हेतु हिंदी कार्यशाला का आयोजन किया गया। इस हिंदी कार्यशाला में कुल 28 अधिकारी एवं कर्मचारियों ने उत्साहपूर्वक भाग लिया।

सर्वप्रथम खान नियंत्रक एवं राजभाषा अधिकारी महोदय डॉ.वाय.जी. काले ने आमंत्रित व्याख्याताओं का संक्षिप्त परिचय दिया तथा कार्यशाला के आयोजन की महत्ता पर प्रकाश डालते हुए इसकी औपचारिक शुरुआत की।

हिंदी कार्यशाला में वेस्टर्न कोलफील्ड लिमिटेड के डॉ. मनोज कुमार, सचिव नराकास ने राजभाषा नीति, श्री राजीव कुमार, मुख्य प्रबंधक(राजभाषा), बैंक ऑफ इंडिया ने हिन्दी भाषा तथा श्री असीम कुमार, कनि. अनुवाद अधिकारी ने हिन्दी तिमाही रिपोर्ट आदि विषयों पर अपने व्याख्यान दिए।

अपने व्याख्यान में डॉ. मनोज कुमार ने राजभाषा नीति विषय पर व्यापक रूप से अपने विचार रखे जिसमें उन्होनें अंग्रेजो के काल से हिन्दी की क्रांति के संबंध में विस्तार से बताते हुए हिन्दी के वर्णों, अंकों एवं लिपि संबंधी जानकारी दी। श्री राजीव कुमार ने हिन्दी भाषा पर व्याख्यान देते हुए संविधान में राजभाषा से संबंधित विभिन्न अनुच्छेदों की विस्तृत जानकारी दी।

साथ ही हिन्दी के शब्दों जैसे 'निवेदन' व 'अनुरोध' तथा 'निमंत्रण' व 'आमंत्रण' जैसे अनेकों शब्दों में क्या अंतर होता है इसके बारे में बताया। श्री असीम कुमार, कनि. अनुवाद अधिकारी ने तिमाही रिपोर्ट भरते हुए क्या सावधानी बरती जाए इसकी जानकारी देते हुए इसके प्रारूपण से प्रतिभागियों को अवगत कराया साथ ही रिपोर्ट में आंकडो को भरते समय होने वाली सभी भ्रांतियों को दूर किया ।

कार्यशाला में सभी प्रतिभागियों ने अपनी विशेष रूचि दिखाते हुए व्याख्याताओं से अपनी समस्याओं का निवारण किया साथ ही ऐसी कार्यशाला समयदृसमय पर नियमित रूप से आयोजित किए जाने की इच्छा व्यक्त की ।

कार्यशाला के पश्चात सभी प्रतिभागियों से कार्यशाला के विषय में उनकी प्रतिक्रियाएं भी प्राप्त की गई। सभी प्रतिभागियों ने सकारात्मक प्रतिक्रियाएं व्यक्त की साथ ही यह भी कहा कि कार्यशाला में व्याख्याओं के साथ विचार -विमर्श आवश्यक है तथा इस कार्यशाला को पूरी तरह से परिपूर्ण बताया ।

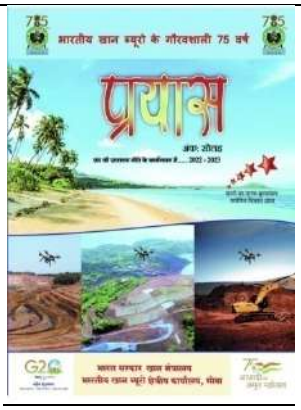
अंत में श्री ए. के. शर्मा, संपादक द्वारा दिए गए धन्यवाद ज्ञापन के साथ कार्यशाला सफलतापूर्वक संपन्न हुई ।


भारतीय खान ब्यूरो, मुख्यालय, नागपुर में हिंदी कार्यशाला का आयोजन (16.03.2023)

- राजभाषा नीति के क्रियान्वयन में दिनांक 31 मार्च 2023 को राजभाषा हिंदी कार्यशाला का गरिमामय आयोजन गोवाक्षेत्रीय कार्यालय में किया गया। इस कार्यशाला का उद्घाटन परंपरा के अनुसार विधिवत रूप से मुख्य अतिथि श्री मुकेश कुमार मीना, संयुक्त निदेशक एवं प्रभारी, एम.एस.एम.ई., मडगांव गोवा द्वारा दीप जलाकर किया। स्वागत भाषण की प्रस्तुति हिंदी संपर्क अधिकारी श्री आर. एस. सौदागर, सहायक खान नियंत्रक द्वारा की गई। इसके बाद राजभाषा हिंदी गृह पत्रिका 'प्रयास' के सोलहवें अंक का विमोचन समारोहके मुख्य अतिथि के करकमलो से हुआ। मुख्य अतिथि ने अपने संबोधन में उक्त पत्रिका की भूरि- भूरि प्रशंसा की तथा पत्रिका के प्रकाशन में योगदान करनेवाले की सराहना की और उन्हें बधाई दी। आगे उन्होंने कार्यालय की

राजभाषा हिंदी के क्रियान्वयन की भी सराहना की तथा आगे भी श्रेष्ठ क्रियान्वयन कायम रहे इसकी शुभकामनाएं दी। इस अवसर पर विशिष्ट अतिथि के रूप में उपस्थित श्री जौहरी, सहायक निदेशक, एम.एस.एम.ई., मडगांव गोवा ने भी अपने विचार व्यक्त किए। इस कार्यशाला में हिंदी के महात्व पर विस्तार से प्रकश डाला तथा कार्यालय के कार्मिकों में हिदी के प्रगामी प्रयोग एवं प्रचार - प्रसारके प्रति प्रतिबद्धता की सराहना की और बताया की इनकी इसी प्रतिबद्धता और हिंदी के प्रति प्रेम का प्रतिफल है कि वित्तीय वर्ष के इस आखरी महीने में अत्यधिक व्यस्तता के बावजूद राजभाषा हिंदी गृह पत्रिका प्रयास के सोलहवें अंक का प्रकाशन संभव हो पाया है। इसके लिए सभी कार्मिक और उनके परिजन प्रशंसा के पात्र हैं। संपादक मंडल के सदस्यों को भी उनके अध्यवसाय के लिए अध्यक्ष महोदय ने उनकी सराहना की और बधाई दी। । संकाय के रूप श्री विनीत बांदेकर, वरिष्ठ प्रचालन अधिकार, भारतीय स्टेट बैंक, मडगांव, गोवा तथा उनके सहकर्मी श्री ऋषि और श्री अक्षय ने अपने योगदान दिए। तीनों संकायों ने आयकर के विभिन्न प्रावधानों को हिंदी माध्यम से बड़े विस्तार से बतलाया। विषय विशेषज्ञ संकायों ने आयकर प्रपत्र को हिंदी में भरने के लिए प्रायोगिक रूप से बतलाया, जो प्रशिक्षनार्थियों / कार्मिकों के लिए बेहद उपयोगी रहा।

राजभाषा हिंदी कार्यशाला का आयोजन गोवाक्षेत्रीय कार्यालय (31.03.2023)



राजभाषा हिंदी गृह पत्रिका 'प्रयास' के सोलहवें अंक का विमोचन समारोह

Annexure 1

REPORT ON ACTIVITIES UNDERTAKEN BY INDIAN BUREAU OF MINES DURING SWACHHATAPAKHWARA FOR THE YEAR 2022 (16-30 NOV 2022)

Indian Bureau of Mines has been conducting various activities as part of SwachhataAbhiyanevery year as per the directives of Ministry of Mines. These activities are carried out in the office workplaces and office premises as well as at the mine sites. The activities carried out at IBM offices include special cleanliness drives with participation of all the employees, awareness campaigns through various activities, posters & banners etc. In addition to above, IBM has also taken initiative to observe the SwachhataAbhiyan at the various mines under the jurisdiction of various Regional Offices of IBM. A total budget of Rs. 2.2 lakhs has been incurred for SwachhataPakhwara 2022.

With reference to the Office Memorandum of the Ministry of Mines, Government of India issued vide letter No. 34/14/2022-Admin dated 11/11/2022, it has been conveyed to observe the SwachhataPakhwada during the 2nd fortnight i.e. from 16th November 2022 to 30th November 2022 at IBM Headquarters and in all Zonal/ Regional/ RODL Offices. Various activities have been carried out to keep the office premises/rooms clean. Detailed account of activities undertaken during SwachhataPakhwada is given below:-

1. Dusting, cleaning and rearranging of files/records and replacement of Old and torn file covers with new one.
2. Weeding out unwanted office records/papers/files.
3. Dusting, mopping / sweeping in various sections and cleaning of furniture, cabinets, racks, almirahs, etc.
4. Painting of walls & doors wherever necessary.
5. Deep sanitization and cleaning of office premises including corridors, stairs.
6. Regular cleaning of toilets.
7. Banners, Posters have been displayed at all important places inside and outside the office premises for creating awareness on cleanliness.

Photographs of various activities organized at Indian Bureau of Mines are as follows:-

SWACHHATA PAKHWADA AT IBM (H.Q), NAGPUR PREMISES

	
Before	**After**
	
Before	**After**

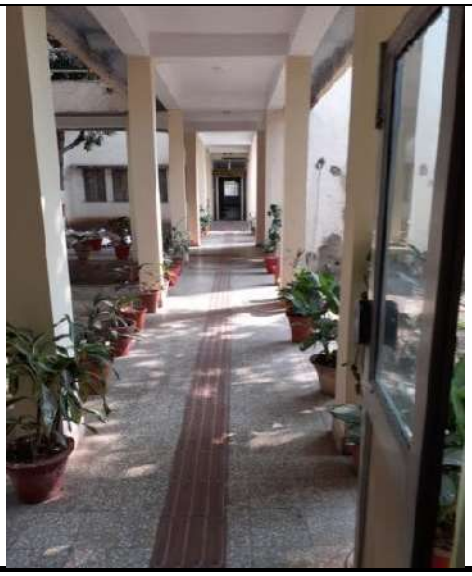
	
Before	**After**
	
Before	**After**
	
Before	**After**

	
Before	**After**

SWACHHATA PAKHWADA AT MMPL & PP, NAGPUR

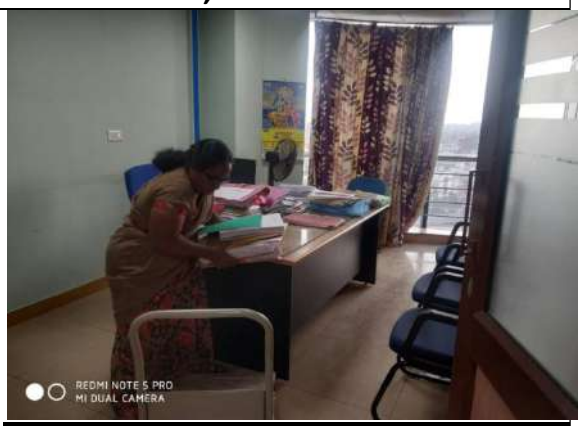
	

Entrance of the Analytical Laboratories

Before	After
	
Office entrence area decorated with New flower pots	
Before	**After**
	
Before	**After**
	
Garrage before Swachhtha 2022	**Garrage after Swachhtha 2022**

Distribution of Cleaning kits to the Isasani Area people, Indira Nagar, Nagpur.

SWACHHATA PAKHWADA AT REGIONAL OFFICE, HYDERABAD



Lecture on importance of Swachhata in daily life at Kolkata ZO
SWACHHATA PAKHWADA AT REGIONAL OFFICE, RANCHI

Under the aegis of Indian Bureau of Mines, Nagpur Region, "Swachhta Pakhwada" campaign atNaokari Limestone Mine of UltraTech Cement Ltd.

Under the aegis of Indian Bureau of Mines, Nagpur Region, "Swachhta Pakhwada" campaign at Dalmia Cement (Bharat) Ltd, Naranda Limestone Mine.

Under the aegis of IBM's Jabalpur Regional Office, "Swachhta Pakhwada" campaign at various mines under its jurisdiction, namely, Satna Limestone Mines, Salaiya Limestone Mine, UltraTech Cements Ltd of Sidhi Cement Works

Annexure 2

Report on Special campaign 2.0

Special campaign 2.0 in respect of (i) disposal of pending references and grievances (ii) record management (weeding out of files) (iii) disposal of scrap/ obsolete items and (iv) cleanliness drive in office premises is ongoing activity in IBM. Brief details of activities carried out in 2022-23 is as follows:

Activities taken up by IBM

- Implementation of E-office at IBM HQ w.e.f. 31.01.2022 and at field offices from 31.12.2022
- Record management
- Disposal of Scrap/ Obsolete items
- Development of Innovative ideas
- Setting up of 03 compost pits; one each at IBM HQ, Nagpur, MMPL, Hingna & SZ, Bangalore offices.
- To make operational of an old rainwater harvesting system at IBM South zone, Bangalore office.
- Outdoor special campaign activities in schools and other public places
- Cleanliness and beautification of office premises
- Disposal of pending public grievances

Summary of Achievements

- E-office implemented in IBM HQ and all regional offices.
  - in IBM HQ w. e. f. 01.10.2022 and
  - at six field offices from 15.11.2022 and
  - at remaining field offices w.e.f. 28.11.2022.
- Record Management 100 % target achieved
  - 39277 Files Reviewed
  - 19543 Files weeded out.
  - 7000 Sq. Ft space freed.
- Total Revenue of Rs. 2,58,514/- generated through identifying & e-auctioning of Obsolete items / scrap disposal & 02 obsolete old vehicle.
- Disposal of pending public grievances were done as and when received.

- Innovative ideas (Development of 3 compost pit sites repairing of rainwater harvesting system at Bangalore office) have been completed.
  - Development of compost pit at IBM HQ premises Nagpur HQ,
  - Development of compost pit at MMPL plant MIDC Hingna
  - Development of compost pit at Bangalore office Premises
  - Repairing & maintenance of rainwater harvesting system at Bangalore office

- **Other activities completed:**
  - Development of Badminton courts at Ajmer and Bhubaneswar
  - Erection of glow sign boards at Dehradun, Bangalore, Kolkata offices
  - Concreting of front pavement at Dehradun office
  - Painting of Machinery and equipment of MMP lab
  - Setting up of bird feeding arrangement in Jabalpur office premises
  - Development of garden in office premises of Goa
  - Development of garden with herbal plants in Bhubaneswar office premises

- **Outdoor Cleanliness Campaigns conducted in schools and other public places**
  1. FIT INDIA RUN with cleanliness drive at IBM HQ Nagpur/ Bangalore/ Ajmer
  2. Cleanliness campaign at Kolkata Zonal Office
  3. Outdoor Cleaning programme, IBM, Bangalore
  4. Outdoor cleanliness activities , Raipur office IBM
  5. Bhubaneswar RO carried outdoor campaign through afforestation of herbal plants in the office premises garden
  6. Ranchi regional office conducted special swachhta campaign at Government School at Village Mudma, Ranchi district. And Swachhta kits are distributed to school

7. Ranchi regional office conducted another special swachhta campaign at Government School at Village Pakhar, Lohardaga district. Jharkhand
8. Bhubaneswar Regional Office IBM conducted Outdoor Swachhata campaign (Debate & Drawing competition) at Gandamunda Government High School, Bhubaneswar, Odisha

9. Ranchi regional office organised programme for Distribution of cleaning and hygiene items to Hanterpathardih Primary Health Centre, Nimdih block, SaraikelaKharsawan district, Jharkhand under special campaign 2.0

10. Ranchi regional office organised programme for Distribution of hygiene kits to Pahardhar Primary school, Jharkhand under special campaign 2.0

11. Publicity and awareness programme in association with JSMDC under Ranchi region

12. Dehradun Regional Office has conducted outdoor campaign on dated 08.10.2022 at Govt. Middle School, where sanitization kit was distributed to the students of the schools

13. Plantation drive at new office building construction site of Ranchi regional office IBM. Other stake holders are also associated in this campaign. Special campaign posters have been distributed to the stakeholders for display at Mine sites

14. Ranchi Regional office IBM pursued the stakeholder and organised a cleaning drive under swachhta campaign 2.0 : Publicity and propaganda with cleanness campaign at Jyoti pahari kyanite mines of M/s JSMDC

15. Raipur regional office conducted an Outdoor campaign under Swachchhata campaign. The distribution of swachhta kits to Govt. Primary school, Amashivni village Raipur. And carried out Rangoli and Drawing competition & Prize distribution to winners of competitions activities

16. Ajmer Regional office conducted a Cleanliness Campaign on 19.10.2022 in IBM residential colony, Adarsh nagarAjmer . The officials & residents along with their families participated in the Cleanliness Campaign

17. Kolkata East zone office conducted Out door Special Campaign for Cleanliness of Road and surrounding area of office

18. Guwahati regional office conducted an Outdoor campaign under Swachchhata campaign 2.0 at SarbaJanik Hindi M.E School, Noonmati, Guwahati on 20.10.2022. The distribution of swachhta kits to school kids was done

19. Raipur regional office conducted an Outdoor campaign under Swachchhata campaign 2.0 and Swachchhata Kit were distributed in Govt. school saduu, Raipur

20. Jabalpur regional office conducted Out door Special Campaign for Cleanliness of Road and surrounding area of office & IBM Colony Jabalpur

21. Swachchtha awareness campaign at Iron Ore Mine in Jharkhand under the aegis of IBM Ranchi Regional Office

22. IBM, Kolkata East Zone Office under the Special Campaign 2.0 conducted an Swachchtha awareness & cleanliness Campaign at Sukanya Home, Saltlake, Kolkata & Distributed Swachhata Kits to the Girls who actively participated in the programme.

23. Chennai Regional office conducted Swachchtha awareness campaign outdoor activity at Olcott Memorial School, Chennai on 28/10/2022. Activities like Painting Competition & Hygiene Kit Distribution were done at School

24. Jabalpur Regional office distributed hygiene kits in Govt Primary School, Bhulan, Jabalpur, MP, and Sister's Play School, Jabalpur MP during the special campaign 2.0

Some of the Glimpses of the activities during Special Campaign 2.0



Compost Pit at IBM HQ, MMPL Hingana, IBM Bengaluru


Repairing of Rainwater Harvesting System at Bangalore


Development of Badminton court at Bhubaneswar Office

Setting up of Bird feeding arrangement at Jabalpur office

Development of Garden at Goa Office premises

Outdoor Campaign: FIT INDIA RUN with cleanliness drive IBM HQ Nagpur/Ajmer/Bengaluru

Outdoor Cleaning programme, IBM, Bangalore

Bhubaneshwar: Planting of herbal saplings in the office premises

Swachhta campaign at Government School at Village Pakhar, Lohardaga district by Ranchi regional office

Distribution of sanitization kit to the students of the schoolsby Dehradun Regional Office

Swachhata Kit distribution by Raipur R.O

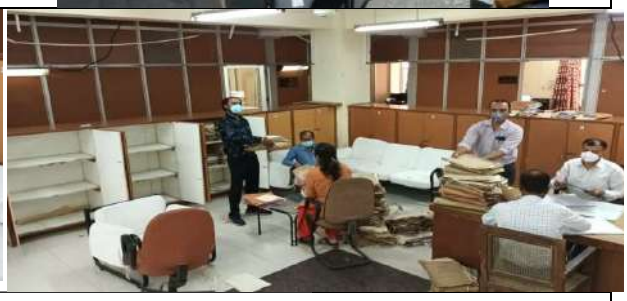
Cleanliness Campaign at Residential Colony Ajmer RO

Swachhata Kit distribution by Guwahati R.O

Cleanliness Campaign at Residential Colony Jabalpur RO

Swachhata Kit distribution by Kolkata Z.O

Swachhata awareness by Chennai R.O



Weeding out of old Files and creating space

Identification of Obsolete Items at IBM HQ

Identification of Obsolete Items at Kolkata ZO

Cementing of Pathway of Dehradun RO

Clean Corridors IBM HQ

Clean Corridors Hyderabad RO

Clean Office Premises Kolkata ZO