

MINUTES OF THE 53rd MEETING OF THE STATE GEOLOGICAL PROGRAMMING BOARD HELD ON 19TH JULY 2017 AT BHUBANESWAR.

53.01.00	<p>The 53rd meeting of the State Geological Programming Board (SGPB) was held under the chairmanship of Sri R. K. Sharma, IAS, Principal Secretary to Government of Odisha, Steel & Mines Department on 19th July 2017 at Hotel Mayfair, Bhubaneswar.</p> <p>The list of the participants is given in ANNEXURE-I.</p>
53.02.00	<p>WELCOME ADDRESS BY THE DIRECTOR OF GEOLOGY, ODISHA & MEMBER SECRETARY, SGPB.</p>
	<p>Sri Artatrana Dash, Director of Geology, Odisha and Member Secretary, SGPB extended a hearty welcome to Sri R. K. Sharma, IAS, Principal Secretary to Government, Steel & Mines Department and Chairman SGPB, Sri Deepak Mohanty, IFS, Director of Mines, Odisha , Sri K.C.Mohapatra , Dy. Director General, GSI, (SU), Odisha, and all delegates & participants to the 53rd. SGPB meeting.</p> <p>The Member Secretary apprised the house that the State Geological Programming Board (SGPB) meeting is being convened in the line of Central Geological Programming Board (CGPB) to finalise the Annual Field Programme of the DG(O) after detailed discussion and deliberation by participating organizations. The onus is on SGPB to recommend the Government of India any issue that needs special attention or modification for the mineral development in the state. He also informed that as per the decision taken in the 52nd SGPB, Director of Geology, Odisha has undertaken 11 investigation programmes in 2016-17 for iron ore, graphite, limestone, coal, garnet, quartz, basemetal, decorative stone and manganese. A total of geological mapping of 927 sq km has been done and 1550 meters of drilling target has been achieved. He apprised that the Director of Geology, Odisha is taking all possible steps to strengthen exploration activities in the State in order to facilitate auction. He further informed the house that during the field season 2017-18, 12 investigations comprising iron ore, graphite, limestone, chromite, pyrophyllite, garnet, quartz, basemetal,dimension stone shall be taken up. Emphasis on iron ore and manganese ore blocks has been given to upscale the exploration to G-2 level of UNFC. The Member Secretary congratulated the GSI, AMD, IBM,OMC, CMPDI, MECL , NALCO, IDCO,DGWD, SAIL and CGWB for their sincere complements in the mineral development of the State.The Member Secretary expressed his deep sense of gratitude to the Principal Secretary to Government, Steel & Mines Department and Chairman of SGPB for his dynamic leadership and focused objective for mineral development of the State. Formulation of Odisha Mineral Exploration Policy-2015, setting up of Odisha Mineral Exploration Corporation, exploration by MECL through NMET fund are certainly some of the praiseworthy steps initiated by the Chairman, SGPB for timely accomplishment of huge task of exploration</p>

	and assessment of mineral resources of the State. The house joined with member secretary in congratulating Principal Secretary and Chairman of SGPB for his visionary initiatives.
53.03.00	ADDRESS BY SRI K.C.MOHAPATRA, DEPUTY DIRECTOR GENERAL, GSI, (STATE UNIT), ODISHA
	Sri K.C.Mohapatra, Deputy Director General, GSI, (SU), Odisha in his address briefed the activity and achievements of GSI during the year 2016-17. He mentioned that GSI has taken up 27 items in the year 2016-17 out of which 16 are in Mission II mode and rest 11 are in Mission I mode. In the year 2017-18, GSI will take up 30 projects out of which 16 are in Mission II mode and rest 14 are in Mission I mode. He informed the house that 2 more iron ore blocks namely Gandhalpara South- East part-A, Keonjhar district and Rengalaberha North-East block, Keonjhar district will be ready for auction by September'17. 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.
53.04.00	ADDRESS BY SRI DEEPAK MOHANTY, IFS, DIRECTOR OF MINES, ODISHA
	Sri Deepak Mohanty, IFS, Director of Mines, Odisha in his address stated that mineral exploration has gained momentum after promulgation of the Mines and Minerals (Development and Regulations) Amendment Act, 2015 which has made prospecting a mandatory for auction of any mineral block. He appreciated the coordinated approach by different agencies like GSI, IBM, MECL and state Directorate of Geology to upgrade the exploration status of mineral blocks up to G-2 level of UNFC to facilitate auction and urged upon all the exploration agencies to set up their activity to bring in more areas and mineral blocks into auction platform. Director of Mines highlighted the necessity of a collaborative approach between all the exploration agencies and the Directorate of Mines for sustainable development of the mineral sector in the State. He urged upon all the organizations to join hands for development and conservation of mineral resources of the State.
53.05.00	ADDRESS BY SRI R. K. SHARMA, IAS, PRINCIPAL SECRETARY TO GOVT. OF ODISHA, STEEL & MINES DEPARTMENT AND CHAIRMAN, SGPB.
	Sri Raj Kumar Sharma, IAS, Principal Secretary to Government of Odisha, Steel and Mines Department and Chairman, SGPB welcomed all the delegates and participants to the 53 rd SGPB meeting. The Chairman stated that the SGPB meeting held every year has been a major deciding mechanism in formulating exploration programmes which has direct bearing on the economic development of the State. He advised to upgrade all the G-4 & G-3 level explored minerals blocks to G-2 level for auction purpose. He emphasized to put priority for exploration of Iron ore and Bauxite followed by Chromite and Manganese. He urged upon all the organizations to come out with a concrete plan highlighting the minerals that have been covered under various stages / levels of

	<p>exploration and the other minerals available in the State alongwith the indicated areas those need to be explored so that a systematic planning over a definite time frame can be chalked out to accomplish the mineral exploration programme. He requested all the organizations to meet frequently and address the issues related to mineral explorations. Simultaneously, he advised to focus on minor minerals like chinaclay, pyrophyllite, quartz & quartzite and decorative stone etc. so that those can also be considered for auction. The chairman expressed that the coal exploration in the State is the responsibility of CMPDI, however other organizations like GSI and State Directorate should supplement, whenever required. The DG(O) can take up the coal exploration, if the required manpower and equipments are available. He appreciated the functioning of MECL in the State and informed that Govt. is contemplating to give them more Iron and Manganese blocks for exploration.</p> <p>The Chairman appreciated the sincere and dedicated efforts of all the geoscientists working relentlessly in the adverse terrain of the State. He advised all the young geoscientists to be updated with use of latest technologies and Remote Sensing Techniques which are useful tools in modern exploration. The Chairman wished all the dignitaries present in this meeting to interact and discuss on the future course of exploration and assured that any sort of assistance from Steel & Mines Department will be extended and if required, the recommendations would be transmitted to Govt. of India for further action. He thanked all the participating organizations in the 53rd SGPB meeting and wished the meeting a success.</p>
53.06.00	CONFIRMATION OF THE MINUTES OF THE 52nd SGPB MEETING
	<p>Member Secretary, SGPB placed the Minutes of the 52nd SGPB meeting circulated vide letter No. 6015/DG, dated 31/08/2016 before the august house for confirmation and the Minutes was unanimously confirmed by the House without any change.</p>
53.07.00	REVIEW OF ACTION TAKEN ON MINUTES OF THE 52nd SGPB MEETING
	<p>The Member Secretary, SGPB, initiated discussion on the follow up action the on the Minutes of the 52nd SGPB meeting with due permission of the chairman, SGPB.</p>
53.07.01	<p>In response to para 52.09.01 on Agenda-1:-</p> <p>Regarding relaxation in the norm of putting boreholes in forest area in order to expedite general exploration in G-2 level, Member Secretary, SGPB informed that MoEF and CC, Govt. of India, has notified the Forest Conservation Amendment Rules, 2016 on 6th March 2017 where some relaxation for prospecting of minerals has been made. The Chairman assured that if the relaxation is not enough for mineral prospecting, the matter will be taken up again.</p>

Agenda-2:-

On precise borehole spacing along and across the strike of a particular mineral block for G-2 level of exploration by a Committee of representatives from GSI, IBM & DG (O) to avoid confusion, the Member Secretary, SGPB informed that all the exploration agencies are deciding the spacing of boreholes in a mineral block considering the geological & structural complexity in line with the prescribed norms of UNFC & MEMC Rules 2015.

Agenda-3:-

On general / detailed exploration of free hold mineral blocks by Public-Private-Partnership (PPP) mode, the Member Secretary, SGPB informed that GSI and DG(O) are presently undertaking mineral exploration of free hold areas either by in-house programme or by outsourcing of Drilling. Besides, MECL is also carrying out exploration in the state through NMET Fund. Therefore, the mineral exploration through PPP mode for timely completion of exploration of free hold mineral blocks is not an immediate requirement. Also, at present there is no legal frame work to address the issue.

Agenda-4:-

On identification of G4 level explored mineral blocks for further exploration at higher level for resource augmentation / auction, the Member Secretary, SGPB informed that the DG (O) has identified few G4 level explored mineral blocks in co-ordination with GSI and IBM for explorations in future.

Agenda-5:-

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, the Member Secretary, SGPB informed that exploration status of ML holders are being reviewed periodically by a committee comprising representatives of GSI, IBM, DG(O), and DM(O).

Agenda-6:-

Regarding reinvestigation of the crystalline limestone (carbonatite occurrences) in Sunki Valley of Koraput and Khariar area of Nuapada districts, with a view to determining contents of rare earth elements, it is reported that Investigation for REE is presently being looked after by GSI.

Regarding graphite occurrences, mines and waste dumps of beneficiation plants with a view to assessing graphite values at a cut-off of 3% FC, the Member

Secretary, SGPB informed that investigation for graphite is being taken up by GSI in Dandtapa area, Angul District in G-3 stage during F.S. 2017-18. Also, General Exploration of Graphite is undertaken in Muniguda area by DG (O) and assessment is being done as per IBM norm.

ii. Regarding formation of a separate cell to look after the investigation and development of newly declared 31 minor minerals vide Notification dated 10th February 2015 of Ministry of Mines, Government of India, the Member Secretary, SGPB informed that Government has notified the OMMC Rules – 2016 for development of Minor Minerals including the 31 minor minerals and DG(O) is taking up exploration for some minor minerals along with major minerals through respective zonal offices having jurisdiction..

iii. Regarding investigation for strategic minerals like base metals, gold, PGE, tin ore by use of remote sensing, geophysical, geochemical survey techniques, Member Secretary, SGPB replied that DG (O) has undertaken geo-physical survey (SP & IP Survey) for base metal in Kesharpur area of Mayurbhanj district during F.S. 2016-17 and shall continue further survey during FS -2017-18 also.

iv. Regarding deep drilling in Sukinda Chromite Belt jointly by DG (O), GSI, OMC, Tata Steel and MECL, it is replied that DG (O) and GSI cannot undertake deep drilling in Lease holds of Sukinda chromite Belt unless specifically asked for.

v. Regarding assessment of iron ore with +45 Fe, Member Secretary, SGPB replied that GSI as well as DG(O) are undertaking assessment of iron ore with +45% Fe as sub grade ore separately.

vi. Regarding upgradation of exploration status of earlier explored iron ore, bauxite, limestone, manganese ores deposits to the prescribed level as required under MEMC Rules 2015 for auction purpose, Member Secretary, SGPB replied that GSI, DG(O) and MECL are in the process of upscaling of exploration status of earlier explored mineral blocks as per MEMC Rules'15.

vii. Regarding emphasis for exploration of potash fertilizer minerals like nepheline-syenite, it is reported that presently DG(O) is concentrating on exploration of iron ore, Manganese ore, Limestone, Coal, Graphite and some specified minor minerals.

viii. The State Govt. should take advantage of National Mineral Exploration Trust Fund to meet the expenditure to be incurred for exploration and assessment of mineral prospects of the State including leasehold areas. It is informed that steps are being taken to undertake exploration of major mineral blocks by MECL through NMET Fund.

	<p>ix. DG(O) to study crystalline limestone occurrences in the State to determine whether these are carbonatites or not ?. In reply, it is informed that GSI is considering it to include in their Annual Field Programme.</p> <p>x. DG(O) to study the Nepheline Syenite for their use as potash fertilizer, it is informed that GSI had reported K₂O value of 3.62% to 5.57% from Kandakhol Nepheline Syenite area.</p>
53.08.00	PRESENTATION BY MEMBER ORGANISATIONS
	The Member Secretary requested participating organizations to present their exploration activities carried out during 2016-17 and programme of exploration for 2017-18.
53.08.01	<p>Smt. Sanjukta Sahoo, Director, GSI, (SU), Odisha made an elaborate presentation on the exploration activities on Iron Ore in (Mission II) conducted during 2016-17. She 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 Sundergarh district. Dr B. K. Sahu, Director, GSI, (SU), Odisha presented work on Manganese, Non-ferrous and strategic minerals. Dr Sahu explained the quantum of work done and achievements made in Tala-Chhelianal area in the central sector of Eastern Ghats Granulite Belt, Rayagada district, Odisha, General exploration for Manganese ore in Kutinga block, Koraput district, Odisha, Rukunibori-Loharpadar block in the central sector of Eastern Ghats Granulite Belt, Rayagada district, Boringpadar-Amath Block, Eastern Ghats Granulite Belt, Kalahandi district, preliminary investigation for REE in the contact zone between Eastern Ghats Mobile Belt and Singhbhum Craton around Kankarkhol in parts of Deogarh district. Sri Jaydip Mukherjee, Superintending Geologist, GSI, (SU), Odisha highlighted the Coal exploration in Ustalli block, Sundargarh district, Tetelibahal block, Jharsuguda district and also Geotechnical Investigations of water resources development projects in Odisha. He also reported that GSI will take up 30 items for the field season 2017-18, out of which 16 are in Mission II, and rest are under Mission I & IV.</p>
53.08.02	<p>Dr. P C Mishra, Deputy Director Geology, Directorate of Geology made an elaborate presentation of work undertaken during 2016-17 in respect of iron ore, manganese, graphite, limestone, dimension stone, garnet, quartz, coal and geophysical survey for base metal. Sri Mishra mentioned that exploration for iron ore has been undertaken in Netrabandha Pahar, west block in Sundergarh district and a total of 1031.45m drilling has been achieved in 28 boreholes at 200m X 200m grid. Exploration for graphite was carried out around Naringpanga & Khalpadar of Rayagada district (G-2stage). An area of 1 sq. km. has been covered by geological mapping on 1:2,000 scale and 244.15 m has been drilled in 11 BHs. The work is still continuing. Limestone exploration was carried</p>

	<p>out around Pipalmunda, Balangir district (G-2 stage). Coal exploration in Madhupur Block of Ib valley coal field (384.70m drilling has been achieved). Manganese exploration was undertaken around Tonto and Roida area of Keonjhar district (G-4 stage). Exploration for garnet and associated minerals were carried out around Sapajhara in Angul district (G-3 stage) with a recovery of 6860 kg of abrasive grade garnet, size varying from +5 mm to 25 mm from 140 pits having maximum depth of 4 m with average recovery factor of 20 kg/cu m. Investigations and assessment of rocks suitable for use as decorative stone and other Minor Minerals in freehold areas were carried out around Rasol and Giridhar Prasad in Dhenkanal district (G-3 stage) and around Kashinagar and Venkatapuram in Gajapati District (G-3 stage). Exploration for assessment of Quartz was taken up around Moter, Ranmal & Baner area in Kalahandi District (G-3 stage). Geophysical Investigation by self potential survey was carried to the north of Kesharpur, Mayurbhanj District (G-4 stage) to target subsurface base metal occurrences.</p> <p>Sri Mishra briefly outlined the exploration programmes of the Directorate of Geology, Odisha for 2017-18. The programme will comprise iron ore (3), graphite(1), limestone(1), chromite(1), pyrophyllite(1), garnet (1), dimension stone (3) and geophysical investigation for base metal (1). He mentioned that the proposed Annual exploration programme is placed in the house for deliberation before finalization.</p>
53.08.03	<p>Sri S. K. Das, AGM (Geology), OMC Ltd. outlined the review of work of OMC during 2016-17 and also the programme of work for 2017-18 in their leaseholds of chromite, iron ore and manganese. He briefly presented the exploration of chromite in Sukinda Ultramafic and Boula-Nuasahi Complex, iron ore and manganese in Bonai - Keonjhar belt. He informed that a total of 4180.60 m has been drilled. Sri Das added that exploration work will continue in different lease holds of OMC as per the quantity envisaged in exploration programme for 2017-18. Besides, 1.19 Lac meters of core drilling is proposed to be undertaken in Chromite Mining Leases and PLs of OMC Ltd. for assessment of ore reserves. The above quantum of core drilling is subject to availability of required forest permission.</p>
53.08.04	<p>Sri R. Thiagarajan, Sr. Manager (Geology), CMPDIL presented the work undertaken during 2016-17 in Talcher and IB valley coal fields. He informed that CMPDIL has achieved 63,041m of drilling against a target of 59,400m during 2016-17. He also presented a detailed programme of exploration of CMPDIL to be carried out in 2017-18 with a drilling target of 1,07,500 m. He informed that out of the above 55,000m</p>

	of drilling will be carried out by CMPDI and rest 52,500m through outsourcing.
53.08.05	Dr. D.K. Sinha, Regional Director, AMD, Jamshedpur presented the exploration activities of AMD in Odisha during 2016-17 for uranium, rare metal & rare earth elements and beach sand heavy minerals. He also reported that the activities of AMD during 2016-17 were mostly concentrated in Mayurbhanj, Deogarh, Sundargarh and Angul districts in Odisha for exploration of uranium. Rare metal and Rare earth elements investigation has been done in Pandikimal area of Jharsuguda district for columbite-tantalite and beryl. A total of 1640 kg of columbite-tantalite has been recovered. AMD had achieved 1440m drilling in 140 bore holes in beach sand investigation along sea coast between Sana-Arjapalli and Agastinuagaon in Ganjam district in Odisha.
53.08.06	Sri J.P. Chaudhury , Asst. Manager (Geology), MECL briefed the house that MECL has conducted 1000m RC drilling in Bolani and 876m drilling in Kalta iron ore mines in Sundergarh district 2015-16. He informed that RC drilling will be continued in the above areas during 2016-17.
53.08.07	Sri S.R. Majumdar, Sr Manager (Geology), IBM stated that during the period 21.03.2016 to 20.03.2017, Indian Bureau of Mines has done regular inspection of mines for mineral conservation & systematic development of mines and protection of environment under Mineral Conservation & Development Rules, 1988. Out of 33 mining plans received with PMCP, 23 have been approved, 1 under process, 6 plans were rejected and 3 were withdrawn.
53.08.08	Dr Deepak Kumar Kar, Geologist, Directorate of Ground Water Development, Odisha highlighting the achievement for 2016-17 apprised the house regarding their activities comprising ground water table / quality monitoring, hydro geological investigation and survey, renovation / replacement / new monitoring wells and Roof top Rain water Harvesting and Ground water recharge.
53.09.09	Sri S. Chaudhuri, GM (Mines), NALCO in his deliberation stated that during 2016-17, a total 3645.24 m of Pre-production drilling has been achieved through 170 bore holes by NALCO and 3971.54 m by MECL. He further informed that 5000 m of drilling target has been fixed in 25m X 25m grid for 2017-18.
53.09.10	Sri S. Sahu, AGM (Geology), IDCOL informed that in Roida-C Iron and Manganese mines, core drilling in Block-I was suspended due to incapability of out sourced agency (not able to penetrate hard cherty formation) and drilling could not commence in Block-II due to lack of approval from MoEF. In Ampavalli Lime stone mines no agency consented to take up the drilling work for Maoist threat. In the year 2017-18, IDCOL propose to take up drilling in Roida-C and Ampavalli Limestone Mines.

53.09.11	Ms. Sumita Sarkar, Hydrogeologist, CGWB briefed the house about the activities of CGWB during the year 2016-17. She informed that the Aquifer Mapping under National Aquifer Mapping and Management Programme was taken up for delineating and modelling the subsurface multiple aquifers in different parts of Odisha. Ground Water Regime Monitoring, Ground Water Resource Assessment and imparting training programmes are the other valued activities of CGWB.
53.10.00	DISCUSSION ON AGENDA ITEMS OF THE 53rd SGPB
53.10.01	<p>AGENDA BY THE DIRECTORATE OF GEOLOGY, ODISHA [DG(O)]:-The following items are discussed and deliberated and needs early attention.</p> <ol style="list-style-type: none"> 1. 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 by miscreants. Hence, an interdepartmental committee of like Departments such as Home, Revenue, Steel & Mines and Forest & Environment may be constituted to address the issue and facilitate the execution of exploration programme by different member organisations. (Action: MoEF, S&M Dept) 2. Identification of mineral bearing areas explored by Licensees at lower level of UNFC which are not granted in their favour for up-scaling of status of exploration for auction purpose. (Action: IBM, GSI, DG(O), MECL) 3. Need for sharing of exploration data such as Geochemical, Geophysical & Geological among exploration organizations/agencies for preparation and finalization of future action plan for mineral exploration. (Action: All Stake holders) 4. 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 chalking out mineral targeting (Action: DG(O) & GSI)
53.10.02	<p><u>AGENDA BY INDIAN BUREAU OF MINES (IBM):-</u></p> <ol style="list-style-type: none"> 5. Status of time bound Exploration to be collected from the lessees as per UNFC norms in pursuance of Ministry of Mines Letter No. F-10/75/2008-MV dated 23.12.2010.

Sl No.	Region	State	District	Mineral	Area (in Ha)	Date of expiry	Mine Name	Lessee Name	Mine Code	Mine rali sed area in Ha with co- ordinate s & depth of minerali sation in metre	Area (in Ha) explored in G1 & G2 level & their co- ordinate s (after consid ering all depth wise explorati on carried out)	Area (in Ha) explore d in G3 & G4 level & their co- ordinate s (after consid ering all depth wise explorati on carried out)	Explorat ion due as per approve d mining plan/sch eme	Adequacy of exploration proposal in Mining Plan/Scheme to bring the entire mine rali sed area within the lease under G1 and G2 level of exploration	Resourc es as on 01.04.20 16 under G1 level (31, 121,111, 211, 221) (in Tonnes)		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16		
Resource	Resource	Resource	Resource	Reserve Reserve	Remaini ng Resourc es	Total	Year 2016-17	2017-18	2018-19	2019-20	Balance Reserve	Remaini ng Resourc es	Total	Production	Life of		
16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31		
Recomm	Balance	Forest area (in Ha)	Non Forest area (in Ha)	Total area (in Ha)	Further G3 to G1/G2 (Mentio n quantity of G3 level resource s in tonnes)	Area in Ha (F/NF)	Pitting (Nos,Spa cing,Dim ension)	Trenching (Nos,Spa cing,Dim ension)	Explorat ory Drill Hole(Ty pe,Nos,S pacing,L ocation, Vertical/ Angular BH,Dept h in m)	Any other method	G4 to G1/G2 (Mentio n quantity of G3 level resource s in tonnes)	Area in Ha (F/NF)	Pitting (Nos,Spa cing,Dim ension)	Trenching (Nos,Spa cing,Dim ension)	Explorat ory Drill Hole(Ty pe,Nos,S pacing,L ocation,Vertical/A ngular BH,Dept h in m)	Any other method	Time period to complete the propose d exploratio n work (6 months / 12 months / 18 months)
32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49
<p>The above details will give true picture of Exploration in the state of Odisha which will be helpful for future planning.</p> <ol style="list-style-type: none"> 1. Exploration of the virgin area & area proposed to be auctioned as per UNFC and interaction with the stake holders by the State Government in this regard. 2. Need of exploration up-to G-2 Level for semiprecious stone in potential areas. 3. Status of exploration in thenon-captive leases expiring in the year 2020. 4. List of abandoned major mineral miningleases and their systematic closure plans.(Action: All Stake holders & IBM) 																	
<p>53.10.03 AGENDA BY SOCIETY OF GEOSCIENTIST AND ALLIED TECHNOLOGISTS (SGAT):-</p> <ol style="list-style-type: none"> 1. Systematic exploration along-with geophysical prospecting may be undertaken in Bhalukasuni-Nilgiri chromite prospect in Balasore district and Ramgiri chromite prospect in Jeypore, Koraput to ascertain their chromite potentiality. Both the prospects deserve detailed exploration based on the reported occurrences of chromite in the deposit. (Action: GSI & DG(O)) 2. Detailed exploration including geophysical prospecting may be taken up in respect of five blocks to establish their potentiality for graphite prospect. Blocks are Kenduguda and Bilamal in Kandhamal district, Karabira in Dhenkanal district, Seramunda in Cuttack district and Kutragarh in Rayagada district. (Action: GSI & DG(O)) 3. Special Thematic Mapping (STM) by GSI in Gumlai-Phasimal area in the contact zone between Singhbhum craton and Eastern Ghats Mobile Belt reports a number of micro and major shear zones. The signatures of shear zones supported by geochemical anomaly from NGCM should be scanned by geophysical survey to locate any possible mineralisation. (Action: GSI & DG(O)) 4. Rare Earth Elements from Nepheline Syenite and Carbonatites of Odisha should be explored and reserves should be estimated. (Action: GSI & DG(O)) 																	

53.11.00	After detailed deliberation on the activities of the exploration agencies during 2016-17 and their programme of exploration for 2017-18 in the State, the Annual Field Season Programme of the Directorate of Geology, Odisha, (ANNEXURE-II) has been approved by all the members as there is no overlapping or duplication found in the field programme.
53.12.00	VOTE OF THANKS
	Sri R.K.Kar, Deputy Director, Geology, DG (O) proposed Vote of Thanks. He thanked hon'ble Principal Secretary to Govt., Steel & 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.

ANNEXURE-I

LIST OF PARTICIPANTS OF 53rd SGPB MEETING HELD ON 19TH JULY 2017

Sl. No.	Name	Designation	Organization
1	Sri R.K. Sharma, IAS	Principal Secretary to Govt. of Odisha and Chairman, SGPB	Steel & Mines Department
2	Sri D. Mohanty, IFS	Director of Mines, Odisha	Dir. of Mines, Odisha
3	Sri K.C. Mohapatra	Dy. Director General	GSI, SU, Odisha
4	Sri A.T. Dash	Director of Geology, Odisha	Dir. Of Geology, Odisha
5	Sri H.K. Sahoo	Superintending Geologist	GSI, SU, Odisha
6	Sri Jaydip Mukherjee	Superintending Geologist	GSI, SU, Odisha
7	Sri A.K. Tripathy	Superintending Geologist	GSI, SU, Odisha
8	Dr. R.K. Naik	Superintending Geologist	GSI, SU, Odisha
8	Mrs. Sanjukta Sahoo	Director	GSI, SU, Odisha
9	Dr. B.K. Sahu	Director	GSI, SU, Odisha
10	Sri K.C. Das	Sr. Geologist	GSI, SU, Odisha
11	Sri G.K. Bhuyan	JDG (L-I)	Dir. Of Geology, Odisha
12	Sri K.C. Mohapatra	JDG	Dir. Of Geology, Odisha
13	Smt. A.B. Mishra	JDG	Dir. Of Geology, Odisha
14	Sri J.P. Panda	JDG	Dir. Of Geology, Odisha
15	Sri M.D. Behera	JDG	Dir. Of Geology, Odisha
16	Sri A.K. Raut	JDG	Dir. Of Geology, Odisha
17	Sri S.K. Rath	DDG	Dir. Of Geology, Odisha
18	Sri S.K. Sahu	DDG	Dir. Of Geology, Odisha
19	Sri N. Sahu	DDG	Dir. Of Geology, Odisha
20	Sri M.R. Mohapatra	DDG	Dir. Of Geology, Odisha
21	Sri K.D. Nath	DDG	Dir. Of Geology, Odisha
22	Dr. S.M. Monalisa	DDG	Dir. Of Geology, Odisha
23	Sri R.K. Kar	DDG	Dir. Of Geology, Odisha
24	Dr. P.C. Mishra	DDG	Dir. Of Geology, Odisha
25	Dr. P.K. Chand	Petrologist	Dir. Of Geology, Odisha
26	Sri S. Mishra	Geologist	Dir. Of Geology, Odisha
27	Smt. S. Sahoo	Geologist	Dir. Of Geology, Odisha
28	Ms. S. Dash	Geophysicist	Dir. Of Geology, Odisha
29	Dr. U.C. Jena	Joint Director Mines	Dir. Of Mines, Odisha
30	Sri S.K. Das	AGM (Geology)	Odisha Mining Corporation Ltd.
31	Smt. N. Das	Dy. General Manager (Geology)	Odisha Mining Corporation Ltd.
32	Dr. T. Basa	Dy. General Manager (Geology)	Odisha Mining Corporation Ltd.
33	Sri K.C. Rath	Dy. General Manager (Geology)	Odisha Mining Corporation Ltd.
34	Sri J.P. Pattnaik	Dy. General Manager (Geology)	Odisha Mining Corporation Ltd.
35	Sri S.K. Nayak	Sr. Manager (Geology)	Odisha Mining Corporation Ltd.
36	Sri B.K. Dash	Sr. Manager (Geology)	Odisha Mining Corporation Ltd.
37	Sri P.K. Behera	Sr. Manager (Geology)	Odisha Mining Corporation Ltd.
38	Sri B.K. Panda	Sr. Manager (Geology)	Odisha Mining Corporation Ltd.
39	Sri D. Manoharam	Sr. Manager (Geology)	Odisha Mining Corporation Ltd.
40	Ms. Kabita Patel	Manager (Geology)	Odisha Mining Corporation Ltd.
41	Sri P.K. Saha	Dy. Manager (Geology)	Odisha Mining Corporation Ltd.
42	Smt. S. Mahanta	Dy. Manager (Geology)	Odisha Mining Corporation Ltd.
43	Sri R. Mohanty	Dy. Manager (Geology)	Odisha Mining Corporation Ltd.
44	Sri T.K. Kandeyang	Dy. Manager (Geology)	Odisha Mining Corporation Ltd.
45	Ms Smitaline Mishra	Dy. Manager (Geology)	Odisha Mining Corporation Ltd.

46	Ms. Nilu Iraqi	Dy. Manager (Geology)	Odisha Mining Corporation Ltd.
47	Sri D. Nayak	Dy. Manager (Geology)	Odisha Mining Corporation Ltd.
48	Sri R. Thiagarajan	Sr. Manager (Geology)	CMPDIL, Bhubaneswar
49	Sri A.B. Mahato	Dy. Manager (Geology)	CMPDIL, Bhubaneswar
50	Dr. D.K. Sinha	Regional Director	AMD, ER, Jamshedpur
51	Sri Harkesh Meena	Regional Controller of Mines	IBM, Bhubaneswar
52	Sri S.R. Majumdar	Sr. Manager (Geology)	IBM, Bhubaneswar
53	Sri J.P. Chaudhury	Assistant Manager (Geology)	MECL
54	Sri S. Chaudhuri	General Manager (Mines)	NALCO
55	Dr. D.K. Kar	Geologist	GWD, Odisha
56	Sri G.P Roy	Director	PPF –II,DOWR
57	Sri T. K. Chakrabarty	Dy. Director	E & SEA,CE.PPF
58	Sri Sumant Sahu	AGM (Geology)	IDCOL, Bhubaneswar
59	Ms. Sumita Sarkar	Hydrogeologist	C.G.W.B
60	Dr. B.M Faruque	Representative, SGAT	SGAT, Bhubaneswar
61	Sri J. R. Patnaik	Representative, SGAT	SGAT, Bhubaneswar

ANNUAL FIELD SEASON EXPLORATION PROGRAMME OF DG(O) FOR 2017-18.

1. Exploration for iron ore around Dholta Pahar, Sundargarh District, TS No.-[F45N1.(73 G/1)] in G-2 Stage
2. Exploration for iron ore around Baliapahar, Sundargarh District, [TS No.-F45 N 5.(73 G/5)] in G-2 Stage. (Through outsourcing)
3. Exploration for iron ore around Mankarnacha, Sundargarh District, TS No.-[F45 N1 & N 5.(73 G/1 & 5)] in G-2 Stage.(Through outsourcing).
4. Exploration for iron ore in Khondadhar IIA Sub-block, Sundargarh District, [TS No.-F45 N1.(73 G/1)], in G-2 Stage.(Through outsourcing).
5. Exploration for iron ore in Khondadhar IIB Sub-block, Sundargarh District, [TS No.-F45 N1& N2. (73 G/1& G/2)] in G-2 Stage. (Through outsourcing).
6. Prospecting for chromite over an area of 208 ha in village Madhuban ,Keonjhar district, TS No.-F45 O8 (73 K/8) , (G-3 Stage).[Notified u/s 4(1) of MMDR Act vide Government in Steel & Mines Department Notification No-**3085** dated **06/04/2017** for a period of 3 (three) years]
7. Exploration of crystalline limestone around Lukapada, Bolangir District, TS No.-F44 W15 (64 L/15) in G-2 Stage.
8. Continuation of exploration for Graphite around Khalpadar ,Rayagada District, [TS No.-E44 F10 (65M/10)] in G-2 Stage.
9. Exploration for coal in Madhupur block of Ib vally coal field, Jharsuguda District, [TS No.-F44R13 (64O/13)] in G-2 Stage.
10. Exploration for pyrophyllite around Janghira- Rampakot area, Keonjhar District, [TS No.-F45 N11(73 G/11)] in G-3 Stage.
11. Exploration for garnet around Birlamunda and Sarai village in Angul and Keonjhar Districts, [TS No.- F45 N7(73 G/7)] in G-3 Stage.
12. Exploration for Decorative stone and other Minor Minerals in freehold areas around Taraba and Lubarsing, Gajapati District, [TS No.-E45A4 (74 A/4)] in G-3 Stage .
13. Exploration for Decorative stone and other Minor Minerals in freehold areas around Antarba and Kandha Adaba, Gajapati District,[TS No.-E45 A3(74 A/3)] in G-3 Stage.
14. Exploration for Decorative stone and other Minor Minerals in parts of Dhenkanal & Angul, Districts, TS No.-[F45 T 1(73 H/1) and F45 T 5(73 H/5)] in -3 Stage.
15. Continuation of Geophysical Investigation for delineation of Base Metal mineralization by induced polarization method to the North of Kesharpur, Mayurbhanj District, [TS No.-F45 I12(73 J/12)] in G-4 Stage.
16. Exploration for quartz in the eastern bank of Bagh river around villages Lumurajola- Sialimunda in Baudha Districts, TS No.-[F45 S 02 (73 D/2)] in -3 Stage.
17. Exploration for quartz & quartzite around villages Mudrajodi - Pokharia in sadar sub-division of Mayaubhanj Districts, TS No.-[F45 I 12 (73 J/12)] in -3 Stage.