

MINUTES OF 3rd MEETING OF THE CGPB COMMITTEE - III
(NON-FERROUS & STRATEGIC MINERALS),
HELD ON 26-07-2010 AT JAIPUR

The **Third Meeting of the CGPB Committee Group-III** on Non Ferrous and Strategic Minerals (Basemetal, Tin Tungsten, Bauxite) was held at GSI Western Region Office, Jaipur on the, **26th July, 2010** under the Chairmanship of **Shri V. P. Sinha**, Deputy Director General, GSI.

3.1.0 Shri V. P. Sinha, the Convenor, greeted all the delegates and mentioned that the same spirit generated in the earlier meetings is to be carried forward to achieve the objectives set for the Committee. He categorized the objectives in the following two major parts: i) To enable an in-depth assessment of the resources of the commodities and ii) arrive at a mechanism of identifying gap areas, formulating broad policies and capacity building. He expressed displeasure on the very thin attendance once again and stressed that measures should be taken to solve this issue. He emphasized that the data filing by the all members, especially the state departments, is of primary importance along with the submission of the five year rolling plans, but unfortunately this has not been done. He added that all these issues will again be taken up in the forthcoming main CGPB to be held in August 2010, therefore the members should submit the desired information at the earliest. He mentioned that the draft of base paper prepared by the committee as per the directives of the MoM has been circulated and discussion will be held for any suggested modifications. He hoped that lively and fruitful discussions will lead to the desired goals.

3.1.1 Dr P Gupta, Director Technical Coordination GSI, WR and Member Secretary, requested all members to introduce themselves. Thereafter he stated that although the base document has been compiled it is yet not complete and needs much further inputs to bring it upto the mark. He requested Shri Amit Kumar Ray, Sr Geologist, PPM to come out with any message from the CHQ. Shri Ray informed that CHQ felt the need to elaborate the term Strategic Mineral for the purpose of committee and arrive at a specific list of the minerals. He read out the definition stating that the minerals include those are vital for security used for combat or ammunition and largely obtained from external resources due to absence/scarcely indigenous resources. The Defence Journal has listed 23 such mineral, out of which 15 such as Sn, W, Mo, etc are more in demand and short in supply. Shri L.K.Nanda, AMD commented that Molybdenum is required for nuclear power industry as well as for power sector and defence.

Dr Gupta stated that our endeavor is to take up work for tungsten and titanium immediately, and requested the representatives of the state departments to draw a strategy for exploration of these commodities, and to take up collaborative items with GSI and DMRL.

[Action: GSI, DGMs]

3.1.2 The Member Secretary sought comments on the minutes of the 2nd Meeting of the CGPB Committee-III and with the permission of the house the minutes were unanimously approved.

3.2.0 Thereafter the Member Secretary initiated discussions on the Action Taken on the minutes of the 2nd Meeting of the CGPB Committee-III.

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2.1.3 i) Partnership of GSI with State Govt. Deptts: The Member Secretary reported that no proposal for partnership has been received from any member and reiterated that this is vital for overall exploration programme of the relevant mineral commodities throughout the country.

[Action: All Members]

2.1.3 ii) Data Filing from State departments: The Member Secretary informed that only Directorate of Orissa has initiated action for compilation and filing of exploration data, but there is no response from other members. He again stressed that this is of utmost importance for comprehensive assessment of the resources and identification of the gap areas for future work.

[Action: All DGMs]

2.1.3 iii) Proposals for follow up work on the already known low grade/small deposits, especially of the deficient commodities: This aspect suggested in the last meeting, is very important in view of augmentation of resource of deficient commodities and must be taken up by all the members.

2.1.4 i. Providing of status of work carried out and identification of gap areas.

No action has been communicated by any member. Therefore all members were once again requested to submit the status of work.

[Action: All Members]

2.1.4 ii. Modification of membership of the committee:

Member Secretary informed that comments regarding modification of membership based on participation have been conveyed to the CGPB Secretariat and CHQ, GSI, but no action has been taken so far. He felt that the CGM, Gujarat should also be included in view of their ongoing work on bauxite.

[Action Member Secretary]

2.1.5 Proposals of State Departments to be made prior to CGPB Meetings: No proposals have been received. Directorate of Geology, Orissa reported that agenda items are being submitted to CGPB. But it is essential that the proposals should be submitted in time to the concerned committee so that it can be discussed before formulation of the FSP of GSI.

[Action: All DGMs]

2.1.6 Proposals for Joint programmes with State Departments: Directorate of Geology, Orissa conveyed that a joint committee has been formed with GSI officers to chalk out joint programmes. The Member Secretary insisted that State Governments should put up joint programmes with active participation. He stated that the DMG Rajasthan has shown interest in joint ventures but any proposal is yet to be received.

[Action: All DGMs]

2.3.0

1.2.4 Holding of SGPB Meetings: Member Secretary informed the house that the Field Season of GSI is now going to be changed to April to March in place of present Oct. to Sept. pattern. In order to switch over to the new mode, the next FSP will be from Oct. 2010 to Mar. 2012. Hence the main CGPB Meeting will be held in February and the mid term CGPB in September every year. Therefore holding of SGPB Meetings prior to the main CGPB Meetings is strongly desired. The following dates of SGPB were informed to the house by respective representatives – Kerala (15th July), Jharkhand (17th July), Orissa (20th July) and Maharashtra (13th August- proposed). Member Secretary requested that the salient points/comments/recommendations of these meeting may be submitted.

[Action: All DGMs]

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1.3.1 Requests for State Deptts for specific work in free hold, forest free and trouble free areas: Representatives from Orissa and Jharkhand commented that most of the areas of interest lie in forest zones. The Member Secretary informed that now the Ministry of MoEF has classified the forest areas into A (Core) and B (Peripheral) parts and permission can be obtained for working in the B part. Shri Amit Ray, Senior Geologist PSS(P&M) CHQ, informed about relaxation being given by MoEF in the norm for drilling, which is 20-25 boreholes per sq km, in place of per 10 sq km permitted earlier. Shri Ray was requested to circulate the minutes of the meeting of senior officers of MoM and MoEF.

[Action: Director Monitoring, CHQ GSI]

1.4.1 Submission of Five Year Plans: Director, DG, Jharkhand stated that the five year plan has been submitted. The Member Secretary insisted that the rolling plan should be submitted and requested the rest of the members to submit plans at the earliest.

[Action: All Members]

1.4.4 Partnership in exploration. Once again the need for partnership among the member organisations was stressed with a request to submit proposals in time for consideration.

[Action: All Members]

1.4.7 Data Sharing and dissemination: The Chairman emphasized that data sharing is of utmost importance and it is mandatory to give the resources in the UNFC format. He desired that the resource figures should be redefined as per UNFC classification. The Member Secretary added that filing of data will be difficult in absence of UNFC code. He wished that the presence of representative from IBM could have helped in further elaboration of the issue.

[Action: All Members]

2.4.4 Taking up work after consultation with GSI to avoid duplication of work: Dy. Director, DG, Orissa informed that two SGPB Meetings are held annually and consultation with GSI goes on to avoid duplication of work. Rest of the members was also requested to hold such consultations.

2.4.5 Data on tungsten and silver occurrences in Kerala from GSI: Representative from Kerala informed that the desired data could not be obtained from GSI, SRO. The Chairman desired that a letter should be sent to SRO, GSI for making the data available at an early date.

[Action: Member Secretary]

2.5.1 Filing of upto date Status of RP/PL: It was emphasized that the up to date status of RP and PL is a must for planning the exploration activities, therefore the data with coordinates should be submitted regularly.

[Action: All DGMs]

2.5.2 Data sharing for maintaining of database on exploration: The Member Secretary said that it is a matter of concern that the data is not being shared despite repeated requests. Director, DG, Jharkhand desired to know what type of data is to be shared. Dr Gupta explained that information of exact location of the working areas with respect to coordinates, plotting in known mineral belts or toposheets, the spatial distribution, details of the work done and resource in UNFC code, is a must for compilation of a comprehensive database.

[Action: All Members]

2.5.3 Collaboration with state governments: The importance of collaborative programmes was once again underlined and the members were requested to put up proposals.

[Action: All Members]

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2.5.4 Feasibility Studies: The Member Secretary stated that there is no response from CGPB Secretariat to the request made to approach FIMI for feasibility studies. He also expressed dissatisfaction over the absence of any representative from IBM for second consecutive meeting.

2.5.5 Emphasis on search for tungsten: The members were informed about the recent meeting held at DMRL Hyderabad and that a presentation will be made by Dr Nagesh. Scientist, DMRL.

3.3.0 Review of the Work done from December 2009 to May/June 2010:

3.3.1 Shri N.M. Pitaliya, Addl. Director, DMG, Rajasthan, presented the list of items taken up and stated that there is no significant result to be highlighted. He conveyed that there is a pendency of 4000 samples for analytical studies and in absence of results future planning cannot be done. Regarding collaborative work he mentioned that all prospective areas are falling under RP and though the RP holders are not doing anything, any other work can not be taken up in these areas. The Member Secretary suggested that this problem should be raised by DMGR in the main CGPB Meeting. He informed the house that recently a MoU has been signed by GSI, WR and DMG Rajasthan for Geochemical Mapping, while GCM in collaboration with CGM, Gujarat is already in progress. He hoped that other states would also come out with such collaborative programmes for basemetal and strategic minerals. He specifically requested the Govt of Rajasthan for collaborative work on tungsten with GSI and DMRL.

3.3.2 Shri R R. Nair, Senior Geologist, DMG Kerala stated that no work on the relevant commodities has been carried out. He informed that the grade of ilmenite in coastal areas has suddenly come down after the Tsunami-2004 and also that mining in coastal areas is being resisted by local people He wanted to know the possibility of exploring the off shore areas for ilmenite. He was advised to approach the CGPB Committee –VI for this. He stated that bauxite investigation in northern parts of Kerala is proposed during the next Field Season involving mapping followed by pitting & trenching, and subsequent drilling, if required.

3.3.3 Shri S.P..Chahande, Dy. Director, DGM Maharashtra presented information on the three items of bauxite investigation in Kolhapur, Satara, and Ratnagiri districts, out of which only the investigation in Satara district will be continued in the next FSP, while new items will be proposed after the next SGPB meeting.

3.3.4 Shri K.Balasubramanian, Deputy Director, DGM, Tamil Nadu, reported that no work was undertaken on basemetals; however work for molybdenum has been carried out in Salem district. He was requested to send the details of the work carried within a week.

[Action: DGM Tamil Nadu]

3.3.5 Shri D.N.Pani, Deputy Director, Dir. of Geology, Orissa, depicted the work carried out for bauxite in Kalahandi and Koraput districts. The Al₂O₃ ranges from 35-54.12 %, Reactive SiO₂ - 0.03 to 2.12%, TiO₂- 0.10 to 7.00% . He mentioned that the global demand for aluminium is on the rise and the small plateaus need to be explored. He stated that UNFC code is being followed. Member Secretary requested that the augmentation of resource from 2005 to 2010 should be informed as MoM is compiling the data. He suggested that GSI Eastern Region may be contacted for identification of prospective areas/plateaus through remote sensing and assured that letter will be sent to ERO by the Committee, for providing assistance.

[Action: DGM Orissa & Member Secretary]

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3.3.6 Shri J.P.Singh, Director, Directorate of Geology, Jharkhand, presented the map compiled in collaboration with the Jharkhand Space Application Centre. The map covering 7430 sq km area in Gumla, Lohardaga and Latehar districts was highly appreciated by all the members. This map would form the basis for proposals for detailed work in collaboration with NMDC.

3.3.7 Shri H.D.Dhekaware, Dy. Director DGM Chhattisgarh, described the results of bauxite investigation in Sarbhanja area (Mainpat Plateau) Sarguja district and Darai area, Kabirdham district. More than 0.2 million tonnes reserves (Al_2O_3 40 -57.65%) have been estimated in Sarbhanja area and 0.2 million tonnes reserves (Al_2O_3 40 -55.85%) in Darai area. The Chairman desired to know the mineralogy of the deposit, to which the reply was that the major mineral is gibbsite. The Member Secretary commented that besides the detailed mineralogy, resource augmentation from 2005 to 2010 should be worked out and submitted. The grade and reserves should be evaluated in terms of the end user specification and included in the report.

[Action: DGM Chhattisgarh]

3.3.8 Shri L.K.Nanda, Regional Director AMD, presented the progress of work carried out throughout the country with special reference to Rajasthan, including Mo assessment near Khandela in Sikar district. In reply to a query by Shri Amit Ray, Shri Nanda informed that thrust areas in XIIth Plan will be on sedimentary basins and delineation of areas by E-M and magnetic studies, along with a massive drilling programme (including outsourcing of drilling). The Member Secretary enquired whether any work for Lithium is being carried out. Shri Nanda replied that with the renewed interest in playas, the brines need to be explored, which will be taken up in the next Field Season. Dr Gupta added that brine is the major source for Lithium in China. He also mentioned that Lithium occurrences in Pegmatites in Sirohi area may be of interest and the data with GSI can be supplied to AMD. Dr Gupta also cautioned that vital atomic minerals bearing zones may come under the submergence zone in the Par- Tapi Project Gujarat, and advised that the NWDA should be contacted to prevent this.

[Action: AMD]

3.3.9 Dr R.V.S. Nagesh, Scientist F, DMRL. depicted an account of the tungsten position in the country with beneficiation techniques through flow sheets. He added since China has refused supply immediate attention towards assessment of tungsten resources is necessary. Dr P Gupta made a presentation on the Tungsten scenario in Rajasthan giving details of the work done so far and stressed that the Degana area in Nagaur district must be taken up for study. He added that the area between west of Ajmer to Sirohi should be scanned regionally for identifying potential zones. He also said that the potential Degana granite is presently being mined for road metal/dimension stone, which must be immediately stopped. He requested Shri Pitalaya to do the needful for this and also to consider taking up MOU based collaborative work for tungsten in this area with GSI & DMGR.

[Action : DMG, Rajasthan]

Dr P.Gupta stressed that a presentation may be given by DMRL, on the demand and supply, and beneficiation of tungsten, in the 47th CGPB Meeting to be held in August 2010 in Delhi.

Shri D.C.Shah, Zonal Manager, MECL, gave an account of the work carried out for copper in Wari area of Chittorgarh district, Rajasthan. He informed that in future work may be taken up in Tikhi area and proposal will be put up in CGPB Meeting.

3.3.11 Shri K. Koteswara, Suptdg. Geologist GSI CR, presented the highlights of search for copper and associated mineralisation in Ghanpur-Mudohli block in Gadchiroli district, Maharashtra. He informed that assessment of the 750m strike length of the mineralized

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zone by drilling is in progress which has been extended upto December 2010 as per recommendation of MTR Committee.

- 3.3.12 Dr K.S.Raghav**, Senior Geologist GSI, NER, briefly stated the results of basemetal investigation in Umphyrnai are E. Khasi Hills district, Meghalaya and Chakong-Jugdum area in W. Sikkim district. The latter item would be continued in the next F.S. along with two new items viz. basemetal investigation in Simsang Division East Garo Hills district and REE evaluation in Sung valley Complex, East Khasi Hills district, Meghalaya.
- 3.3.13 Shri A.K.Bhattacharya**, Director, GSI, WR, presented the work under Copper investigation in Karoi-Rajpura area in Bhilwara district and search for Copper and Nickel in Biramsar-Ki-Dungri area in Churu district. Drilling in Karoi-Rajpura may be taken up after assessment of analytical results. While in Biramsar- Ki -Dungri area presence of ophiolite suite of rocks has been reported for the first time, where drilling is proposed to know the extent of ophiolite suite of rocks and to ascertain prospective areas for PGE, Ni, Cr and basemetals.
- 3.3.14 Shri D.K.Rai**, Suptdg. Geologist, GSI, WR presented the work carried out in Dariba, Mahwa blocks (Sikar district), Dhanota block (Jhunjhunun district), Deota Kishangarh Bas area (Alwar district), and Dholpura area (Jaipur district) Rajasthan. He also presented the outline of proposals for the next field season. The Member Secretary added that in view of encouraging results in the Nim Ka Thana Belt, HCL has applied for RPs.
- 3.3.15 Shri P.K.Raut**, Suptdg. Geologist, GSI, WR depicted the highlights of work for basemetal and associated gold /precious metal, carried out in Kalikhera Block, Rampuriya-Garadiakhera area (Bhilwara district), Anjeni-Bedawal-ki-Pal area, (Udaipur district) and Danva Block (Sirohi district).

3.4.0 AGENDA ITEMS:

- 3.4.1 Discussions on Base Paper:** The Member Secretary after briefing the instructions from MoM regarding preparation of base paper and its salient points, invited suggestion/comments for modifications/upgradation of the draft base paper already circulated. They were no immediate comments from members, while the representatives from state departments of Orissa, Maharashtra and Tamil Nadu reported non receipt of the draft. It was decided that once again the draft will be mailed to these departments and all the members were requested to kindly peruse the draft and mail the comments/suggestions at the earliest.

The Member Secretary requested all the members to submit the following material for upgradation of base paper as per the terms and conditions of the CGPB Committee – III:

1. Five year rolling plan.
2. Collaborative strategy and partnership.
3. Evaluation of projects in terms of end user's specifications.
4. Update database (including maps) of regional and detailed exploration.
5. Adoption of scientific mining, ore dressing and beneficiation techniques.
6. Data filing by concession holders and uploading in websites.
7. Proposals for training in GSI TI for capacity building.

[Action: All Members]

- 3.4.2 Quality Management:** The Chairman announced that MoM has framed a Quality Management Cell for monitoring the quality of the work carried out in order to maintain high standard, at par with international agencies. Suggestions for maintaining high standard and quality of work are always welcome from all the members which can also be put on the space on portal.

[Action: All Members]

3.4.3 Miscellaneous: Shri R.R.Nair, Senior Geologist, DGM, Kerala pointed out that attending all the CGPB Committee meetings by one or the other representative of any department sometimes become difficult due to very short gap between the dates of these meetings. Therefore the schedule of all the twelve committee meetings should be designed so that sufficient time is available for participation in all the meetings.

The Member Secretary while summarizing the proceedings commented that the poor participation in this meeting as well as in past ones is a cause of concern which will be conveyed to the CGPB secretariat and in turn to MoM with request to take measures for more meaningful composition of the membership and active participation. He appreciated the vivid presentations made by representatives of AMD, DMRL, Orissa Govt and the importance of the map compiled by Directorate of Geology, Jharkhand. He expressed satisfaction over the appreciable work being carried out for bauxite by various agencies and hoped that assessment of tungsten and titanium will be taken up effectively in near future.

Chairman's Remarks: The Chairman in his concluding remarks stated that he too shares the view offered by Dr P.Gupta and expressed dissatisfaction over the poor participation of members, even from the GSI. He also praised the very good presentations by representatives of AMD, DMRL, Orissa and Jharkhand. Govts. He requested all members to go through the draft base paper critically and send the feed back at the earliest. He once again reminded all members to ensure that the resources must be presented as per the UNFC classification. He hoped that programmes of partnership in exploration will increase in future.

Vote of Thanks: Shri N.M.Pitaliya, DMG Rajasthan presented a vote of thanks.

LIST OF PARTICIPANTS
3rd Meeting of the CGPB COMMITTEE - III
26-07-2010, at Jaipur.

S.No.	Name & Designation	Organisation
1	Shri V.P.Sinha Deputy Director General CONVENOR	Geological Survey of India Western Region, Jaipur
2	Dr P.Gupta, Director, Tech. Coord. Div. MEMBER SECRETARY	Geological Survey of India Western Region, Jaipur
3	Shri Amit Kumar Ray Senior Geologist	Monitoring Cell GSI, CHQ, Kolkata
4	Shri N.M.Pitaliya Addl. Director	Directorate of Mines & Geology Mining, Govt. of Rajasthan
5	Shri J.P.Singh Director	Directorate of Geology, DGM Govt. of Jharkhand
6	Shri V.K.Ojha, Deputy Director	Directorate of Geology, DGM Govt. of Jharkhand
7	Shri K. Balasubramanian Deputy Director	Commissionerate of Geology & Mining, Govt of Tamil Nadu
8	Shri H.D.Dhekaware Deputy Director	Directorate of Geology & Mining, Govt. of Chhattisgarh
9	Shri S.P.Chahande Deputy Director	Directorate of Geology & Mining, Govt. of Chhattisgarh
10	Shri D.N.Pani Deputy Director	Directorate of Geology, DGM Govt. of Orissa
11	Shri R.R.Nair Senior Geologist	Directorate of Mining & Geology, Govt. of Kerala
12	Shri L.K.Nanda Regional Diector	Atomic Minerals Directorate for Research and Exploration, Jaipur.
13	Shri R.V.S.Nagesh Scientist F	Defence Metallurgical Research Laboratory Hyderabad
14	Shri D.C.Shah Zonal Manager	Mineral Exploration Corporation Ltd.
15	Shri K.Koteshwara Rao Suptdg. Geologist	Geological Survey of India Central Region, Nagpur
16	Dr K.S.Raghav Senior Geologist	Geological Survey of India North Eastern Region, Shillong
17	Shri A.K.Bhattacharya Director	Geological Survey of India Op: Rajasthan, W.R, Jaipur
18	Shri D. K.Rai Suptdg. Geologist	Geological Survey of India Op: Rajasthan, W.R, Jaipur
19	Shri P.K.Raut Suptdg. Geologist	Geological Survey of India Op: Rajasthan, W.R, Jaipur

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20	Shri D.W.Joshi Senior Geologist	Geological Survey of India Western Region, Jaipur
21	Shri V.Ramesh Senior Geologist	Geological Survey of India Western Region, Jaipur

**LIST OF NON PARTICIPANTS
3rd Meeting of the CGPB COMMITTEE - III
26-07-2010, at Jaipur.**

S.No.	Name of Organisation
1	DIRECTORATE OF MINES AND GEOLOGY, GOVT. OF ANDHRA PRADESH.
2	INDIAN BUREAU OF MINES
3	HINDUSTAN COPPER LIMITED (HCL)
4	NATIONAL ALUMINUM COMPANY LIMITED (NALCO)
5	STERLITE INDUSTRY
6	METAL MINING INDIA PVT. LTD.
7	ANGLO AMERICAN EXPLORATION PVT. LTD.
8	GOLDEN PATRIOT MINING PVT. LTD.
9	INDO GOLD MINES PVT. LTD.
10	MOGUL RESOURCES
11	HINDALCO
12	IMMT, BHUBANESHWAR
13	INDIAN RARE EARTHS LTD.
14	KERALA RARE EARTHS MINERALS LTD
15	BARC
16	RIO TINTO EXPLORATION
17	GSI Eastern Region
18	GSI Northern Region
19	GSI Southern Region

