

**MINUTES OF THE 55th MEETING OF THE STATE GEOLOGICAL
PROGRAMMING BOARD HELD ON 8TH AUGUST 2019 AT BHUBANESWAR**

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| 55.01.00 | <p>The 55th meeting of the State Geological Programming Board (SGPB) was organized under the chairmanship of Sri R. K. Sharma, IAS, Additional Chief Secretary to Government of Odisha, Steel & Mines Department on 8th August 2019 in the Convention Hall of Hotel Mayfair, Bhubaneswar.</p> <p>The list of the participants is enclosed as ANNEXURE-I.</p> |
| 55.02.00 | <p>WELCOME ADDRESS BY THE DIRECTOR OF GEOLOGY, ODISHA & MEMBER SECRETARY, SGPB.</p> |
| | <p>Smt A.B Mishra, Director of Geology, Odisha and Member Secretary, SGPB extended hearty welcome to Sri R. K. Sharma, IAS, Additional Chief Secretary to Government, Steel & Mines Department and Chairman SGPB, Sri Deepak Mohanty, IFS, Director of Mines, Odisha, Sri L. L Vishwakarma, Dy. Director General, GSI, (SU) Odisha, Sri R. Veenil Krishna, IAS (M.D), OMC and all the delegates & participants in the 55th 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 congregated in the similar forum 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 for the mineral development of the state.</p> <p>She informed the house regarding the achievements of the 15 investigations undertaken by the Directorate of Geology during the year 2018-19 in accordance with the resolution of 54th SGPB. Out of these projects, 6 investigations were at G2, 7 investigations at G3 and 2 investigations were at G4 level of UNFC. These include 2 investigations for iron and manganese, 4 for graphite, 2 for quartz & quartzite, 2 for dimension & decorative stone, 2 for chromite, 1 each for limestone, china clay and coal while 2 G2 level proposals for iron ore couldn't be executed due to delay in clearance of Forest Diversion Proposal. A total geological mapping of 533 sq km on 1:25,000 scale, 8.7 sq km on 1:2000/5000 scale have been achieved supported by 369 cubic meter of trial excavation and generation of 4688 samples during the course of exploration. Highlighting the achievements of DG(O) she informed the house that DG(O) has added 1 million tonne of graphite, 24 million tonnes of iron ore (at G2 level), 84 million cubic meter of DD stone (at G3 level) to the state mineral resource with accomplishment of 11724.26 m of drilling. Further, Directorate has also reassessed the resource of Ballada bauxite block, Khatkurbahal (North) limestone block at G-2 level, Kalimati manganese block at G2 level and Unchabali iron ore block at G2 level in line with MEMC Rule-2015 & submitted the Geological reports for auction. Geological Reports of 12 auctionable major mineral blocks and 13 minor mineral blocks have been</p> |

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| | <p>prepared and submitted to DM (O) for auction while 21 geological reports of working mines due to expire on 31st March 2020 have been evaluated by the Technical Committee for auction purpose.</p> <p>She appraised the house about the constitution of four working groups as per the directive of ACS & Chairman SGPB, for better execution and achievement of exploration of different minerals & for better coordination among the exploring agencies.</p> <p>She also informed the house regarding the role of gem testing and characterization services offered by DG (O) to the public with its contribution to the state exchequer. The Directorate has also taken steps to procure XRD and XRF instruments for precise analysis of rocks and ores which will immensely strengthen the infrastructure facilities & scientific approach to the geological exploration. Two crawler mounted rigs have been procured to enhance drilling capabilities of the directorate. The Member Secretary congratulated GSI, AMD, IBM, OMC, CMPDI, MECL, NALCO, IDCOL, DGWD, SAIL, CGWB and Chief Engineer Project Planning for successfully accomplishing their work during the year 2018-19.</p> <p>She further informed the house that during the field season 2019-20, 25 investigations comprising of iron, manganese, chromite, graphite, limestone & dolomite, quartz & quartzite, dimension & decorative stone, pyrophyllite, coal, china clay, fire clay, pyroxenite and PGE are envisaged to be undertaken, out of which 9 investigations have been planned in G2, 12 in G3 and 4 projects in G4 level of UNFC. Special emphasis is being laid on upscaling of iron and manganese resource to G-2 level for leasing out these blocks through auction. The Member Secretary expressed her deep sense of gratitude to the Additional Chief Secretary to Government, Steel & Mines Department and Chairman of SGPB for his dynamic & visionary leadership and focused objective for mineral development of the State.</p> |
| 55.03.00 | ADDRESS BY SRI R.Veenil Krishna, IAS (MANAGING DIRECTOR) OMC,ODISHA |
| | <p>Sri R. Veenil Krishna, IAS (M.D) OMC Ltd & OMECL, Odisha in his address synopsized the activities and achievements of OMC & OMECL during the year 2018-19. He expressed his concern over the constraints in getting forest clearance for which exploration work in the state is not getting momentum. He also reassured that as there has been certain relaxation in the current forest clearance norms, the exploration work will gain momentum in coming days. Further he informed that in the current year, OMC Ltd has planned to achieve drilling target of 50,000m after getting more and more Stage –II clearance. The exploration activities cover both non operational mines and operational mines to reassess the resource and sustainability. OMC Ltd is focused to complete the explorations in the allotted blocks within two years. Both in-house and outsourcing drilling will be carried out to achieve the objective in time. Iron ore and Bauxite blocks have been allotted to OMECL for up scaling of resource</p> |

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| | which have been approved for NMET funding and hopefully field activity will commence soon after forest clearance. |
| 55.04.00 | ADDRESS BY SRI L. L VISHWAKARMA, DEPUTY DIRECTOR GENERAL, GSI, STATE UNIT, ODISHA |
| | <p>Sri L. L Vishwakarma, Deputy Director General, GSI, (SU) Odisha highlighted the activities and achievements of GSI during the year 2018-19 in a compendious manner. He informed that GSI had carried out 16 NGCM items covering 11381 sq km & 4 STMs covering 1300 sq km under Mission –I, 14 mineral explorations under Mission-II. Out of 14 items in Mission – II, 5 items for Iron ore, 2 each for Manganese, base metal and coal, one each for REE, RMT and Graphite. 6 items have been carried out at G-2 stage, 4 items at G-3 stage and 3 items at G-4 stage of UNFC. Gandhalpada Iron ore West block in Sundargarh district, Alaghat Iron Ore block in Keonjhar district, Madanasahi Basemetal block in Mayurbhanj district and Adash Basemetal block in Deogarh district are very promising. After completion of these basemetal blocks, it will be put for auction for the first time in Odisha. Four Geological Reports i.e Gandhalpada Iron ore south-east part-B block, Rengalaberha Iron ore north-east extension block & Gandhalpada Iron ore south block in Keonjhar district and Kutinga manganese block in Koraput district have been handed over to State Government of Odisha. As per request of the State Government, a compiled report amalgamating all the sub blocks of Gandhalpada Iron ore with a total resource of 314.37mt with average grade of 60.48% Fe at 45% cut off has been submitted by GSI. GSI has been asked to complete exploration up to G-2 stage in 13 non working mines. Forest clearance issues are the major hindrance in carrying out G-3 and G-2 stage of exploration. He also informed the house that GSI has intercepted a 40m thick peat/ lignite sequence in Gandhalpada west block in Keonjhar district for the first time which bears a geological significance. Apart from this, the aero-geophysical data of 75000 sq km handed over by the Odisha Government to RSAS, GSI Bangalore is under interpretation by a Canadian Company and the first draft of the report is expected to be submitted in January, 2020. He thanked Director of Geology, Odisha for all the support and further assured to extend all possible cooperation in the field of mineral exploration.</p> |
| 55.05.00 | ADDRESS BY SRI DEEPAK MOHANTY, IFS, DIRECTOR OF MINES, ODISHA |
| | <p>Sri Deepak Mohanty, IFS, Director of Mines, Odisha in his address stated the significance of this SGPB meeting wherein all the geological exploring agencies join together in a common platform to discuss and decide the course of action for the entire year. He further reiterated that after amendment of the Mines and Minerals (Development and Regulations) Act, 2015, geological exploration has assumed tremendous importance and significance for the activity & progress of the mining sector of entire nation. He informed the house that in our state 5 blocks have been already auctioned and another 40 blocks are in readiness to put for auction in the coming year in a phase manner. He</p> |

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| | <p>thanked all the exploring agencies for successful completion and resource assessment job. State Government has already constituted a Technical Committee under the chairpersonship of DG (O) with representative of GSI, IBM, DM (O) & OMECL to scrutinize and validate the Geological Reports of working mines due to expire in March 2020. DG (O) has already prepared 13 minor mineral blocks with all the exploration activities completed, which will be put into auction. He sought cooperation of IBM, Odisha region for auctioning of minor minerals associated with major mineral. Govt. of India is very much concerned about the successful auctioning of the 24 mining leases which are going to expire by March 2020. So, he hoped for the coordination of all the exploring agencies to make the mining activities of the state more systematic.</p> <p style="text-align: right;">(Action: IBM)</p> |
| 55.06.00 | <p>ADDRESS BY SRI R.K. SHARMA, IAS, ADDITIONAL CHIEF SECRETARY TO GOVT. OF ODISHA, STEEL & MINES DEPARTMENT AND CHAIRMAN, SGPB.</p> |
| | <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 55th SGPB meeting. The Chairman expressed that the SGPB Meeting, has been a major deciding mechanism in formulating exploration programme for each year which has direct bearing on the economic development of the state. He emphasized to prioritize exploration on Iron, Manganese and Chromite in which Odisha is the leading producer in the country and urged upon all the organizations to look for new areas for further augmentation of these resources. He advised the exploring agencies to formulate concrete action plans for exploration of basemetal, graphite, bauxite, limestone, gemstone deposits of the state. He appealed to enhance the mining portfolio of the state by means of adding new minerals like nickel, cobalt, gold and lithium to the mineral basket of the state. He thanked GSI for taking up projects on base metal and gold in this year programme. The chairman stressed upon to maintain a time frame to complete the exploration programmes for proper utilization. The chairman appraised the house that the state government has taken up the issue of forest clearance with central government and the persuasion is still on but at the same time he also declared that Steel & Mines Department has planned to open a Forest Diversion Cell in Directorate of Mines that will work for getting timely forest clearance of the exploring agencies of the state. A nodal officer with supporting staffs will be engaged to look after local problems faced by the exploring agencies. He emphasized on the manpower strengthening of DG (O).The Chairman wished that all the dignified members present in this meeting will interact and discuss on 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 necessary action. He thanked all the organizations participating in the 55th SGPB meeting and</p> |

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| | wished the meeting a success. |
| 55.07.00 | CONFIRMATION OF THE MINUTES OF THE 54th SGPB MEETING |
| | Member Secretary, SGPB placed the Minutes of the 54 th SGPB meeting circulated vide Letter No.-10626/DG, Dt. 09/10/2018 before the august house for confirmation and the Minutes was unanimously confirmed by the House without any change. |
| 55.08.00 | REVIEW OF ACTION TAKEN ON MINUTES OF THE 54th SGPB MEETING |
| | <p>The Member Secretary, SGPB, initiated the discussion on the follow up action taken by member organizations on the recommendation of the 54th SGPB meeting with due permission of the Chairman, SGPB. During the discussion the following suggestions were made by the members.</p> <ul style="list-style-type: none"> • Keeping in view the potentiality of Gemstone in the state, DM (O) suggested to take up few gemstone exploration projects, either by DG (O) or GSI in addition to the major mineral investigations; Member Secretary, SGPB informed that GSI is going to take up one G4 stage investigation for Diamond in Bargarh district during the year 2019-20 • Regarding possible mineralisation of REE in Nepheline Synite. Nepheline Synite of Deogarh & Sambalpur districts have been studied and GSI will examine the other reported alkaline bodies of Odisha in due course of time. (Action: GSI) • MECL should expeditiously complete the exploration in the allotted blocks within the NMET approved time line. (Action: MECL) • ORSAC is included as a member organization of SGPB • Mining feasibility should be examined by DM(O) while putting smaller mineral blocks into auction. (Action:DM(O)) • Regarding deep borehole to prove the deeper extension of chromite bands in Sukinda Valley where, all the potential bands under leaseholds, it is opined that the Working Group- I will examine the feasibility of putting deeper boreholes from the exploration reports of individual lessees to be collected from DM (O)/IBM & suggest modalities to work out a working plan so that DM(O) will coordinate with the ML holders for putting few deep inclined boreholes for assessing the depth persistence of chromite lodes at deeper level by GSI / DG (O). • 3D ore modeling of iron/manganese ore bodies need to be done while exploring at G2 level. (Action: All members) |
| 55.09.00 | PRESENTATION BY MEMBER ORGANISATIONS |
| | The Member Secretary requested participating organizations to present their exploration activities carried out during 2018-19 and programme of exploration for 2019-20. |
| 55.09.01 | Sri M. K. Patel, Director, GSI, (SU) Odisha made an elaborate presentation on the exploration activities of GSI (SU) Odisha conducted during 2018-19. He explained regarding the activities of 16 NGCM projects and 4 STM projects under Mission – I. He also presented on 14 projects under Mission – II which |

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| | <p>includes 5 projects of Iron ore, 2 projects of Manganese ore, 2 projects of Base metal and 2 projects of Coal, one project each for REE, RMT and Graphite. He also highlighted on the quantum of work done and achievements in Nuagan Iron ore West Block, Keonjhar district, Jhumka –Pathiriposi Iron Ore West Block, Sundargarh district, Gandhalpada Iron Ore West Block, Keonjhar district. Boirani-Sadabartan Manganese Block of Ganjam district and Adash Copper deposit of Deogarh district. He presented a detailed presentation on the programme of the exploration activities for F.S. 2019-20 which includes 7 projects under Mission – I (3 NGCM project & 4 STM projects) and 33 projects under Mission – II (6 iron, 10 manganese, 5 gold, 4 base metal, 4 coal, 2 chromite 1 graphite & 1 bauxite). Geotechnical investigation of Water Resources Development Projects in Odisha will also be carried out during the F.S 2019-20.</p> <p>Sri Jaydip Mukherjee, Director (Geology), GSI, (SU), Odisha made an elaborate presentation on Coal exploration in Kendudihi Block of IB River Coalfield and Khandanal Block in Talcher Coalfield. He also presented 11 Engineering Geology projects which include 2 Dam projects, 5 barrage projects and 2 irrigation projects, one canal project & one land subsidence project undertaken during F.S. 2018-19.</p> |
| <p>55.09.02</p> | <p>Dr. P C Mishra, Deputy Director Geology, Directorate of Geology made an elaborate presentation on the 15 exploration projects undertaken during 2018-19 which includes one coal, 2 iron ore & manganese, 4 graphite, one limestone, one china clay, 2 chromite, one dimension & decorative stone, 2 quartz & quartzite, one Artisan grade decorative stone in different districts of Odisha, where DG (O) achieved 10313.01m drilling in various mineral/ore prospects. Out of 15 investigations, exploration has completed in 2 projects and 4 G2 level exploration projects will be continued in 2019-20.</p> <p>Dr. Mishra highlighting the achievements of DG(O) informed that in Madhupur Coal Block of Ib valley coal field a proved resource of 318.919 mt of thermal grade and gross indicated resource of 134.28 mt of G-8 to G-17 grade has been estimated. Further an indicated resource of 23.922 mt of iron ore (all grades) has been estimated in Dholtapahar iron block and 0.98 mt of disseminated graphite in Jagdalpur block of Rayagada district have also been assessed. Exploration for iron ore in SGB mine in Keonjhar district received a setback for rejection of forest clearance proposal by REC, MoEF and drilling was suspended. Another two exploration programmes for iron ore (Mankarnacha & Baliapahar block) could not start for want of forest clearance.</p> <p>Dr. Mishra briefly outlined the exploration programmes of the Directorate of Geology, Odisha for F.S. 2019-20. The programme will comprise 25 investigations comprising Coal – 1, Iron ore -3, Limestone – 2, Graphite – 2, China clay – 1 (all are at G2 stage), Pyrophyllite – 01, Decorative stone -02, Quartz & quartzite – 07, Fire clay -01, Pyroxenite – 01(at G3 stage) , Chromite – 01, Graphite – 01, Fire clay -01, Manganese -01 (at G4 stage) (Annexure-II). He mentioned that the proposed annual exploration programme for 2019-20 is</p> |

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| | placed in the house for approval before finalization. |
| 55.09.03 | Dr. Tilotamma Basa, Addl. General Manager (Geology), OMC Ltd. outlined the review of work of OMC during 2018-19 and also the programme of work for 2019-20 in their leaseholds of chromite, iron ore and manganese prospects. She briefly presented the exploration of chromite in South-Kaliapani, Sukrangi & Bangur, iron ore in Daitari, Gandhamardan-B, Kurmitar & SBBK (Barbil) and manganese in Dubuna-Sakradihi Keonjhar belt. She informed that during 2018-19 a total of 19,394 m has been drilled. Dr. Basa added that exploration work, will be continued during F.S 2019-20 with drilling meterage of 54,140m of core drilling in Chromite, Iron, and Bauxite Mining Leases and PLs of OMC Ltd. for assessment of ore reserves subject to availability of required forest permission. |
| 55.09.04 | Sri S. Sinha, GM, Exploration, OMECL presented the work undertaken during 2018-19 by OMECL with the approval of NMET. Five bauxite blocks & 8 iron blocks were allotted to OMECL. Forest clearance is awaited to carry out exploration activities in bauxite blocks. Geological mapping have been carried out in Khandadhar Iron ore sub block-A, B, C, D, E, F, G & Thakurani block. All the blocks will be explored upto G2 stage as per UNFC. |
| 55.09.05 | Sri S.K. Srivastava, Regional Director, CMPDIL presented the work undertaken by CMPDIL during 2018-19 in Talcher and IB valley Coalfields. He informed that CMPDIL has achieved 95,105.90 m of drilling which includes CIL block - 21,242.5m, Non CIL block – 73,863.4 m against a total target of drilling 1,49,000m during 2018-19. He also presented a detailed programme of exploration of CMPDIL to be carried out during 2019-20 with a drilling target of 1, 37,500 m. He also informed the house regarding the Law and Order problem and forest clearance issue which is the main cause of shortfall of drilling meterage. |
| 55.09.06 | Sri Anirban Saha, Regional Director, AMD, Jamshedpur presented the exploration activities of AMD in Odisha during 2018-19 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 2018-19 were mostly concentrated in Mayurbhanj (Kanjia-Kusumbari, Dudhisol-Jamshola-kesharpur area, Tilogoriya, Panjia and Dumurdih area), Bagiyabahal-Baratangra, Baramarian-Banskona-Champajharan-Sargigarh tract of Sundargarh district and Gurundia, Bharimara, Laimora and Raital tract of Sundargarh and Deogarh districts in Odisha for exploration of uranium. |
| 55.09.07 | Sri K. Krishan, Regional Mining Geologist, IBM presented the review of work done by IBM, Bhubaneswar during 2018-19. He stated that IBM has done regular inspections of 90 mines for mineral conservation & systematic development of mines and protection of environment under MCDR, 2017. Out of 34 mining plans received with PMCP, 31 have been approved, 3 plans were |

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| | rejected by IBM. Out of 56 review of mining plans received with PMCP, 36 mining plans have been approved and 20 mining plans were rejected. Out of 59 FMCP received, 35 approved and 24 rejected. During the year 2018-19 one certificate issued under Rule 21(4) of MCDR 2017. During 2018-19 & 2019-20 scale relaxation of two mines i.e Jilling langalota iron & manganese mine & Bolani iron ore mine are granted. Validation of all self assessed 04 & 05 Star mines completed. |
| 55.09.08 | Sri M.W. Wadaskar, Manager (Geology), MECL presented the exploration activities of MECL in Odisha during 2018-19. He highlighted the quantum of work done in Jumka-Pathriposhi Iron ore Block in Sundargarh district, Tamiya Manganese block & Rengali Manganese block in Balangir district. He also briefed the house regarding their mineral exploration programme for F.S.2019-20. |
| 55.09.09 | Sri R.P. Mondal, Manager (Geology), SAIL, presented the exploration activity of Barsua Iron Mine, Sundargarh district during the F. S 2018-19. Total achievement since 2011-12 to 2018-19 is 5580m drilling in 76 BHs. |
| 55.09.10 | Er. P.K. Nanda, Chief Engineer & Director, DGWD presented physical achievement during the 2018-19. Under the ground water scheme, 4nos of ground water table & quality monitoring in 314 blocks & in 23 towns have been done. 314 nos of Ground Water assessment and data collection & concise reports are prepared. Rooftop Rainwater Harvesting & GW Recharge have been done in 126 nos. of Govt. buildings and in 5351 nos. of private buildings. |
| 55.09.11 | Sri N. Sahu, JDG, O/o - Chief Engineer, PPF & Inv. Deptt. of Water Resources, Odisha highlighted the achievement of the Department for F.S. 2018-19. He presented the work done in Kalhandi, Padampur, IB, Ganjam, Koraput, Mayurbhanj and Cuttack Investigation Divisions. He mentioned about 213 numbers of boreholes drilled in year 2018-19 and 152 numbers of boreholes to be drilled in year 2019-20. |
| 55.10.00 | DISCUSSION ON AGENDA ITEMS OF THE 55th SGPB |
| 55.10.01 | AGENDA BY DIRECTORATE OF GEOLOGY, ODISHA [DG (O)]: The following items are discussed and deliberated with the following recommendation. Government exploring agencies like GSI & DG (O) are facing difficulties in pursuing forest clearance proposals for executing G-2 level of exploration. Recently REC of MoEF has approved a Stage-I clearance for an iron ore block with a precondition that after exploration, the mineral block may not be considered for auction while another FDP is rejected which are major set back to the exploration programme and mineral development in the state. One Forest Officer may be entrusted to pursue the FDP proposals of the Govt. agencies to facilitate and expedite the forest clearance proposals. (Action: Steel & Mines Department and PCCF) |

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| 55.10.02 | <p>AGENDA BY SOCIETY OF GEOSCIENTIST AND ALLIED TECHNOLOGISTS (SGAT):</p> <ol style="list-style-type: none"> 1. High Resolution Aeromagnetic and Radiometric Airborne Survey of hard rock areas of the state. An area of 75,000 sq. km of hard rock areas of the State was covered by HR Aeromagnetic and Radiometric Airborne survey with assistance of Govt. of Australia and a Data Processing Center was set up in the Directorate of Geology during the 1990s. Steel & Mines Department may seek the assistance of Australian Govt. for covering the balance hard rock areas of the State, updating the Data Processing Centre (DPC) and providing training facilities for the technical personnel of DG (O). Views: It was informed to the house that GSI will take up the balance areas in a phased manner as per availability of the aircraft. (Action: DG (O) and Steel & Mines Deptt.) 2. DG (O) should prepare a shelf of exploration projects for funding by NMET. The minerals to be targeted include Gold, Base metals, PGM, Tin, Nickel among others. Views: The above commodities are under active consideration by exploring agencies operating in Odisha with initiatives from Chairman, SGPB. DM (O) is holding regular meetings for allotment of exploration blocks. (Action: DG (O) ,OMECL,GSI,MECL) 3. DG (O) should also prepare a shelf of projects for possible assistance (technical and financial) by UNDP, Canadian International Development Agency (CIDA) and other world bodies of South Africa, France, US, UK and Russia. Views: In the present context, NMET has been founded by Government of India to promote exploration projects & sharing of expertise. (Action: DG (O) and Steel & Mines Deptt.) 4. Steel & Mines Department may take steps for framing State Mineral Policy in line with NMP 2019. (Action: Steel & Mines Deptt.) 5. The State Directorate of Mining & Geology was the first State to take up proving of coal reserves in collaboration with and support of CMPDI. This should be revived. Views: DG (O) and CMPDIL are working together & regular coal coordination meetings are being conducted. (Action: DG (O) & CMPDIL.) 6. In view of the climatic change and increase in the intensity and numbers of tropical cyclones affecting Odisha, Marine and Coastal Survey Division (M&CSD) of GSI, may take up geological mapping of coastal zone including the shoreface along with geophysical surveys such as shallow seismic, Electrical Resistivity etc. all along the 480 km stretch on priority basis. Views: GSI will examine the proposal & will take up in future. (Action: GSI) 7. Micro seismic zonation survey may be taken up for the coastal town of Puri. The micro-seismic zonation map for the twin city Bhubaneswar and Cuttack carried out by GSI may be made available to the public for effective town planning. Views: GSI has already started working on the micro-seismic zonation of |
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| | <p>Bhubaneswar & Cuttack and submitting its reports to state Govt. It will be extended to Puri town in future.</p> <p style="text-align: right;">(Action: GSI)</p> <p>8. Priorities of exploration projects to be taken up by DG (O) during the next 5 years have been indicated in the Vision Document – 2030 for Development of Mineral Sector of Odisha.</p> <p>Views: DG (O) is prioritizing exploration proposals as per requirement of the state in coordination with DM (O). The proposals in 2030 vision document will be taken care of.</p> |
| 55.10.03 | <p>AGENDA BY MINERAL EXPLORATION CORPORATION LIMITED (MECL):</p> <p>MECL proposes to take up G4/G3 stage exploration around Kumiapali and Antapali Block in Balangir district and Amatpani-Giringkela-Sargipalli-Baharatpur area, Sundargarh district and seeks consent of the State Government.</p> <p>Views: Allotment of mineral blocks for exploration is to be decided in the committee headed by DM (O). The proposal will be examined by the committee.</p> <p style="text-align: right;">(Action: DG(O) & DM(O))</p> |
| 55.10.04 | <p>AGENDA BY INDIAN BUREAU OF MINES:</p> <p>1. As per the Mineral Conservation and Development (Amendment) Rules, 2018, the depth of exploration to be proposed in the modified mining plan of all leases by open cast mining shall be up to 300 meter or up to discontinuance of ore body, whichever is earlier in which depth of the ore body has not been established.</p> <p style="text-align: right;">(Action: All Stake holders)</p> <p>2. In case of underground mines, the depth of exploration shall be decided by the Indian Bureau of Mines on case to case basis at the time of approval of such plan, depending upon the geological set up of the area.</p> <p style="text-align: right;">(Action: Steel & Mines Deptt. and DM(O))</p> |
| 55.11.00 | <p>After detailed deliberation on the activities of the exploration agencies during 2018-19 and their programme of exploration for 2019-20 in the State, the Annual Field Season Programme of the Directorate of Geology, Odisha, was approved by all the members as no overlapping or duplication is found in the field programme. However, the Chairman of the Board is authorized to add any further prospects for exploration in consultation with the agency concerned.</p> |
| 55.12.00 | <p>VOTE OF THANKS</p> |
| | <p>The meeting ended with a formal Vote of Thanks by Dr P. K Chand, Deputy Director, Geology,</p> |

ANNEXURE-I

LIST OF PARTICIPANTS OF 55TH SGPB MEETING HELD ON 8TH AUGUST, 2019
CHAIRMAN: SRI R.K. SHARMA, IAS, ADDITIONAL CHIEF SECRETARY,
STEEL & MINES DEPARTMENT, GOVT. OF ODISHA
MEMBER SECRETARY: MRS. A.B. MISHRA, DIRECTOR OF GEOLOGY, ODISHA

| Sl. No. | Name | Designation | Organization |
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| 1 | Sri R. Veenil Krishna, IAS | Managing Director | Odisha Mining Corporation Ltd. |
| 2 | Sri D. Mohanty, IFS | Director of Mines, Odisha | Dir. of Mines, Odisha |
| 3 | Sri L.L. Vishwakarma | Dy. Director General | GSI, SU: Odisha |
| 4 | Sri R.N. Praharaj | Director | Odisha Mining Corporation Ltd. |
| 5 | Sri M.K. Patel | Director | GSI, SU: Odisha |
| 6 | Sri J.P. Mohakul | Director | GSI, SU: Odisha |
| 7 | Sri J. Mukherjee | Director | GSI, SU: Odisha |
| 8 | Sri K.C. Das | Sr. Geologist | GSI, SU: Odisha |
| 9 | Dr. U.C. Jena | JDM | Dir. of Mines, Odisha |
| 10 | Sri J.P. Panda | JDG | Dir. of Geology, Odisha |
| 11 | Sri A.K. Rout | JDG | Dir. of Geology, Odisha |
| 12 | Sri M.R. Panda | JDG | Dir. of Geology, Odisha |
| 13 | Sri M.R. Mohapatra | JDG | Dir. of Geology, Odisha |
| 14 | Sri K. Patnaik | JDG | Dir. of Geology, Odisha |
| 15 | Sri R.K. Kar | DDG | Dir. of Geology, Odisha |
| 16 | Dr. P.C. Mishra | DDG | Dir. of Geology, Odisha |
| 17 | Sri N.N. SinghDeo | DDG | Dir. of Geology, Odisha |
| 18 | Sri J.P. Behera | 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 S.K. Dalai | DDG, I/c JDG | Dir. of Geology, Odisha |
| 23 | Sri S. Mishra | Geologist | Dir. of Geology, Odisha |
| 24 | Sri D. Sharma | 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 | Mrs. S. Sahoo | Geologist | Dir. of Geology, Odisha |
| 30 | Sri B.S. Rauta | Geologist (I/C, JDG) | Dir. of Geology, Odisha |
| 31 | Mrs. L. Devi | Geologist | Dir. of Geology, Odisha |
| 32 | Miss S. Dash | Geophysicist | Dir. of Geology, Odisha |
| 33 | Dr. T. Basa | Addl. General Manager (Geology) | Odisha Mining Corporation Ltd. |
| 34 | Sri K.C. Rath | DGM (Geology) | Odisha Mining Corporation Ltd. |
| 35 | Sri S.K. Nayak | DGM (Geology) | Odisha Mining Corporation Ltd. |

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| 36 | Sri B.B. Mishra | DGM (Geology) | Odisha Mining Corporation Ltd. |
| 37 | Sri P.K. Behera | DGM (Geology) | Odisha Mining Corporation Ltd. |
| 38 | Sri B.K. Tanti | DGM (Geology) | Odisha Mining Corporation Ltd. |
| 39 | Sri B.K. Panda | Sr. `Manager (Geology) | Odisha Mining Corporation Ltd. |
| 40 | Smt. S. Mahanta | Manager (Geology) | Odisha Mining Corporation Ltd. |
| 41 | Ms. K. Patel | Manager (Geology) | Odisha Mining Corporation Ltd. |
| 42 | Sri T.K. Kandeyang | Manager (Geology) | Odisha Mining Corporation Ltd. |
| 43 | Sri D. Nayak | Manager (Geology) | Odisha Mining Corporation Ltd. |
| 44 | Sri S. Mishra | Manager (Geology) | Odisha Mining Corporation Ltd. |
| 45 | Sri B.K. Ranjit | Manager (Geology) | Odisha Mining Corporation Ltd. |
| 46 | Sri P. Nayak | Manager (Geology) | Odisha Mining Corporation Ltd. |
| 47 | Sri C. Nayak | Manager (Geology) | Odisha Mining Corporation Ltd. |
| 48 | Sri S.K. Behera | Manager (Geology) | Odisha Mining Corporation Ltd. |
| 49 | Sri S. Sinha | GM, Exploration | OMECL |
| 50 | Dr. P.K. Nayak | Manager (Geology) | OMECL |
| 51 | Sri Vinod R.V. | Manager (Geology) | OMECL |
| 52 | Sri R. Behera | Dy. Manager (Geology) | OMECL |
| 53 | Sri S.K. Sahoo | Dy. Manager (Geology) | OMECL |
| 54 | Sri N. Sahu | Dy. Director Geology | CEPPF&I, WR Deptt., Bhubaneswar |
| 55 | Sri D. Mohanty | Geologist | CEPPF&I, WR Deptt., Bhubaneswar |
| 56 | Er. P.K. Nanda | Chief Engineer & Director | DGWD |
| 57 | Sri A. Behuria | GM (I/C) | IDCOL |
| 58 | Sri S. Sahu | AGM, Geology | IDCOL |
| 59 | Sri R.P. Mondal | Manager (Geology) | SAIL, Barsua Iron Mine |
| 60 | Sri A. Saha | Regional Director | AMD |
| 61 | Sri K. Krishan | Regional Mining Geologist | IBM, Bhubaneswar |
| 62 | Sri S.R. Mazumdar | Sr. Manager (Geology) | IBM, Bhubaneswar |
| 63 | Sri M.W. Wadaskar | Manager (Geology) | MECL |
| 64 | Sri J. Dash | Sr. Manager (Geology) | MCL |
| 65 | Sri S.K. Srivastava | Regional Director | CMPDIL, Bhubaneswar |
| 66 | Sri R.K. Singh | Chief Manager | CMPDIL, Bhubaneswar |
| 67 | Sri A.B. Mahato | Manager (Geology) | CMPDIL, Bhubaneswar |
| 68 | Sri G.P. Mohapatra | Representative, SGAT | SGAT, Bhubaneswar |
| 69 | Sri G.C. Das | Representative, SGAT | SGAT, Bhubaneswar |

DIRECTORATE OF GEOLOGY, ODISHA
Exploration proposals for F.S. 2019-20

| Sl. No. | Name of exploration blocks |
|---------|---|
| 1. | Exploration for Manganese & Iron in SGB Block, Keonjhar district. (G-2 stage) (<i>Out sourcing</i>) |
| 2. | Exploration for Iron ore in Baliapahar Block, Sundargarh district. (G-2 stage) (<i>Out sourcing</i>) |
| 3. | Exploration for Iron ore in Mankarnacha Block, Keonjhar & Sundargarh districts. (G-2 stage) (<i>Out sourcing</i>) |
| 4. | Exploration for graphite around Karabira, Dhenkanal district. (G-2 stage) (<i>Out sourcing</i>) |
| 5. | Exploration for Limestone & Dolomite in Dahijira Block, Sundargarh district, (G-2 stage) (<i>Out sourcing</i>) |
| 6. | Exploration for Manganese around Roida-D, Keonjhar district. (G-2 stage) |
| 7. | Exploration for Limestone around Telipadar, Balangir district. (G-2 stage) |
| 8. | Exploration for coal in Madhupur Block, Ib Valley Coalfield, Jharsuguda district. (G-2 stage) |
| 9. | Exploration for china clay around Dumuria Block, Mayurbhanj district. (G-2 stage) |
| 10. | Exploration for graphite around Khalpadar, Rayagada district. (G-2 stage) |
| 11. | Exploration for pyrophyllite around Jamudiha, Keonjhar district. (G-3 stage) |
| 12. | Investigation for quartz & quartzite around Purunapani, Mayurbhanj district. (G-3 stage) |
| 13. | Investigation for DDS around Endrima area of Gajapati district. (G-3 stage) |
| 14. | Exploration for quartz around Debjharan, Kalahandi district (G-3 stage) |
| 15. | Assessment of quartz, quartzite and silica sand around Rajbahal, Sundargarh district. (G-3 stage) |
| 16. | Investigation for Quartz /Quartzite around Kanaktora and Bhikampalli, Jharsuguda district. (G-3 stage) |

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| 17. | Investigation for Quartz & Quartzite around Burbuda, Subarnapur district. (G-3 stage) |
| 18. | Investigation for Quartz & Quartzite around Kadalimunda, Balangir district. (G-3 stage) |
| 19. | Exploration for decorative and dimension stone and other minor minerals around Paburia, Kandhamal district. (G-3 stage) |
| 20. | Assessment of pyroxinite / serpentinite and examination of PGE potentiality in the contact of ultramafics around Kaliahata area, Keonjhar district. (G-3 stage) |
| 21. | Investigation for quartz/ quartzite around Soroda, Sundargarh district. (G-3 stage) |
| 22. | Investigation for Fireclay/ sandstone around Amatpani, Sundargarh district. (G-3 stage) |
| 23. | Geophysical prospecting for chromite around north of Mathkargola, Dhenkanal district. (G-4 stage) |
| 24. | Geophysical exploration for graphite mineralisation around Bandhabhuin, Dhenkanal district. (G-4 stage) |
| 25. | Investigation for Fireclay around Bhairpur, Dhenkanal district. (G-4 stage) |
| 26. | Investigation for Manganese around Tentuliguda of Koraput district. (G-4 stage) (NMET approved) |

GEOLOGICAL SURVEY OF INDIA
Exploration proposals for F.S. 2019-20

| Mission-I | | |
|-------------------|-------------|---|
| Sl. | | Title of the proposed items |
| 1. | STM | Specialised Thematic Mapping in Mundher, Chhamunda, Badsahir area in Sambalpur District, Odisha to characterize the lithotypes, and to elucidate the different tectono-metamorphic episodes in the evolution of the granulites. |
| 2. | | STM on Petrotectonic framework of granulites south of Mahanadi Shear Zone along Kanigiri-Tulubi-Olasa segment, Nayagarh District, Odisha. |
| 3. | | Specialised Thematic Mapping of granitoids and associated metasediments with mafic/ultramafic dykes around-Nuagan-Shuakathi-Kendujhar Garh area, Keonjhar District, Odisha. |
| 4. | | Reappraisal of Stratigraphic position of manganese/ manganiferous horizons in Iron Ore Group of rocks in Singbhum/Bonai synclinorium, Odisha. |
| 5. | NGCM | Regional Geochemical Mapping in Toposheet no. 65G/9 in Koraput district of Odisha and East Godavari and Khammam districts of Andhra Pradesh. |
| 6. | | Regional Geochemical Mapping in Toposheet no. 74A/9 in Ganjam district of Odisha |
| 7. | | Regional Geochemical Mapping in Toposheet No. 74A/11 covering Ganjam district of Odisha. |
| Mission-II | | |
| 8. | IRON | General exploration for iron ore in Gandhalpada West Block, Kendujhar and Sundargarh district, Odisha (G-2 stage) |
| 9. | | Preliminary exploration for iron ore in Champajhar-Tomka east block, Jajpur district, Odisha. (G-3 stage) |
| 10. | | Preliminary exploration for iron ore in Champajhar-Tomka west block, Jajpur district, Odisha. (G-3 stage) |
| 11. | | Preliminary exploration for iron ore in Kendudihi North Block, Kendujhar district, Odisha (G-3 stage) |
| 12. | | Reconnoitory survey for iron ore in BIF and titanium-vanadium bearing magnetite ore in Badampahar- Suleipat Jashipur area, Mayurbhanj district, Odisha. (G-4 stage) |
| 13. | | Preliminary exploration for iron and manganese ore in Uliburu area Kemdujhar District, Odisha. (G-3 stage) |

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| 14. | MANGANESE | General exploration for Manganese Ore in Podakana East block, Koraput district, Odisha (G-2 stage) |
| 15. | | General exploration for Manganese Ore in Taldhodshi block, Koraput district, Odisha (G-2 stage) |
| 16. | | Preliminary exploration for Manganese Ore in Upardhodshi block, Koraput district, Odisha (G-3 stage) |
| 17. | | Preliminary Exploration for Manganese Ore in Mandhara block, Koraput district, Odisha. (G3) |
| 18. | | Preliminary exploration for Manganese in parts of Boringpadar-Amath block in the Eastern Ghats Granulite Belt, Kalahandi district, Odisha (G-3 stage) |
| 19. | | Preliminary exploration for Manganese in Taprang Block in the Eastern Ghat Mobile Belt, Kalahandi district, Odisha. (G-3 stage) |
| 20. | | Exploration for Manganese in Dengula Block, Bonai-Kendujhar Belt, Sundargarh district, Odisha (G-3 stage) |
| 21. | | Preliminary Exploration for Manganese Ore in Devjholla block, Koraput district, Odisha. (G-3 stage) |
| 22. | | Reconnaissance survey for Manganese ore in East of Jhirpani and Amgobha , Sundargarh district, Odisha (G4 stage) |
| 23. | | Reconnaissance survey for Manganese ore in Sunakhunti-Paikaranipinda Blocks in the central sector of Eastern Ghats Granulite Belt, Rayagada district, Odisha (G-4 stage) |
| 24. | GOLD | Reconnaissance survey for Gold and associated elements in Mankarhachua area, Angul District, Odisha. (G-4 stage) |
| 25. | | Reconnaissance survey for search of gold and associated elements in south of Pal Lahara area, Angul District, Odisha. (G-4 stage) |
| 26. | | Reconnaissance Survey For Gold In Kantala – Burhipada - Rebana Area, Kendujhar District, Odisha (G-4 stage) |
| 27. | | Reconnaissance survey for Gold in Surda - Ruansi area of Badampahar - Gorumahisani Belt, Mayurbhanj District, Odisha. (G-4 stage) |
| 28. | | Preliminary exploration for Gold in Bhuiyanbasa-Neturujharan area of of Badampahar - Gorumahisani Belt, Mayurbhanj District, Odisha. (G-3 stage) |
| 29. | BASE METAL | General exploration for Copper and associated precious metals in Madansahi block, Mayurbhanj district, Odisha (G-2 stage) |
| 30. | | Preliminary exploration for copper and associated precious metals in Dudhiasol East block, Mayurbhanj district, Odisha (G-3 stage) |
| 31. | | Preliminary exploration for copper and associated metals in Rampali Block, Deogarh district, Odisha (G-3 stage) |

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| 32. | BASE METAL | Predictive mineral potential mapping in Adas-Sargipali mineralized belt, northwest Odisha through geoscience data integration and spatial modeling |
| 33. | BAUXITE | Reconnaissance survey for Bauxite in Saptasajiya hill and surrounding areas of Dhenkanal district, Odisha (G-4 stage) |
| 34. | GRAPHITE | Reconnaissance survey for graphite in Panimara-Gorhadian area, Sambalpur district, Odisha (G-4 stage) |
| 35. | CHROMITE | Integrated Geochemical and Geophysical survey for chromite mineralization in Asurabandha-Bhusal block and Chandar block, Dhenkanal district, Odisha. (G-4 stage) |
| 36. | | Reconnaissance survey for possible Chromite and associated mineralization in the covered area between Sukinda and Baula-Nuasahi ultramafic complex, Kendujhar and Jajpur districts, Odisha. |
| 37. | COAL | General Exploration for Coal in Khandanal Block, Talcher Coalfield, Angul district, Odisha (G-2 stage) |
| 38. | | General exploration for Coal in Kuanrkella Block, Ib-River Coalfield, Sundargarh district, Odisha (G-2 stage) |
| 39. | | General exploration for Coal in Bagbarhi Block, Ib-River Coalfield, Sundargarh district, Odisha (G-2 stage) |
| 40. | | General exploration for Coal in Badibahal Block, Ib-River Coalfield, Sundargarh district, Odisha (G-2 stage) |
| Mission-IV | | |
| 41. | ENGINEERING GEOLOGY | Geotechnical investigation of Water Resources Development Projects in Odisha. |

**PROGRAMME OF EXPLORATION TO BE CARRIED OUT IN ODISHA BY CMPDIL
& ITS CONTRACTUAL AGENCIES IN THE F.S 2019-20**

A. CMPDIL:

➤ **Drilling to be carried out for detail exploration:**

| | | |
|---------------------------------------|----------|-----------------|
| a. Talcher Coalfield | : | 49,500m. |
| 1. Balabhadra West Extn. | : | 3,000m. |
| 2. Tribira | : | 4,000m. |
| 3. Chhelia | : | 3,000m. |
| 4. Sardhapur North | : | 1,500m. |
| 5. Palasbani East | : | 3,000m. |
| 6. Palasbani West | : | 3,000m. |
| 7. Kosala East | : | 3,500m. |
| 8. Takua | : | 3,000m. |
| 9. Jadunathpur | : | 3,000m. |
| 10. South of Kardabahal-Brahmanbil | : | 2,000m. |
| 11. New Patrapada | : | 1,000m. |
| 12. Chhendipada-II | : | 1,000m. |
| 13. Mahanadi | : | 1,000m. |
| 14. Ramchandi | : | 1,000m. |
| 15. Sakhigopal-B & N'n Extn. | : | 1,000m. |
| 16. Mandakini-B | : | 2,500m. |
| 17. Brahmani | : | 3,000m. |
| 18. Northern part of N. of Arkhapal | : | 10,000m. |
| | | |
| b. Ib Valley Coalfield | : | 19,500m. |
| 1. Kulda-Garajanbahal West | : | 3,000m. |
| 2. Belpahar & dip side | : | 5,000m. |
| 3. Dip Extn. of Samaleswari | : | 4,000m. |
| 4. Chatabar West | : | 1,500m. |
| 5. Chatabar East | : | 1,500m. |
| 6. Budhajhoria | : | 1,000m. |
| 7. Ghogarpalli & its dip Extn. | : | 1,000m. |
| 8. Burapahar | : | 1,000m. |
| 9. Meenakshi West | : | 1,500m. |
| | | |
| c. Production support drilling | : | 5,000m. |
| | | |
| TOTAL BY CMPDIL | : | 74,000m. |

B. THROUGH OUTSOURCING:

➤ **Drilling to be carried out for detail exploration:**

| | | |
|---------------------------------------|----------|-----------------|
| a. Talcher coalfield | : | 28,000m. |
| 1. Lingaraj-Bhubaneswari-Sakhigopal-A | : | 1,000m. |
| 2. Subhadra West | : | 3,000m. |
| 3. Kosala West | : | 14,500m. |
| 4. Alaknanda | : | 9,500m. |
| | | |
| b. Ib valley coalfield | : | 35,500m. |
| 1. Hemagiri | : | 4,000m. |
| 2. Tangardihi East | : | 30,000m. |
| 3. Madhupur (through MoU, DGO) | : | 1,500m. |
| | | |
| TOTAL THROUGH OUTSOURCING | : | 63,500m. |

MINERAL EXPLORATION CORPORATION LTD.

Exploration proposals for F.S. 2019-20

- Exploration for Manganese around Tamiya Block, Balangir District
- Exploration for Manganese around Rengali Block, Balangir District
- Exploration for Manganese around Babja Block, Balangir District
- Exploration for Manganese around Bairapali Block, Balangir District
- Exploration for Manganese around Dungripalli (North & South Block) , Balangir District
- Exploration for Manganese around Sunakhunti Block, Rayagada district
- Exploration for Iron Ore around Malangtoli Block, Keonjhar & Sundargarh district
- Investigation for Copper Ore around South of Kesharpur, Mayurbhanj District

ODISHA MINERAL EXPLORATION CORPORATION LTD.
Exploration proposals for F.S. 2019-20

- Exploration for Bauxite around Majhingamali, Rayagada district
- Exploration for Bauxite around Nunapaimali, Rayagada district
- Exploration for Bauxite around Tarhapani, Koraput district
- Exploration for Bauxite around Karnapodikonda, Koraput district
- Exploration for Iron ore around Khandadhar Sub block-A, B,C,D,E,F & G of Sundargarh district
- Exploration for Iron ore around Thakurani of Keonjhar district

ODISHA MINING CORPORATION LTD.
Exploration proposals for F.S. 2019-20

- Exploration for Iron & Manganese Ore around Khuntpani, Keonjhar district.
- Exploration for Iron & Manganese Ore around Bholbeda, Keonjhar district.
- Exploration for Iron Ore around Deojhar, Keonjhar district.
- Exploration for Iron Ore around Jajang, Keonjhar district.
- Exploration for Iron & Manganese Ore around Dalita, Mandajoda, Khajurdihi, Sundargarh district.
- Exploration for Iron & Manganese Ore around Dalita, Sundargarh district.
- Exploration for Iron & Manganese Ore around Gonua-Mandajoda, Sundargarh district.
- Exploration for Iron & Manganese Ore around Gonua, Sundargarh district.
- Exploration for Manganese Ore around Sarkunda, Sundargarh district.
- Exploration for Manganese Ore around Nuagaon, Sundargarh district.
- Exploration for Manganese Ore around Oraghat, Sundargarh district.