

**MINUTES OF THE 54<sup>th</sup> MEETING OF THE STATE GEOLOGICAL  
PROGRAMMING BOARD HELD ON 25<sup>TH</sup> AUGUST 2018 AT BHUBANESWAR**

54.01.00	<p>The 54<sup>th</sup> meeting of the State Geological Programming Board (SGPB) was organised under the chairmanship of Sri R. K. Sharma, IAS, Additional Chief Secretary to Government of Odisha, Steel &amp; Mines Department on 25<sup>th</sup> August 2018 in the Convention Hall of Hotel Mayfair, Bhubaneswar.</p> <p>The list of the participants is enclosed as <b>ANNEXURE-I</b>.</p>
54.02.00	<p><b>WELCOME ADDRESS BY THE DIRECTOR OF GEOLOGY, ODISHA &amp; MEMBER SECRETARY, SGPB.</b></p>
	<p>Sri Gopa Krishna Bhuyan , Director of Geology, Odisha and Member Secretary, SGPB extended a warm &amp; hearty welcome to Sri R. K. Sharma, IAS, Additional Chief Secretary to Government, Steel &amp; Mines Department and Chairman SGPB, Sri Deepak Mohanty, IFS, Director of Mines, Odisha , Sri J. Prasad , Dy. Director General, GSI, (SU) Odisha, and all the delegates &amp; participants in the 54<sup>th</sup> SGPB meeting.</p> <p>The Member Secretary emphasized on the role of SGPB and contribution of the member organizations for the mineral development of the state. State Geological Programming Board (SGPB) meeting is being convened in the similar manner as Central Geological Programming Board (CGPB) to finalize the Annual Field Programme of the Directorate of Geology, Odisha after detailed discussion and deliberation by participating organizations. The objective of the SGPB is to recommend the Government of India regarding any issue that needs special attention or intervention for the mineral development of the state. Consequent upon the Amendment of the MM(D&amp;R) Act-2015, he emphasized on the streamlined auction route for leasing out mineral blocks. He also highlighted that as per the decision taken in the 53<sup>rd</sup> SGPB, Directorate of Geology, Odisha has undertaken 13 investigation programmes during 2017-18 for iron ore, graphite, limestone, coal, abrasive grade garnet, quartz and quartzite, base metal, dimension stone and pyrophyllite. Two iron ore investigation programmes have been earmarked for outsourcing. A total geological mapping of 633 sq km on R.F. 1:25,000 and 4236 meters of drilling have been achieved during this period. He apprised that the Directorate of Geology, Odisha is taking all possible measures to strengthen exploration activities in the State in order to facilitate the process of auction. He further informed the house that during the field season 2018-19, 18 investigations comprising iron ore, manganese, chromite, graphite, limestone &amp; dolomite, quartz &amp; quartzite and dimension &amp; decorative stone shall be taken up by the Directorate of Geology, Odisha. Emphasis has been laid on iron and manganese ore blocks to upscale the exploration to G-2 level of UNFC for leasing out the blocks through auction. The Member Secretary congratulated the GSI, AMD, IBM, OMC, CMPDI, MECL, NALCO, IDCOL, DGWD, SAIL,CGWB and Chief Engineer Project Planning for their sincere harmonization with the mineral development of the State. The Member Secretary expressed his deep sense of gratitude to the Additional Chief Secretary to Government, Steel &amp; Mines Department and Chairman of SGPB for his dynamic and keen premiership and focused objective for mineral development of the State. During his tenure, 5 blocks have been auctioned and about 18 more including those of iron ore are</p>

	<p>in pipeline for auction during this year. In pursuance of Odisha Mineral Exploration Policy-2015; the Odisha Mineral Exploration Corporation Limited has been set up as a wholly owned subsidiary of M/s OMC Limited. Approval of the Central Government has been obtained notifying OMC and OMECL U/S 4(1) of MM(D&amp;R) Act-2015 to carry out exploration without prospecting licences. In view of the requirement of huge drilling meterage within rather a short span of time, several assignments have been outsourced to MECL and other agencies. The house joined with the member secretary in congratulating Additional Chief Secretary and Chairman of SGPB for his ingenious initiatives.</p>
<b>54.03.00</b>	<b>ADDRESS BY DR. J. PRASAD, DEPUTY DIRECTOR GENERAL, GSI, STATE UNIT, ODISHA</b>
	<p>Dr. J.Prasad, Deputy Director General, GSI, (SU) Odisha in his address synopsis the activities and achievements of GSI during the year 2017-18. He indicated that GSI had carried out 2 Specialised Thematic Mapping (STM) projects and 10 Geochemical Mapping (GCM) projects under Mission I. In Mission II, commodity wise 3 projects for coal, 4 projects for iron ore, 6 projects for Mn, 2 for chromite, 1 project each for gold, phosphorite, REE &amp; graphite were carried out during 2017-18. Out of these, 6 projects are in G2 stage, 6 in G3 stage and 7 projects in G4 stage. It is also revealed that during 2018-19, GSI will take up 37 projects, out of which 14 are in Mission II mode and rest 23 are in Mission I, Mission III &amp; Mission IV mode. He apprised the house that iron ore blocks namely Gandhalpara South- East part-B, Gandhalpara South block, Keonjhar district, Rengalaberha North-East extension block, Keonjhar district and Kutinga manganese block, Rayagada district will be ready for auction by October'18. These 3 iron ore blocks have added 250 mt of additional resource of iron ore to the state. GSI has launched a new prestigious programme for F.S. 2018-19 i.e. Regional Mineral Targeting with the concept of integration of geological, geophysical and geochemical data to discover new mineral prospects. He thanked the Directorate of Geology (O) for all the support and assured to extend all sorts of cooperation in the field of mineral exploration.</p>
<b>54.04.00</b>	<b>ADDRESS BY SRI DEEPAK MOHANTY, IFS, DIRECTOR OF MINES, ODISHA</b>
	<p>Sri Deepak Mohanty, IFS, Director of Mines, Odisha in his address stated that the decision taken in this meeting should be brought to action with fruitful results. After amendment of the Mines and Minerals (Development and Regulations) Act, 2015 which has made prospecting mandatory for auction of mineral blocks. He emphasized to put impetus to explore more and more geologically potential blocks, so that the blocks will be eligible for the auction process. He appreciated the coordinated approach of different agencies like GSI, IBM, MECL and State Directorate of Geology to upgrade the exploration status of mineral blocks upto G-2 level of UNFC. Director of Mines highlighted on successfully auctioned blocks of iron ore, manganese and limestone. Also, other 11 blocks are in the pipeline for auction in near future. All these efforts have come out with flying colours only because of very pivotal and productive exploration work accentuated by the Directorate of Geology, GSI, MECL, OMECL &amp; OMC. He reiterated that all the organizations should join hands for development and conservation of mineral resources of the State.</p> <p>Keeping in view the potential of Gemstone in the state, DM (O) suggested to take up few gemstone exploration projects, either by DG(O) or GSI in</p>

	addition to the major mineral investigations viz: iron, manganese & bauxite. <b>(Action :GSI, DG(O) &amp; OMC)</b>
<b>54.05.00</b>	<b>ADDRESS BY SRI R.K. SHARMA, IAS, ADDITIONAL CHIEF SECRETARY TO GOVT. OF ODISHA, STEEL &amp; MINES DEPARTMENT AND CHAIRMAN, SGPB.</b>
	<p>Sri Raj Kumar Sharma, IAS, Additional Chief Secretary to Government of Odisha, Steel and Mines Department and Chairman, SGPB welcomed all the dignitaries on the dais and delegates to the 54<sup>th</sup> SGPB meeting. The Chairman declared that the SGPB meeting held every year is a very old forum serving useful purpose for mineral exploration in Odisha in a systematic manner. He pointed out the challenges thrown by MM (D&amp;R) Act,2015 which suddenly shifted the responsibility of private agencies regarding mineral exploration to Govt. organizations. Earlier, Government organizations were undertaking explorations at G 4 or G3 stage of UNFC while private agencies were carrying out exploration at G 2 or G 1 stage over their PL. Subsequent to Amendments in Rules and Acts, Government organizations are given the task of undertaking mineral exploration at G 2 stage for auction purpose. He also appreciated that Govt. organizations like GSI, DG (O) have tried their best to execute their task and some Geological Reports of G-2 level have been completed and few others are close to completion. He appreciated GSI for their enthusiasm to take up more blocks for up gradation. He hoped that GSI, DG (O) will be scaling up their activities to multifold in future. The chairman informed the house regarding ongoing process of recruitments in OMECL and its completion by the end of this year. The chairman emphasized on the role of SGPB for mineral development of the state. He opined that though SGPB is an one day affair, but the recommendation of the forum warrants their result oriented execution. The Chairman appealed all stake holders to implement all the recommendations &amp; suggestion of the forum throughout the year instead of deliberating once a year. To achieve the objective and monitoring of various mineral exploration activities of this state, Chairman suggested to constitute different mineral wise Working Groups inducting representatives from member organizations for tangible achievements within a timeframe such as Group-1 for iron, manganese &amp; chromite, Group-2 for coal, Group- 3 for beach sand mineral (AMD) &amp; Group-4 for other minerals which are not mentioned in schedule-1 and may include 31 minor minerals. Besides, another small group should be formed for scientific exploration of gemstone by using latest technology. He also emphasized to give more thrust on beach sand minerals and graphite investigations. He appealed the members that proceedings of SGPB should be action oriented and to look at the progress made on the decision of last year SGPB. The Chairman wished all the dignitaries present in this meeting to interact and discuss on the future course of exploration. He thanked all the participating organizations in the 54<sup>th</sup> SGPB meeting and wished the meeting a success. <b>(Action : All Stake holder)</b></p>
<b>54.06.00</b>	<b>CONFIRMATION OF THE MINUTES OF THE 53<sup>rd</sup> SGPB MEETING</b>
	Member Secretary, SGPB placed the Minutes of the 53 <sup>rd</sup> SGPB meeting circulated vide Letter No. 6035/DG, dated 25/09/2017 before the august house for confirmation and the Minutes was unanimously confirmed by the House without any change.

<b>54.07.00</b>	<b>REVIEW OF ACTION TAKEN ON MINUTES OF THE 53<sup>rd</sup> SGPB MEETING</b>
	The Member Secretary, SGPB, initiated discussion on the follow up action on the Minutes of the 53 <sup>rd</sup> SGPB meeting with due permission of the chairman, SGPB.
<b>54.07.01</b>	<p><b>In response to para 53.10.01 on Agenda-1:</b> In view of auction of mineral blocks, up scaling of the reported mineral occurrences is warranted. But execution of the exploration programme receives set back due to forest related problems and local resistance, Member Secretary, SGPB informed that the action has been initiated for engagement of three forest officers to look into the forest issues. The forest related issues will be addressed on case to case basis as per the revised notification of MoEF &amp; CC dated 09.05.18. Regarding local interference during exploration, District Administration will be requested to render necessary co-operation to execute the programme.</p> <p><b>Agenda-2:</b> Regarding identification of mineral bearing areas of the Taken over leases which were explored by Licensees at various level of UNFC, for up-scaling of status of exploration for auction purpose; Member Secretary, SGPB informed that all the exploring agencies have been provided with the data in respect of possession taken over leases. Detailed of 39 areas have been transferred to OMECL for up gradation of resources. IBM has conducted four meeting for preparation of road map for auctioning of mining leases which are due to expire by 2020. During the fourth meeting, where the status of all the 29 cases of MLs (10 Nos. of Iron, 8 Nos. of Iron &amp; Manganese, 8 Nos. of Manganese and 3 Nos. of Chromite) have been discussed in detail.</p> <p><b>Agenda-3:</b> Regarding sharing of exploration data such as Geochemical, Geophysical &amp; Geological among exploration organizations/agencies for preparation and finalization of future action plan for mineral exploration, Member Secretary, informed that geochemical, geophysical and geological data of GSI are being shared through its OCBIS portal which is available in public domain. DG (O) has already shared their aero-geophysical data, geophysical data and beach sand exploration data with other exploring agencies.</p> <p><b>Agenda-4:</b> GSI has been undertaking Geochemical mapping in Odisha. The outcome of the NGCM in respect of the State may be shared with the state for mineral targeting. Member Secretary, SGPB informed that toposheet wise finalised NGCM reports of GSI are being uploaded in public domain (OCBIS portal) for viewing by all stake holders. Intervening the discussion, DG (O) pointed out that, it is not possible to download the exploration data &amp; maps uploaded by GSI from the portal. Reacting to the issues, Chairman appealed to GSI representatives to share the digital data directly to DG (O) whenever required. <b>(Action : DG(O) &amp; GSI)</b></p> <p><b>In response to Para: 53.10.02 on Agenda-5:</b> On Status of time bound exploration undertaken by ML holders as per UNFC norms in pursuance of Ministry of Mines Letter No. F-10/75/2008-MV dated 23.12.2010, on exploration of the virgin areas &amp; areas proposed for auction,</p>

	<p>exploration for semiprecious stone upto G2 level in potential areas; the Member Secretary, informed that DG (O) is taking up mineral exploration at G 4, G 3 &amp; G 2 stage of UNFC, prioritizing the mineral blocks for exploration and auction. In order to meet the requirement of auction of major minerals, DG (O) is putting thrust on exploration of major minerals like Iron, Limestone &amp; Graphite. Exploration for gemstone at G2 stage will be taken up in future as per requirement.</p> <p><b>In response to Para: 53.10.03 on Agenda-6:</b></p> <p><b>(i)</b>Regarding systematic exploration along with geophysical prospecting in Bhalukasuni-Nilgiri chromite prospect, Balasore district and Ramgiri chromite prospect, Koraput district to ascertain their chromite potentiality; Member Secretary, informed that GSI had carried out exploration during F.S 1991-93. Out of 4 boreholes only one borehole had intercepted a zone with 50 cm of chromite dissemination. Further, in course of geological mapping in Ramagiri area during 1966-67, the chromiferous ultrabasic body was noticed with limited extension over a small area and chromite occurs as dissemination. With the integration of geological, geophysical and geochemical data, these occurrences can be revisualised. If encouraging results are noticed, the area may be taken up for detailed study. DG (O) will take up the Geophysical prospecting over the suggested areas after acquiring the Gravity meter.</p> <p><b>(ii)</b> Regarding detailed exploration including geophysical prospecting in respect of five graphite blocks to establish their potentiality; Member Secretary, informed that GSI had carried out investigation for graphite in Koraput and Kandhamal districts during 1985-88 but no such potential blocks had been delineated. Further as suggested DG(O) has already taken up investigations in Kenduguda, Bilamal in Kandhamal districts, and Kutraguda in Rayagada district and investigation at G2 level in Karabira area, Dhenkanal district is envisaged during the current field season.</p> <p><b>(iii)</b> Regarding scanning of the shear zone at the contact of singhbhum craton and EGMB established by NGCM around Gumlai-Phasimal area through Geophysical survey, to locate any possible mineralization; Member Secretary, SGPB informed that on the basis of STM carried out in Gumlai-Phasimal area by GSI a G4 stage, mineral exploration programme for identification of potential zones of iron ore and manganese ore has been proposed during the current FS-2018-19.</p> <p>Participating in the discussion, DG (O) requested GSI to share the STM map &amp; NGCM data for planning further exploration programmes.</p> <p><b>(iv)</b> Regarding estimation of Rare Earth Elements from Nepheline Syenite and Carbonatites of Odisha; Member Secretary, informed that Nepheline syenites and associated alkaline litho units identified in Kankadakhhol-Lodhajhori area in Deogarh district during FS 2015-17 by GSI had been taken up for assessing their REE potentiality. But the result was discouraging, hence no further exploration in this area is proposed. <b>Action: GSI &amp; DG(O)</b></p>
<b>54.08.00</b>	<b>PRESENTATION BY MEMBER ORGANISATIONS</b>
	The Member Secretary requested participating organizations to present their exploration activities carried out during 2017-18 and programme of exploration for 2018-19.

<p><b>54.08.01</b></p>	<p>Sri M. K. Patel, Director, GSI, (SU) Odisha made an elaborate presentation on the exploration activities of GSI (SU) Odisha conducted during 2017-18. He explained regarding the activities of 10 NGCM projects and 2 STM projects under Mission – I. He also presented on 16 projects under Mission – II which includes 4 projects of Iron ore, 6 projects of manganese ore, 2 projects of chromite and one project each for gold, REE, phosphorite and graphite. He also highlighted quantum of work done and achievements in Gandhalpada SE, Part-B, Gandhalpada SE, Part-A, Rengalberha NE block of Keonjhar district and Jhumka-Patriposhi west block of Sundargarh district. He executed a detailed presentation on the exploration activities of the projects for F.S. 2018-19 which includes 21 projects under Mission – I (18 NGCM project &amp; 3 STM projects) and 12 projects under Mission – II (5 iron, 2 manganese, 1 graphite, 1 REE, 1 gold &amp; 2 copper projects). One more new Regional Mineral Targeting (RMT) project has also been introduced during F.S 2018-19.</p> <p>Sri Jaydip Mukherjee, Director (Geology), GSI, (SU), Odisha deliberated an elaborate presentation on Coal exploration in Kendudihi and Tetelibahal Block of IB River Coalfield and Kantaikoliya north Block in Talcher Coalfield. He also presented 10 Engineering Geology projects which include 2 Dam projects, 2 barrage projects and 6 irrigation projects undertaken during F.S. 2017-18.</p>
<p><b>54.08.02</b></p>	<p>Dr. P C Mishra, Deputy Director Geology, Directorate of Geology made an elaborate presentation of work undertaken during 2017-18 in respect of Coal, iron ore, limestone, graphite, chromite, decorative stone, pyrophyllite, abrasive grade garnet, quartz &amp; quartzite and geophysical survey for base metal deposits.</p> <p>Dr. Mishra mentioned that exploration for iron ore undertaken at G 2 stage in Netrabandha Pahar (West) Block, Sundargarh district, estimated an indicated resource of 17.625 mt. Exploration for iron ore in Dholta Pahar at G2 stage completed. Coal exploration in Madhupur Block of Ib valley coal field conducted 2120m drilling in 6 boreholes. Exploration for graphite at G2 stage in Naringpanga Block, Rayagada district estimated a resource of 0.333 mt. Exploration for graphite in Jagdalpur Block of Rayagada district at G 2 stage is continuing at 50m x 50m grid. Limestone exploration was carried out around Pipalmunda and Lukapada Block, Balangir district (G2 stage). Chromite exploration was undertaken around Madhuban of Keonjhar district (G4 stage). Exploration for abrasive grade garnet was carried out around Birmunda in Angul district (G3 stage) with a recovery of 4810 kg of abrasive grade garnet, with an average recovery factor of 23 kg/cu m. Exploration for Decorative stone was carried out in Tarabha and Lubarsing of Gajapati district, Antarba and Kandha Adaba area of Gajapati district, Tulasipal, Nuagaon, Nalatangra and Sarapa area of Dhenkanal &amp; Angul districts in G 3 stage and identified 10 prospecting blocks. Exploration for assessment of quartz and quartzite was taken up around Lumurajala-Sialimunda, Boudh district and Mudrajodi-Pokharia in Sadar Sub-division of Mayurbhanj District in G-3 stage. Investigation for Pyrophyllite around Raduan of Keonjhar District was carried out in G4 stage. Continuation of Geophysical investigation for delineation of base metal mineralization around Kesharpur, Mayurbhanj District was carried out in G4 stage. Sri Mishra briefly outlined the exploration programmes of the Directorate</p>

	of Geology, Odisha for 2018-19. The programme comprises Coal – 1, Iron ore -3, Manganese – 1, Limestone – 2, (all are at G2 stage), Decorative stone – 2, Quartz & quartzite – 2 (all are at G3 stage), Chromite – 2 (1-G3 & 1-G4), Graphite – 4 (2-G2 and 2-G4). He mentioned that the proposed Annual exploration programme was placed in the house for approval before finalization.
<b>54.08.03</b>	Mrs. Nirupama Das, Addl. General Manager (Geology), OMC Ltd. outlined the review of work of OMC during 2017-18 and also the programme of work for 2018-19 in their leaseholds of chromite, iron ore and manganese prospects. She briefly presented the exploration of chromite in Sukinda Ultramafic and Boula-Nuasahi Complex, iron ore and manganese in Bonai - Keonjhar belt. She informed that a total of 12,281.3 m (Departmental – 1313 m and Agency – 10,968.3 m) has been drilled during 2017-18. Mrs. Das added that exploration work will continue in different lease holds of OMC as per the quantity envisaged in exploration programme for 2018-19. As mentioned, 57,800 meters of core drilling is proposed to be undertaken in Chromite, Iron, and Bauxite Mining Leases and PLs of OMC Ltd. for assessment of ore reserves subject to availability of required forest permission.
<b>54.08.04</b>	Sri S.K. Srivastava, Regional Director, CMPDIL presented the work undertaken during 2017-18 in Talcher and IB valley Coalfields. He informed that CMPDIL has achieved 1,28,622 m of drilling which includes departmental - 67,746m, outsourcing – 58,755 m and MoU - 2,121 m against a total target of 1,16,000 m during 2017-18. He also presented a detailed programme of exploration of CMPDIL to be carried out during 2018-19 with a drilling target of 1, 49,000 m. He also informed the house regarding problems for forest clearance and resistance of local people which should be discussed for a solution.
<b>54.08.05</b>	Anirvan Saha, Deputy Regional Director, Eastern Zone AMD, Jamshedpur presented the exploration activities of AMD in Odisha during 2017-18 for uranium. Investigations were mostly carried out for QPC type uranium mineralisation and shear controlled hydrothermal vein type uranium mineralisation. He reported that the activities of AMD during 2016-17 were mostly concentrated in Mayurbhanj (Kusumbari, Kesharpur, Dudhisol-Jamshola-Kesharpur), Deogarh (Jagannathpur and Barkote tract), Sundargarh (Burha pahar – Gurundia, Khandamuni-Nalaghati-Kumakalas-Barhagm area, Baramarian-Banskona-Champajharan-Sargigarh tract, Bagiyabahal area) districts in Odisha for exploration of uranium. He also mentioned activities regarding human resource development like summer training programme for University students, provision of stipend in studentship programme and MoU with University for R&D and HRD Purpose.
<b>54.08.06</b>	Sri S.R. Mazumdar, Sr. Manager (Geology), IBM presented the review of work done by IBM, Bhubaneswar during 2017-18. He outlined the compliances of exploration proposals mentioned in mining plan etc. He stated that IBM has done regular inspections of 124 mines for mineral conservation & systematic development of mines and protection of environment under MCDR, 1988. Out of 31 mining plans received with PMCP, 21 have been approved, 10 plans were rejected by IBM. Out of 48 scheme of Mining received with PMCP, 38 schemes have been approved and 10 schemes were rejected. Out of 02 FMCP received, 01 approved and 01 rejected. He informed the house regarding proceedings of

	evaluation of exploration programme of the leases expiring on 31.03.2020. He also mentioned about progress of Geological study to establish the average percentage of lumps and fines in the Run-of-mine for chromite in Odisha under rule 46(1) of Minerals (other than Atomic and Hydrocarbons Energy Minerals) Concession Rules, 2016. At last he gave the annual target of IBM, Bhubaneswar for 2018-19 which includes 90 inspections under Administration of MCDR and Star rating of mines (validation of all the eligible mines).
<b>54.08.07</b>	Sri J.P. Choudhury, Assistant Manager (Geology), MECL presented the exploration activities of MECL in Odisha during 2017-18. He highlighted the quantum of work done in Pureibahal-Chandiposi Iron ore Block, Jumka-Pathriposhi Iron ore Block, South of Kesharpur(Mayurbhanj dist) copper block and Ambadala-Sunakhunti (Rayagada district) Manganese ore block. He also briefed the house regarding their mineral exploration activities for F.S.2018-19.
<b>54.08.08</b>	Sri N. Sahu, DDG, O/o - Chief Engineer, PPF & Inv. Deptt. of Water Resources, Odisha highlighted the achievement of the Department for F.S. 2017-18. He presented the work done in Kalhandi, Padampur, IB, Ganjam, Koraput, Mayurbhanj and Cuttack Investigation Divisions. He mentioned about 194 numbers of boreholes drilled in year 2017-18 and 110 numbers boreholes to be drilled in year 2018-19.
<b>54.09.09</b>	Dr. B. M. Faruque, Representative, SGAT appreciated GSI and DG (O) for their geological investigation programme for iron & manganese ore. He informed the house regarding the importance of lithium and occurrence of lithium mica in cassiterite bearing pegmatite in south Chhatisgarh. He also suggested to focus on lepidolite (source for lithium) exploration programme in the Tin fields of Koraput. Regarding manganese ore, he informed the house about the discontinuous manganese belt starting from Rayagada to Angul district revealed from regional geochemical mapping by GSI. Khondalite contact with calc-granulite is one of the indicator parameters for manganese ore which should be given priority for exploration activity. He also suggested focusing bauxite exploration in Boudh and Kandhmal districts. He appreciated AMD for radioactive mineral exploration work and Human resource development activity like summer training programme for University students.
<b>54.10.00</b>	<b>DISCUSSION ON AGENDA ITEMS OF THE 54<sup>th</sup> SGPB</b>
<b>54.10.01</b>	<b>AGENDA BY THE DIRECTORATE OF GEOLOGY, ODISHA [DG (O)]:</b> The following items are discussed and deliberated with the following recommendation. 1. In view of a rising trend of auctioning more and more mineral deposits to cater to the demand of raw materials after the year 2020, mineral exploration in several blocks of iron ore, manganese ore and bauxite have been assigned to MECL and OMECL. These agencies should expedite the activities and chalk out a time frame to complete the exploration of the mineral blocks to facilitate early auction. <b>(Action : MECL &amp; OMECL)</b> 2. Even after the relaxation of the forest clearance procedure by the MOEF&CC on 09.05.2018, it is still difficult to obtain an early clearance for exploration in forest areas. Necessary steps may be proposed to further relaxing the criteria involved in the procedure of clearance. <b>(Action: DM(O) and S &amp; M Deptt.)</b> 3. IBM to share the Geological Reports from the approved mining plans of the



	<p>leasehold areas whose possession has been taken over by the Government with the exploring agencies. <b>(Action : IBM)</b></p> <p>4. Since ORSAC is now actively involved in the DGPS survey and process of finalization of auctionable mineral blocks, it is proposed to include them as a member of SGPB with due approval of the board. <b>(Action :All member)</b></p> <p>5. From mineral conservation and scientific mining points of view, a single mineral block should not be broken into smaller blocks while throwing for auction. <b>(Action: GSI, DG(O), DM(O) &amp; S&amp;M )</b></p> <p>6. It is observed that prospecting/exploration reports in the GR of the approved mining plans submitted by earlier lessees in case of lapsed, surrendered or taken over areas are either not available or reliable. Hence, fresh exploration should be undertaken within such areas by authorized exploration agencies to validate the resource within such areas. <b>(Action : All Stake holder)</b></p> <p>7. In case of gemstone exploration, areas cannot be left as such after prospecting, which exposes the deposits for clandestine mining and theft of minerals. Therefore, these deposits should be leased through the PL-cum-ML mode only. <b>(Action: DM (O) &amp; S&amp; M Deptt.)</b></p> <p>8. Government should develop a mechanism to allow internship for university students in the state Directorate of Geology and Geological Survey of India, which will help the budding geoscientists to be professional being conversant with the ongoing mineral exploration activities. <b>(Action: S &amp; M Deptt.)</b></p> <p>9. The recent relaxation by MoEF &amp; CC vides Letter no. F.No.5-3/2007-FC, dated 09.05.2018 obtaining forest clearance for undertaking exploration in forest areas by Government agencies made a provision to deposit NPV by user agencies. But the matter may be taken up with the MoM &amp; MoEF to delete or repeal the clause for Government agencies as the explored blocks will be put for public auction. The same may be charged to the successful bidder. <b>(Action: DM (O), PCCF, S &amp; M Deptt.)</b></p>
54.10.02	<p><b>AGENDA BY SOCIETY OF GEOSCIENTIST AND ALLIED TECHNOLOGISTS (SGAT):</b></p> <p>1. During G1 or G2 level of exploration of Iron ore, it has now become necessary to separately estimate resource for Lump ore and fine ore, so that at the time of auction process the bidders can have the advantage of deciding their stake as per their requirement. <b>(Action: GSI , DG(O) &amp; MECL)</b></p> <p>2. In case of Chromite ore of Sukinda valley, many private mining companies are planning to go ahead with underground mining, So some regional deep borehole programme in form of sponsored project in the valley may be initiated. <b>(Action: GSI &amp; DG(O))</b></p> <p>3. For manganese exploration, it has now become necessary to utilise the Ore geometry modeling on the basis of existing data-base available specially in the horse shoe belt so that it may be easier to identify target area for future exploration. <b>(Action: GSI , DG(O) , OMC, OMECL &amp; MECL)</b></p> <p>4. Regarding Special Thematic Mapping, the micro suture contact zone identified by typical mélange litho assemblage should be critically studied by advanced &amp; modern laboratory inputs, so that on the basis of which scout boreholes can be planned for drawing sub-surface core samples of that zone can be studied in detail to ascertain the presence of any deep seated hidden mineral prospects. <b>(Action: GSI &amp; DG(O))</b></p>

	<p>5. For NGCM project, so far carried out by GSI, it is necessary that the anomaly zone should be identified over the map for targeting the detailed geological investigation for future. <b>(Action: GSI)</b></p> <p>6. Emphasizing on capacity building, training for newly recruited geoscientists of different organization &amp; post graduate students should be conducted at Satellite Training Institute campus, near Jajpur Road instead of relocating to elsewhere. <b>(Action: GSI)</b></p>
<b>54.10.03</b>	<p>Implementation of rule 12 (4)(A) of MCDR, 2017 for the Mining leases covered under Sub-section (6) of section 8 A of the Act where the date of expiry of the period of such lease is on 31<sup>st</sup> March, 2020, the holders of such mining lease shall carry out General Exploration (G-2) over the entire mineralised area under the mining lease before the 1<sup>st</sup> day of April, 2019. <b>(Action: DM (O) and S &amp; M Deptt.)</b></p>
<b>54.11.00</b>	<p>After detailed deliberation on the activities of the exploration agencies during 2017-18 and their programme of exploration for 2018-19 in the State, the Annual Field Season Programme of the Directorate of Geology, Odisha, has been approved by all the members as no overlapping or duplication is found in the filed programme.</p>
<b>54.12.00</b>	<b>VOTE OF THANKS</b>
	<p>Dr P. K Chand, Deputy Director, Geology, DG (O) proposed Vote of Thanks. He thanked hon'ble Additional Chief Secretary to Govt., Steel &amp; Mines Department and Chairman SGPB for his active participation, keen interest and valuable guidance. He further thanked all the members of SGPB for their active participation and hearty cooperation.</p>

**ANNEXURE-I**

**LIST OF PARTICIPANTS OF 54<sup>TH</sup> SGPB MEETING HELD ON 25<sup>TH</sup> AUGUST, 2018**

**CHAIRMAN: SRI R.K. SHARMA, IAS, ADDITIONAL CHIEF SECRETARY,  
STEEL & MINES DEPARTMENT, GOVT. OF ODISHA**

**MEMBER SECRETARY: SRI G.K. BHUYAN, DIRECTOR OF GEOLOGY, ODISHA**

<b>Sl. No.</b>	<b>Name</b>	<b>Designation</b>	<b>Organization</b>
1	Sri D. Mohanty, IFS	Director of Mines, Odisha	Dir. of Mines, Odisha
2	Sri J. Prasad	Dy. Director General	GSI, SU: Odisha
3	Sri M.K. Patel	Director	GSI, SU: Odisha
4	Sri K.K. Behera	Director	GSI, SU: Odisha
5	Sri J. Mukherjee	Director	GSI, SU: Odisha
6	Sri K.C. Das	Sr. Geologist	GSI, SU: Odisha
7	Sri K.C. Mohapatra	JDG	Dir. of Geology, Odisha
8	Smt. A.B. Mishra	JDG	Dir. of Geology, Odisha
9	Sri J.P. Panda	JDG	Dir. of Geology, Odisha
10	Sri A.K. Rout	JDG	Dir. of Geology, Odisha
11	Sri S.K. Sahu	JDG	Dir. of Geology, Odisha
12	Sri M.R. Panda	DDG	Dir. of Geology, Odisha
13	Sri M.R. Mohapatra	DDG	Dir. of Geology, Odisha
14	Sri S.K. Rath	DDG, I/c JDG	Dir. of Geology, Odisha
15	Sri K. Patnaik	DDG, I/c JDG	Dir. of Geology, Odisha
16	Sri R.K. Kar	DDG	Dir. of Geology, Odisha
17	Dr. P.C. Mishra	DDG	Dir. of Geology, Odisha
18	Sri N.N. SinghDeo	DDG	Dir. of Geology, Odisha
19	Dr. P.K. Chand	DDG	Dir. of Geology, Odisha
20	Smt. S. Jena	DDG	Dir. of Geology, Odisha
21	Dr. S.M. Monalisa	DDG	Dir. of Geology, Odisha
22	Sri M.K. Oram	DDG	Dir. of Geology, Odisha
23	Sri S.K. Dalai	DDG	Dir. of Geology, Odisha
24	Sri S. Mishra	Geologist	Dir. of Geology, Odisha
25	Dr. S.A. Jena	Geologist	Dir. of Geology, Odisha
26	Sri K. Nayak	Geologist	Dir. of Geology, Odisha
27	Md. Q.J. Khan	Geologist	Dir. of Geology, Odisha
28	Sri S.K. Das	Geologist	Dir. of Geology, Odisha
29	Smt. S. Sahoo	Geologist	Dir. of Geology, Odisha
30	Miss S. Dash	Geophysicist	Dir. of Geology, Odisha
31	Smt. N. Das	Addl. General Manager (Geology)	Odisha Mining Corporation Ltd.
32	Dr. T. Basa	Addl. General Manager (Geology)	Odisha Mining Corporation Ltd.
33	Sri S.K. Nayak	DGM (Geology)	Odisha Mining Corporation Ltd.
34	Sri K.C. Rath	DGM (Geology)	Odisha Mining Corporation Ltd.
35	Sri B.B. Mishra	Sr. Manager (Geology)	Odisha Mining Corporation Ltd.
36	Sri P.K. Behera	Sr. Manager (Geology)	Odisha Mining Corporation Ltd.
37	Sri S. Mishra	Sr. `Manager (Geology)	Odisha Mining Corporation Ltd.
38	Sri D. Manoharan	Sr. `Manager (Geology)	Odisha Mining Corporation Ltd.

39	Sri B.K. Panda	Sr. `Manager (Geology)	Odisha Mining Corporation Ltd.
40	Dr. P.K. Nayak	Manager (Geology)	Odisha Mining Corporation Ltd.
41	Sri T.K. Kandeyang	Manager (Geology)	Odisha Mining Corporation Ltd.
42	Smt. S. Mahanta	Manager (Geology)	Odisha Mining Corporation Ltd.
43	Sri P.K. Saha	Manager (Geology)	Odisha Mining Corporation Ltd.
44	Ms. D. Singh	Manager (Geology)	Odisha Mining Corporation Ltd.
45	Ms. K. Patel	Manager (Geology)	Odisha Mining Corporation Ltd.
46	Sri R.K. Mohanty	Manager (Geology)	Odisha Mining Corporation Ltd.
47	Sri N. Sahu	Dy. Director Geology	CEPPF&I,WR Deptt., Bhubaneswar
48	Sri D. Mohanty	Geologist	CEPPF&I, WR Deptt., Bhubaneswar
49	Sri A. Saha	Dy. Regional Director	AMD, ER, Jamshedpur
50	Sri G.C. Sethi	Dy. Controller of Mines	IBM, Bhubaneswar
51	Sri S.R. Mazumdar	Sr. Manager (Geology)	IBM, Bhubaneswar
52	Sri J.P. Choudhury	Assistant Manager (Geology)	MECL
53	Sri P. Pradhan	Assistant Manager (Geology)	MECL
54	Sri S.K. Srivastava	Regional Director	CMPDIL, Bhubaneswar
55	Dr. S.M. Rao	General Manager (Geology)	CMPDIL, Bhubaneswar
56	Sri S.N. Bohidar	Chief Manager (Geology)	CMPDIL, Bhubaneswar
57	Sri A.B. Mahato	Manager (Geology)	CMPDIL, Bhubaneswar
58	Dr. B.M. Faruque	Representative, SGAT	SGAT, Bhubaneswar
59	Sri G.C. Das	Representative, SGAT	SGAT, Bhubaneswar

**DIRECTORATE OF GEOLOGY, ODISHA**  
**PROGRAMME OF EXPLORATION FOR 2018-19**

Sl. No.	Exploration proposal
	<b>COAL</b>
1	Exploration for coal in Madhupur block of IB valley coal field, Jharsuguda district, T.S.No.F44R13 (64O/13) (G-2 stage).
	<b>IRON ORE</b>
2	Exploration for iron ore around Balia Pahar, Sundergarh & Keonjhar Districts, T.S. No. F45N5, (73 G/5) (G-2 Stage)
3	Exploration for iron ore around Mankarnacha, Sundergarh & Keonjhar Districts, T.S. No. F45N1 & 5 (73 G/1 & 5), (G-2 Stage)
4	Exploration for iron ore and manganese ore in the SGB Mines, Keonjhar District, T.S. No.F45N1 & 5 (73 G/1 & 5), (G-2 Stage)
	<b>MANGANESE ORE</b>
5	Exploration for manganese around Ganua, Possession taken over ML, Keonjhar district T.S.No. F45H8 (73F/8) (G-2 stage)
	<b>CHROMITE</b>
6	Continuation of Prospecting for chromite over an area of 208 Ha. in village Madhuban of Keonjhar district T.S. No. F45O7 (73 K/7) (G-3 stage) [Resource u/s 4(1) of MMDR Act vide Government in Steel & Mines Department Notification No-3085/6.4.17, dated 06.04.2017 for a period of 3 years]. (G-3 stage).
7	Investigation for Chromite around Mathkargola in Dhenkanal district T.S.No. F45T9 & (73H/9) (G-4 stage)
	<b>GRAPHITE</b>
8	a) Exploration for graphite around Jagdalpur, Rayagada district, T.S.No.E44F9 (65M/9) (G-2 stage). a) Exploration for graphite around Sargiguda, Rayagada district, T.S.No.E44F10 (65M/10) (G-2 stage).
9	Exploration for graphite around Karabira, Dhenkanal district, T.S.No. F45T2 (73H/2) (G-2 stage).
10	a) Investigation for graphite around Ranjitpur aided by Geophysical survey, Bargarh district, T.S.No. F44W13 (64L/13) (G-4 stage). b) Investigation for graphite around Temrimal & Dahigaon aided by Geophysical survey, Bargarh district, T.S.No. F44W10 & X1 (64L/10 & P/1) (G-4stage).
	<b>LIMESTONE &amp; DOLOMITE</b>
11	Exploration for Crystalline limestone around Telipadar, Balangir district, T.S.No. F44W15 (64L/15) (G-2 stage).
12	Exploration for limestone/dolomite around Dahijira, Sundargarh district, T.S.No. F45G7 & 8(73B/7 & 8) (G-2 stage).

	<b>QUARTZ &amp; QUARZITE</b>
13	a) Investigation for quartzite around Raruanguda in champua sub-division, Keonjhar district, T.S.No.F45N13 (73G/13) (G-3 stage). b) Investigation for quartz & quartzite around Bhatuabeda-Chirgidihi, Mayurbhanj district, T.S.No.F45I12 (73J/12) (G-3 stage).
	<b>DECORATIVE &amp; DIMENSION STONES</b>
14	Investigation for Decorative stone of Artisian Grade in parts of Cuttack, Jajpur, Balasore, Mayurbhanj and Keonjhar Districts T.S.No. F45U2, N9, O10, O11 and O7 (73L/2, G/9, K/10K/11 AND K/7) (G-3 stage)
15	Investigation for dimension/decorative stone & other minor minerals in free areas around Ramgiri & Mahendragarh, Gajpati district, T.S.No.E45A8 (74A/8) (G-3 stage).
	<b>CHINA CLAY</b>
16	Exploration for China clay around Dumuria Taken over ML of OMC Ltd. , Mayurbhanj district, T.S No. F45N13 (73 G/13) (G- 2 stage)