

**MINUTES OF THE 19th MEETING OF
STATE GEOLOGICAL PROGRAMMING BOARD
5thSeptember, 2019, RAIPUR**

- 19.1** 19th meeting of SGPB Chhattisgarh was held at New Circuit House, Raipur on 5thSept. 2019 under the Chairmanship of Shri Anbalagan P, Special Secretary, Govt. of Chhattisgarh Mineral Resource Department. Member secretary & Director Geology and Mining, Chhattisgarh Shri Ajeet Vasant was present at the meeting. Members and dignitaries of SGPB, present at this meeting include Shri Ch. Durga Rao, Deputy Director General, Geological Survey of India, Chhattisgarh unit. Representatives of Geological Survey of India, Chhattisgarh unit, Indian Bureau of Mines, National Mineral Development Corporation, Chhattisgarh Mineral Development Corporation, Central Mine Planning and Design Institute, Mineral Exploration Corporation Ltd, Chhattisgarh, Central Institute of Mining and Fuel Research (CIMFR), Atomic Mineral Division Raipur, State Planning Commission Chhattisgarh, Raipur, Chhattisgarh Environment Conservation Board and Directorate of Geology and Mining, Chhattisgarh participated in the meeting. List of Participants is enclosed.
- 19.2** Shri Shailesh Verma, Deputy Director, Geology and Mining, Chhattisgarh offered a warm welcome to all the dignitaries from various departments.
- 19.3** In inaugural address, Member secretary Shri. Ajeet Vasant, Director Geology and Mining, Chhattisgarh said that in the new Auction regime, mineral exploration work has become very important.
- Member secretary also said that this meeting provides an opportunity to the state agencies as well as central agencies to exchange information about their activities, achievements and future mineral exploration activities.
- Chhattisgarh is a mineral rich state and its contribution to the national economy is considerable. He suggested to all exploration agencies to plan exploration work in a coordinated way to avoid duplication of work. During his address, he emphasized the need to explore the possibility of usage of technology and expertise of private sector in the remaining areas of exploration and mining operation.
- 19.4** Member Secretary welcomed the Chairman Shri Anbalagan P, Special Secretary, MRD, C.G. Govt. In his address, secretary welcomed the participant, he appreciated the work carried by various exploration agencies, particularly for their dedication and their endurance to difficult camp conditions.
- Chairman underlined the importance of optimized use of the mineral resources for betterment of society particularly in view of their non-renewable nature. He pointed out that the 2015 amendment in MMDR act has brought massive change in agencies approach towards exploration. He emphasized the need of coming together of government agencies and private sector for attaining the economic growth. He appreciated the objective of geochemical mapping undertaken by GSI. He also appreciated the work carried by GSI Raipur, particularly for high valued strategic minerals like Nickel, PGE, gold, Tungsten etc. In this regard he welcomed GSI for taking

up more number of high value minerals and advised GSI totake up exploration of high value mineral upto G-2 level of exploration.

(Action GSI)

Chairman also emphasize the need to bring more auctionable blocks to the auction platform. Director, DGM advised the agencies to speeding up of grant of mineral concessions and approvals.

19.5 ShriShailesh Varma, Deputy Director, Geology and Mining, Chhattisgarh, thanked Chairman ShriAnbalagan P and member secretary for their valuable guidance and assured them of compliance of all the guidelines. He presented the minutes of the 18th meeting of the SGPB held on 26th July, 2018 before the house for approval and the same was unanimously approved by the members without any modifications.

19.6 Special Secretary ShriAnbalagan Phighlighted the issue of pricing of iron ore lumps and fines by NMDC and suggested that it appears due to this flaw in pricing state is suffering from loss of revenue.

IBM official suggested that this issue has been identified and should be separately discussed between IBM, NMDC and DGM.

19.7 Special Secretary also discussed the issue of Bhilai Steel plant, he specified that IBM does not issues ROM price and BSP bring ROM to another mine and mix to grade enhancement. SoDGM Suggested for ROM price to enable to issue transit pass and transportation of mineral.

IBM informed that return is already modified and once MTS is functional, ROM prices will also be issued.

(Action IBM)

19.8 Special Secretary, also highlighted likely issues due to amendment of IInd schedule of the act with reference to royalty, his immediate concern was introduction of lower grades of iron ore. Secretary enquire if in case some miner request DGM that they have 15% of grade, how DGM will proceed. He Suggested to discuss the same in case time is available.

IBM informed that this case will not be applicable in Chhattisgarh as 45% Fe and above is the threshold for Chhattisgarh though below quality 45% is produced but it is not used in Chhattisgarh.

19.9 ShriShailesh Varma,Deputy Director, inviteddifferent organization for presentations of their works in the state.

19.10 Geological Survey of India, Chhattisgarh Unit, Raipur

Shri Ch. Durga Rao, Dy. Director General, informed the house that in the F.S. 2018-19 GSI has taken up number of projects under systematic thematic mapping, national geochemical mapping and mineral investigation.

19.10.1 Mission 1: Project STM:- Shri S.N. Mahapatra, Director GSI informed the house that chief secretary has asked GSI to look up the issue of Arsenic and Florine contamination in supabeda of Gariyaband district. He informed that GSI will collect

water samples post monsoon period to ascertain the reason. Shri Mahapatra informed that 4 project has been taken up in the Specialized Thematic Mapping (STM).

- I. Specialized thematic mapping around Beltara, Baloda, Murapar and Khisora areas in Korba, Bilaspur & Janjgir-Champa districts, Chhattisgarh in parts of Toposheet Nos. 64J/7, 8, 11 and 12 to understand tectono-thermal evolution of a part of Bilaspur-Raigarh-Surguja (BRS) metamorphic belt and study its relationship with adjoining Chhotanagpur Gneissic Complex (CGC), covered 350 Sq. km.area on 1:25000 scale.
(Item No.- STM/NC/CR/SU-CG/2018/19328)
- II. Specialized thematic mapping on 1:25000 scale around Sahebsur, Pattakela and Shakhajharan in Jashpur district, Chhattisgarh in parts of Toposheet Nos. 64N/9 and 13 to understand tectono-magmatic and metamorphic evolution of a part of western Chhotanagpur Gneissic Complex (CGC).
(Item No.- STM/NC/CR/SU-CG/2018/19953)
- III. Specializedthematic mapping covering an area of 350 Sq. Km on 1:25,000 scale around Kutanpani, Jharmunda and Simabari areas in Jashpur District, Chhattisgarh in parts of Toposheet nos. 64N/14, 15 and 73B/2 & 3 to understand tectono-thermal evolution of a part of western segment ofChhotanagpur Gneissic Complex (CGC) and possible extension of Gangpur Group of rocks.
(Item No.- STM/NC/CR/SU-CG/2018/20208)
- IV. Specialized thematic mapping covering an area of 350 Sq. Km on 1:25,000 scale of the Precambrians around Chaitma, Pali and Tiwarta in parts of Toposheet No. 64J/7, Korba District, Chhattisgarh to characterize the metamorphic and structural evolution and stratigraphic status of the Bilaspur Raigarh-Surguja (BRS) metamorphic belt in relation to Chhotanagpur Gneissic Complex
(Item No.- STM/NC/CR/SU-CG/2018/20209)

19.10.2 Mission 1: Project NGCM:- The main purpose of this project is to prepare geochemical data base that can be used in different purpose viz. mineral exploration, forestry, agriculture, health hazard etc. ShriS.N.Mahapatra Director, GSI Raipur informed the house that under this mission 19projects have been taken in different parts of Chhattisgarh State.

- I. Geochemical Mapping in T.S. No. 64J/02 of Bilaspur & Korba districts, Chhattisgarh.A total of 728sq. Km area was mapped on 1:50,000 scale and 728 no of samples were collected forvarious purposes.
(Item no. GCM/NC/CR/SU-CG/2018/20076)
- II. Geochemical Mapping in part of toposheet 64J/07 in Bilaspur and Korba Districts, Chhattisgarh. A total of 728sq kmarea was covered on 1:50,000 scale.
(Item no. GCM/NC/CR/SU-CG/2018/20082)

- III.** Geochemical Mapping in Korba, Janjgir-Champa & Raigarh districts, Chhattisgarh (Toposheet No. 64J/16).
(Item no. GCM/NC/CR/SU-CG/2018/20077)
- IV.** Geochemical mapping in toposheet no. 64F/10 in parts of Dindori district, MP and Mungeli district, Chhattisgarh. Total 728 sq km was covered and a total of 182 nos. of composite samples were prepared for various purposes.
(Item no. GCM/NC/CR/SU-CG/2018/19962)
- V.** Geochemical mapping in toposheet No. 64F/13 in parts of Bilaspur district of Chhattisgarh and Shahdol district of Madhya Pradesh.
(Item no. GCM/NC/CR/SU-CG/2018/20089)
- VI.** Geochemical Mapping in Toposheet No. 64F/11 in parts of Mandla District of M.P. and Mungeli District of Chhattisgarh. Total 716 samples were collected and a total of 179 nos. of composite samples were prepared for various purposes.
(Item no. GCM/NC/CR/SU-CG/2018/19859)
- VII.** Geochemical mapping in toposheet no. 64N/15 in Jashpur and Raigarh districts of Chhattisgarh and Sundargarh district of Orissa. A total of 182 nos. of composite samples were prepared for various purposes.
(item no. GCM/NC/CR/SUCG/2018/16709)
- VIII.** Geochemical Mapping in Toposheet No. 64N/12 in parts of Raigarh District of Chhattisgarh and Sundargarh District of Odisha. Total 728 sq km was covered on 1:50,000 scale and a total of 182 nos. of composite samples were prepared for various purposes.
(Item no. GCM/NC/CR/SU-CG/2018/20084)
- IX.** Geochemical Mapping in Toposheet No. 64N/02 in parts of Raigarh, Surguja and Korba Districts of Chhattisgarh State.
(Item no. GCM/NC/CR/SU-CG/2018/20091)
- X.** Geochemical mapping in Toposheet no. 64N/07 in parts of Raigarh district, Chhattisgarh. A total of 182 nos. of composite samples were prepared for various purposes.
(Item no. GCM/NC/CR/SU-CG/2018/19984)
- XI.** Geochemical mapping in toposheet no. 64G/12 in parts of Raipur district, Chhattisgarh.
(Item no. GCM/NC/CR/SU-CG/2018/19860)
- XII.** Geochemical Mapping in Toposheet no. 64G/16 in parts of Raipur district of Chhattisgarh,
(Item no. GCM/NC/CR/SU-CG/2018/20097)
- XIII.** Geochemical Mapping in Toposheet no. 64H/01 in parts of Balod district of Chhattisgarh, A total of 728sq km area was covered on 1:50,000 scale. A total of 182 nos. of composite samples were prepared for various purposes.
(Item no. GCM/NC/CR/SU-CG/2018/20097)

- XIV.** Geochemical Mapping in T.S.No. 64O/5 in part of Raigarh and Janjgir District, Chhattisgarh. A total of 182 nos. of composite samples were prepared for various purposes.
(Item no. GCM/NC/CR/SU-CG/2018/20098)
- XV.** Geochemical Mapping in Toposheet no. 64J/01 in parts of Bilaspur and Korba districts of Chhattisgarh, A total of 728sq km area was covered on 1:50,000 scale. A total of 182 nos. of composite samples were prepared for various purposes.
(Item no. GCM/NC/CR/SU-CG/2018/20090)
- XVI.** Geochemical Mapping in Toposheet no. 64M/01 in parts of Balrampur and Surajpur districts of Chhattisgarh and Sonbhadra district of Uttar Pradesh.
(Item no. GCM/NC/CR/SU-CG/2018/20096)
- XVII.** Geochemical Mapping in Toposheet no. 64I/03 in parts of Koriya district of Chhattisgarh and in parts of Shadol District, Madhya Pradesh. A total of 728sq km area was covered on 1:50,000 scale. A total of 182 nos. of composite samples were prepared for various purposes.
(Item no. GCM/NC/CR/SU-CG/2018/20092)
- XVIII.** Geochemical Mapping in Toposheet No. 64M/08, Surguja district. A total of 728sq km area was covered on 1:50,000 scale.
(Item no. GCM/NC/CR/SU-CG/2018/16706)
- XIX.** Geochemical Mapping in Toposheet No. 64I/13 in parts of Surajpur and Balrampur districts of Chhattisgarh, Sonbhadra District of Uttar Pradesh and Sidhi district of Madhya Pradesh. A total of 182 composite samples were prepared.
(Item no. GCM/NC/CR/SU- CG/2018/20081)
- ~~**XX.** Geochemical Mapping in Toposheet no. 64J/14 in parts of Korba Surguja district, Chhattisgarh.
Project was dropped due to inaccessible sample locations.
(Item no. GCM/NC/CR/SU- CG/ 2018/20095)~~

19.10.3 Mission II - Natural Resource Assessment:-

Precious Metal & Mineral

- I. Reconnaissance survey for kimberlite/lamproite clan rocks in Pipradhar and Maharajpur area in parts of Kabirdham district, Chhattisgarh. (Stage-G4)
(Item no. MEP/C/CR/SU-CG/2018/17036)**

The area is bounded between 21⁰45' & 22⁰00' latitudes and 81⁰00' & 81⁰15' longitudes. The area falls in western vicinity of Bilaspur lamproite/ carbonatite field. A total of 700 sq. km area was covered by orientation stream sediment survey with collection of 155 nos. of stream sediment samples from favourable trap sites, 20 nos. petrographic and petrochemical samples and 10 nos. pit samples. 1100 ppm of Cr & 205 ppm of Ni concentration in PCS/11 collected south of Maharajpur are of ultramafic in nature.

Multidisciplinary approach was taken in demarcating priority blocks using the International Geomagnetic Reference Field (IGRF) corrected aeromagnetic data on 1:50000 scale with the contour interval of 20 mt and IRS LISS III data with 23.5m

resolution for 700 sq km with geological map, NGLM map, DEM and ASTER data. 6 nos. priority blocks were demarcated for systematic detailed studies based upon the frequency and nature of occurrence of recovered heavy minerals from stream sediment samples SSS/141- Pipradhar village, SSS/124- south of Jhandi, SSS/154- Budhwara village, SSS/155- south of Maharajpur, SSS/115- west of Eklama, SSS/19- east of Mohanpur, SSS/13- south of Kaliyanpur, the area can be taken up for detail investigation.

II. Reconnaissance survey for gold and associated sulphide mineralization in Barjor area, Jashpur district, Chhattisgarh.

(Item no. MEP/C/CR/SU-CG/2018/17036)

A preliminary investigation of G-4 Stage was initiated during Field Season 2018-19 in parts of Toposheet no. 64N/ 14 in Jashpur district. An area of 100 sq km was mapped on 1: 12,500 scale. In addition 50 cu.m pitting, trenching and sampling has been carried out in the suspected areas along with collection of 80 nos of stream as well as bed rock samples resp. 50 nos of soil samples have also been collected.

Analysis reveal anomalous gold value in bed rock sample varies from 1750 ppb to 11000 ppb, collected from Barjor area. BJ-3, BJ- 6, BJ-8 and 9 indicate gold value of 6300 ppb, 1750 ppb, and 11000 ppb each respectively. Simultaneously BJ-8 is giving 0.26% of Lead. Whereas only BJ-4 is giving a higher value of copper about 905 ppm.

19.10.4 Ferrous Minerals

III. Reconnaissance survey for iron ore in and around Gopalpur area, Mahasamund district, Chhattisgarh. (STAGE:G-4) (Item no.MEP/NC/CR/SU-CG/2018/18449),

The litho-units of Baya Gneissic complex comprising biotite schist, amphibolite, migmatite gneiss, tonalite etc. are the dominant rock types covering almost one fourth of the study area. It occurs in the low lying undulatory plains as well as forming small hills in the southern and western part of the area and a small patch in the northern part of the area.

The restites of Tonidongari Complex occur within this gneissic complex. These rocks are exposed around Bhokludih, Khairkhuta, Baldidih and Badetemri area. Petrographic studies reveal the presence of magnetite with grey colour and brownish tinge.

BMQ is characterised by metallic lustre, cubical form, high hardness and specific gravity. The magnetite-quartzite is associated with pyroxenes & amphiboles and also exhibit friable and rough surface characters.

19.10.5 Industrial & Fertilizer Minerals:

IV. General exploration for limestone in Bhikuria-Chhanta block, Kabirdham district of Chhattisgarh: (Item no. MEP/NC/CR/SU-CG/2018/18393&M2ASMIF IML/NC/ CR /SUCG/2019/27912 (Upgraded item)),

The study area comprises of Limestone deposit belonging to Chandi Formation of Raipur Group of Chhattisgarh Super-group. It is Meso to Neo Proterozoic in age. The Limestone is bedded with 2°-7° dip to east. In the study area 204 no. core samples were generated.

V. General exploration for limestone in Sandi block, Rajnandgaon district, Chhattisgarh:(Item no.IML/NC/CR/SU-CG/2018/19715&M2ASMIF-MEP/NC/CR/SUCG/ 2019/27976(Upgraded item))

The study area comprises of Stromatolitic limestone belonging to Chandi Formation of Raipur Group of Chhattisgarh Super-group. It is Neo Proterozoic in age. The Limestone is bedded striking NNE-SSW with 4° dip to east.

A total of 5.6 sq. km. area has been covered by detailed mapping on 1:4000 scale. Total 1610.10 m drilling has been completed in 35 boreholes in a grid pattern at an interval of 400m along with collection of 05 nos. of BRS and 10nos. PCS samples 05 no. XRD and 06 water samples and 1168 no. core samples has been collected.

VI. Reconnaissance survey for graphite in Baharchura, Tikidiri, Revatipur and Oranga area, Balrampur district, Chhattisgarh.

(Item no. IFL/NC/CR/SU-CG/2018/17025)

A G-4 stage reconnaissance survey for graphite were carried out in Baharchura, Tikidiri, Revatipur and Oranga areas in toposheet 64M/5 in Balrampur district, Chhattisgarh. An area of 100 sq. km. was covered by large scale mapping on 1:12,500 scale followed by geophysical survey of 10 L.km. A total of 75.65 cu. m of trenching was carried out to find the strike continuity of the ore body and 57 nos. of trench samples were collected and submitted for fixed carbon analysis. A total of 30 bed rock samples (BRS) each for Cu, Pb, Zn, Cd, Bi, Au, Ag analysis and fixed carbon analysis were collected and submitted. Apart from this, 20 nos. of petrochemical sample (PCS), 20 petrological samples (PS) were also collected.

VII. Reconnaissance survey for Glauconitic Sandstone for its potash content in and around Girodh area within Kansapathar Formation, Chhattisgarh Basin, Baloda Bazar district, C.G. (G-4 stage).

(Item no. IFL/C/CR/SU-CG/2018/17024)

The study area lies in the SSE part of the Chhattisgarh basin and falls in T.S. no 64H/13 and 64L/01 and bounded by coordinates 20°45'0"- 20°50'55" N and 81°55'- 82°02'30" E. An area of 100 sq. km area was covered by large scale mapping on 1:12,500 scale revealing the crystalline basement and various lithounits of the Lohardih and Kansapathar formation. The maturity of glauconite is mostly nascent i.e. 2-4% K₂O throughout the study area. At Kumharmarra and Sankra the variety is intermediate i.e. 4-6% K₂O while at Kutena and Phuljhar the variety is mature i.e. (>6% K₂O).

19.10.6 Project-Strategic Minerals

VIII. Reconnaissance survey for molybdenum, tungsten and associated base metal mineralization in Shankargarh block, eastern extension of Burhabagicha Sulphide Zone, Balrampur-Ramanujanj district, Chhattisgarh.

(Item no. MEP/NC/CR/SU-CG/2018/17031)

The investigated area comprises eastern extension of Burhabagicha Sulphide Zone and falls in the south-western part of toposheet no.64M/11 bounded by latitudes

N23°15'00" to N23°20'10" and longitudes E83°30'00" to E83°40'15". Meta-volcanics, meta-volcano sedimentaries, meta-sedimentaries and granitoid rocks form the dominant lithologies exposed in the block intruded by numerous mappable and unmappable mafic intrusives and quartz-tourmaline veins.

A G-4 stage reconnaissance survey for molybdenum, tungsten and associated base metal mineralization was carried out in Shankargarh block falling in the SW quadrant of toposheet 64M/10 and covering parts of Balrampur-Ramanujan District, Chhattisgarh. An area of 100 sq. km was covered by large scale mapping on 1:12,500 scale. A total of 300 nos. of bed rocks samples and 30 petro-chemical samples were collected trace elements, base metal traces, major oxides and gold analysis. In addition, 30 petrological samples and 20 ore-microscopy samples were collected for EPMA, SEM and mineralogical studies.

The petrographic studies of the rock samples reveal some sulphide mineralization containing pyrite, pyrrhotite and arsenopyrite phases. The analytical results of 40 nos. of bed rock samples from the block area do not indicate any significant mineralization of molybdenum and tungsten. However, the Σ REE values range from 47.50 ppm to 512.98 ppm, with a mean Σ REE value of 219.62 ppm are obtained in chemical analysis result of meta-volcano sedimentary rocks.

**IX. Reconnaissance survey for Ni, Cr and associated PGE mineralization in Bhalukona-Jamnidi block, Mahasamund district, Chhattisgarh:
(Item no. MEP/NC/CR/SU/CG/2018/18461)**

Large Scale mapping (LSM) was carried out systematically on 1:12,500 scale covering 100 sq km area around Bhalukona and Jamnidi areas (T.S.No.64K/15). The Bhalukona-Jamnidi block forms a part of Neo-archean Sonakhan Schist belt in the north-eastern fringe of Bastar Craton.

The area reveals the presence of wide spectrum of volcano-volcanoclastic rocks belonging to Sonakhan and Bilari Group, mafic-ultramafic intrusives, undeformed granitoids, younger dykes and quartz veins.

A five number of pyroxenite and three number of anorthositic gabbro bands have been demarcated in the area during the course of mapping. The length of these bodies varies from 50 m to 6 km (appx.) and width varies from <25 m to 200 m.

The analytical results of 15 BRS samples (out of 100) received so far yield anomalous Ni, Cr and Cu values from meta-ultramafites, gabbro and pyroxenite. Bedrock samples from Bhalukona area indicated Ni values up to 2300 ppm, (n=795), Cr values upto 2700 ppm (n=730) and Cu values upto 1500 ppm (n=240) whereas the analysis for gold has yielded values upto 1.9 ppm in rhyolite near Chapiya area. The Chiprikona area seems to be encouraging for Ni –PGE mineralization as one highly altered pyroxenite body of nearly 400m in strike length and 50m in width have yielded high Pd (1174ppb), Pt (241ppb) and Ni (0.16%) values. Other localities did not show any encouraging values of PGE though primary sulphides are noticed during large scale mapping.

X. Reconnaissance survey for lithium and associated rare metals in Katghora-Garhatara area, Korba district, Chhattisgarh.

(Item no. SML/NC/CR/SU-CG/2018/18445)

Reconnaissance survey for lithium and associated rare metals was undertaken around Katghora-Garhatara areas of Korba district, Chhattisgarh in Toposheet No. 64 J/10 An area of 100 sq km, bounded by latitudes 22°30'2.421" to 22°37'59.45" and longitudes 82°29'59.204" to 83°39'38.901" was studied for lithium and associated rare metal mineralization. The area constitutes a part of south-western marginal zone of ChhotanagpurGneissic Complex (CGC) close to Bilaspur-Raigarh Belt (BR Belt).

Total 138 nos. of sample were collected viz. 62 nos. from bedrock (grab samples), 50 nos. of channel samples and 26 nos. of pit/trench samples. Out of 62 nos. of bedrock samples, 45 nos. of REE results, 20 nos. of Li results and 43 nos. of other rare metal (Be, Rb, Cs, Sn, W, Mo, Ta and Nb) results have been received. The analytical results do indicate significant mineralization of Li, REE and other rare metals in the area of investigation.

XI. ~~Preliminary exploration for tungsten in Chiknipani block, Jashpur district, Chhattisgarh.~~

(~~Item no. SML/C/CR/SU-CG/2018/17032~~)

Project was dropped due to protest from local people.

19.10.7 Mission-III Project Geo-Informatics:-

Maintenance of IT infrastructure and service support – SU: Chhattisgarh, Raipur.

Service support was provided for uninterrupted running of computer hardware and software.

Regular support to users of OCBIS and updating of data was carried out. Support was also provided in scanning, printing, digitization of maps and preparation of layouts from 50K map.

19.11 Coal Wing, Geological Survey of India, Kolkata:-

During the period regional exploration program for coal were continued in Chhattisgarh in two blocks of Mahanadi Valley basin (Mand Raigarh Coalfield).

During the discussion S. N. Mahapatra, Director GSI, inform that GSI is in process of revision of District Resource Map of four districts.

(Action GSI)

Shri Shailesh Varma, Deputy Director raise the issue of Murtdanad bauxite block and inform it has already been conveyed to GSI that Murtdand bauxite project is approved by NMET and included in DGM exploration program, hence GSI should drop the same from its list.

It was informed by GSI that the Murtdand block taken by GSI lies outside the block taken up by DGM hence no duplicity of work will be involved. Shri Shailesh Varma informed that more discussions are needed as CMDC applied area also lies in Murtdand. It was told by GSI that their field program is approved one year earlier and hence any change in field program is not possible at this stage. Shri Shailesh Varma requested that since the issue has been conveyed well in advance this needs to be corrected.

(Action GSI)

Shri Ch. Durga Rao suggested that DGM should share all the RP reports with GSI in order to have clarity in selecting of exploration project. Shri Anurag Diwan informed that all the reports has already been shared with GSI.

19.12 Indian Bureau of Mines:-

Shri B.L. Gurjar, R.COM, IBM, Raipur, informed that 87 mines were inspected in Chhattisgarh for the implementation of MCDR 2017 and for approval of Mining plan and Scheme of Mining. 40 mines inspections were carried out for the disposals of mining plan/scheme of mining in Chhattisgarh state. 52 Mining plan approved during the year and 07 Mining plan disapproved. During the year 2017-18, 6 mines were awarded 5 star rating and 13 mines 4 star rating out of 102 participating mines of Chhattisgarh.

He also raised the issue of DGPS demarcation of mining lease area and highlighted the issue of variation in Survey reports giving different areas. He suggested that DGM should authenticate DGPS coordinates on case by case basis.

Shri B.L. Gurjar suggested that before DGPS survey patwari, mining officer and owner should be there and as per physical status based on Khasra No. survey of boundary to be done and whatever area is coming should be certified and fixed. DGM informed without any proper guideline from GOI, it is not possible for state to change the area. It was agreed that the same may be discussed in CEC meeting also.

(Action IBM,

DGM)

Shri B.L. Gurjar requested DGM to check that miners submit timely returns and penalize the erring miners. He told this is required for timely publishing of ASP,

(Action DGM)

Shri B.L. Gurjar advised state government to allow sale of limestone reject below threshold limit without coming to IBM as below threshold limit it cannot be considered as mineral, so DGM can allow its sale as minor mineral. On being informed that DGM can allow only after the consent of IBM, Shri Gurjar Suggested to forward such applications to IBM.

Shri B.L. Gurjar advised state government to propose for 5 years permission instead of 2 or 3 years. He also told that differentiation of limestone as minor and major mineral is only based on usage and he will share the definition of minor mineral with DGM.

(Action IBM and DGM)

Shri B.L. Gurjar advised DGM to provide all RP and PL reports to GSI. It was informed that all reports are shared with GSI. GSI, Raipur may check the available report in DGM library and DGM will share the copy of the desired reports.

(Action GSI)

Shri B.L. Gurjar Suggested DGM to update the list of expiring leases.

(Action DGM)

Shri B. L. Gurjar informed that it was suggested in the CGPB meeting that Kacheche-Ari-Dongri area is having some magnetite deposit which should be investigated by either of GSI or MECL.

(Action GSI/ MECL)

Shri B. L. Gurjar suggested that private players from mining industry who are involved in exploration/mining shall be invited for participation in SGPB meeting.

(Action DGM)

19.13 ATOMIC MINERAL DIRECTORATE OF EXPLORATION AND RESEARCH, HYDERABAD

Shri Suresh Kumar, Regional Director, Central Region, AMD informed the house about the activities of Uranium and RMRE exploration in Balrampur, Jashpur and Rajnandgaon District. During the F.S. 2018-2019 work for Uranium in Dongargarh-Kotri and Surguja comprise of reconnaissance survey of 608.70 Sq. Km, DM of 21.20 Sq. Km and sub-surface exploration of 3308.90 meter. The work carried out for RMRE includes reconnaissance survey of 150 Sq. Km and detailed survey and prospecting of 301 Kg. of Nb₂O₅ and 6500 Kg of Xenotime.

I. Dongargarh-Kotri investigation for Uranium in Rajnandgaon district, Chhattisgarh

Reconnaissance radiometric survey, geological mapping (1:50,000) of 203.70 Sq. Km and geochemical sampling around Trans Chhattisgarh magnetic linear for uranium mineralisation in Bargaon, Arjuni, Dongargaoan, Sangin kachhar, Pinkapar area, Rajnandgaon district

Detailed radiometric survey, geological mapping of 11.20 Sq. Km area and geochemical sampling along Taramtola - Dewarsur tract, north of Bodal uranium deposit, Rajnandgaon district.

II. Dongargarh-Kotri investigation for Uranium in Rajnandgaon district, Chhattisgarh

Reconnaissance radiometric survey, geological mapping and hydro-geochemical sampling of 405 Sq. Km area in and around the Gondwana – CGGC contact, Surajpur and Balrampur districts.

Detailed radiometric survey, geological mapping on 1:10,000 scale of 10 Sq. Km area and geochemical sampling along Taramtola - Dewarsur tract, north of Bodal uranium deposit, Rajnandgaon district.

III. Investigation for RMRE in Jashpur district, Chhattisgarh

Detailed survey and prospecting comprising of recovery of 6500 Kg of xenotime bearing polymineral concentrate at Kunkuri area, Jashpur district.

Reconnoitry drilling of 3308.90 meter at Jhapar, and Rakshakhand in Balrampur district, Chhattisgarh.

IV. Investigation for RMRE in Surajpur and Balrampur district, Chhattisgarh

Reconnaissance survey and geological mapping (1:50,000) of 150 Sq. km area to locate rare metal bearing pegmatites along Palaihan-Karkota-Saraijhar-Makrohar-Bhaukhar tract, Balrampur and Surajpur districts.

Detailed survey and prospecting RM bearing pegmatites at Kuberpur-Hathichua, Surajpur districts.

Shri Anurag Diwan enquired about the production plan of Kunkuri area, Jashpur district.

It was told by AMD that it's a prospecting as well as simultaneous mining of Xenotime bearing placers from 2nd and 3rd order streams. Shri Anurag Diwan highlighted that royalty payment is being made as sand which is not justified and advised AMD to submit the details.

(Action AMD)

19.14 Central Mine Planning and Design Institute-RI-V Bilaspur:-

Shri Surendra Kumar, CMPDIL, RI-V- Bilaspur informed the house about the activities of Coal Exploration in Korba, Mand-Raigarh, Sonhat and Ramkola-Tatapani Coalfields. The work carried out through departmental resources and outsourcing and a total of 102099.00 m drilling was completed. Prospecting report of 04 blocks, SinghmaauzaJampali Block, Tulsi Block F-Bilahra, Tulsi Block G-Biharpur and Tulsi Block HKarwan were finalized by CMPDI and 01 Geological Report of Meghuliblock, West of BasinPhatehpur A and West of Basin Phatehpur C were finalized by MECL, MAPL and APC respectively. Coal resources estimated in this block are 1493.209 million tonne.

Shri Anurag Diwan raised the issue that though the CMPDI has been authorized to do DGPS based demarcation of SECL coal mines but most of the coal mines survey is pending.

(Action CMPDI)

19.15 National Mineral Development Corporation Ltd.:-

Shri R.K. Dewangan, NMDC informed the house about exploratory drilling work carried out in the existing mining leases of Bailadila area for quality control as well for establishment of additional resource/reserves proving. Total 11039.50m drilling was done.

NMDC stated that they have applied for reservation of Baloda-Belmundi Diamond block (156.80sq.km) Saraipali Tehsil, Mahasaund district, Chhattisgarh for prospecting and mining operation through tripartite agreement.

Shri Anurag Diwan informed that DGM has forwarded to government.

Shri. Shailesh Varma suggested NMDC to apply through NMET.

DGM advised NMDC to participate in exploration work in Chhattisgarh as national exploration agency especially for Gold, Diamond and Base Metal.

Shri Anurag Diwan pointed out that BHQ has long been reported to contain gold, hence NMDC should take up the same at least as R&D work.

(Action NMDC)

Shri Anurag Diwan pointed out the issue of pricing of iron ore lump and fines. It was informed by IBM that NMDC didn't sold the lump ore and reported the last price as per the statutory guidelines.

(Action NMDC)

Shri Anurag Diwan pointed out the issue of provisional pricing. Shri B. L. Gurjar of IBM informed that there is need to take up the issue with the concerned authorities.

19.16 Mineral Exploration Corporation Ltd.:-

Shri Pradeep Kulkarni, MECL informed the house that exploratory drilling work carried out in coal and non-coal mineral commodity. Exploratory drilling in coal, as per MoU with CMPDIL, done in various coalfield of Chhattisgarh state. In other commodity, MECL also carried out exploration work for Bauxite and Limestone. During the year 2018-19, MECL has taken 02 project of Bauxite and 02 project of Limestone through NMET fund.

During the discussion, the issue of 200 m borehole spacing for bauxite as approved by NMET for MECL projects were raised. It was emphasized for G-2 level exploration, strict adherence to guidelines under MEMC rules in this regard along with local geological condition and practice being adopted by DGM.

It was discussed that this issue needs to be included in agenda point for discussion in TCC and EC of NMET.

(Action DGM& MECL)

It was highlighted by MECL that they don't have further projects in Chhattisgarh and requested DGM to suggest further area for exploration. Shri Anurag Diwan informed that all the reports of GSI is uploaded on portal and if MECL desires it can study these reports to identify further area.

(Action MECL)

19.17 Central Institute of Mining and fuel Research

Shri Rajesh Kumar Meena, CIMFR, elaborated the activities of CIMFR in the year 2018-19. CIMFR carried out testing for coal received from GSI and CMPDIL. Altogether 24254.11 meters of borehole coal core received. Out of which Result of 20753.49 meter of coal cores have dispatched. Apart from the above mentioned activity CIMFR is involved in coal quality monitoring covering all SECL coal mines and approximately 50 power plants.

19.18 Chhattisgarh Mineral Development Corporation:-

Shri Sanjay Khare, GM, CMDC, elaborated the mineral exploration activities of CMDC in the year 2017-18. CMDC carried out investigation for Bauxite, through outsourcing. Altogether 06 project of Bauxite have been taken for exploration. Out of these, 02 projects (Pandripani & Sukhjar) are in Kabirdham district and 04 project (Kudridih, Kamleshwarpur, Narmdapur and Rupakhar) in Surguja district. He informed that out of the above mentioned six projects 5 project i.e. Kudaridih, Narmadapur (149.125 Ha) and Rupakhar in Surguja district and Pandaripani, Sukhjar in Kabirdham district will be continued in field season 2019-20. In addition two new blocks namely Narmadapur (265 Ha) in Surguja district and Kerwa Coal Block in Korba Disrict will be taken up for exploration in field season 2019-20.

19.19 Directorate of Geology and Mining, Chhattisgarh

19.19.1 Regional Office Jagdalpur:-

Shri D. Sai, Regional Head, Jagdalpur informed the house that survey and investigation for limestone in Chapka-Ichhapur block in Bastardistrict was done. During the period 236 sqkm Reconnaissance survey (1:50,000 scale), 2 sq km detailed geological mapping (1: 4000 scale) and 1122 m drilling completed. Around 120 million tonnes of limestone resources estimated in this block. Work has been completed in the block.

19.19.2 Regional Office Bilaspur:-

Shri Sanjay Kankane, Regional Head, Bilaspur elaborated the mineral exploration activities of Regional office Bilaspur. He informed that total 5 exploration projects of G-3 level comprising of 3 bauxite and 2 limestone block were taken up during 2018-19. In Dumarguda bauxite block (District- Surguja) Total 447.9 m drilling completed and approximately 7.77 million tonnes of bauxite deposits are estimated in the area. G-3 level Exploration work in Dandkesra North bauxite block is also completed. (District- Surguja) Total 365.4 m drilling completed and approximately 6.87 million tonnes of bauxite deposits are estimated in the area. In parpatia bauxite block (District- Surguja) total 1540.6 m drilling completed and approximately 16.89 million tonnes of bauxite deposits are estimated in the area.

During the period G-3 level exploration for limestone was carried out in Khairaha and Khamhardih-Gatadih limestone block Raigarh district. In Khairaha 150.70m drilling work done. Total 44.18 million tonnes limestone resources are estimated and work is completed. Khamhardih-Gatadih limestone block 274.00 m drilling work done. Total 107.59 million tonnes limestone resources are estimated and work is completed.

19.19.3 Regional Office Raipur:-

Shri S.K. Tiwari, Regional Head Raipur informed the house that Exploration for limestone in Sarseni-Guma area district Balodabazar-Bhatpara was done during the period under review. During the period, detailed geological mapping of 2.34 Sq. Km area on 1:4000 scale and a total of 1096.50m drilling work done in the area. Total 180.47 million tonnes resources of limestone estimated.

Exploration of limestone in Sarseni-Guma block of distt. Balodabazar-Bhatpara work will be continued in next field season.

19.20 The proposed field programs for 2019-20 has been approved by all the members of the committee unanimously.

The meeting concluded with vote of thanks by Shri Anurag Diwan, Joint Director, DGM to Chairman, members of Board and participants for their active participation.

(Ajeet Vasant, IAS)
Director
Geology and Mining
Chhattisgarh

19th SGPB Meeting
New Circuit house, Civil Lines, Raipur
Date 5th September 2019

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