

MINUTES OF THE 54th MEETING OF THE KERALA STATE GEOLOGICAL PROGRAMMING BOARD (SGPB)

Date : 30th October 2017

Venue : Banquet Hall, Government Guest House, Thycaud,
Thiruvananthapuram

Time : 10.15 hrs to 13.00 hrs

Participants: Separate list appended

Proceedings:-

54.1.0 Shri. T.K Ramakrishnan, Member Secretary and Director of Mining and Geology, whole-heartedly welcomed Shri. Paul Antony IAS, Chairman of the State Geological Programming Board and Additional Chief Secretary to Government, Power and Industries Department to chair the meeting and all the esteemed members of the State Geological Programming Board to the meeting. The Member secretary briefly explained the history of the SGPB as well as the functions of the State Department of Mining and Geology. He informed the Department's dual functions, the prime one is that of technical in nature viz. Mineral Exploration and Prospecting and the other being of Mineral Administration which is statutory. He emphasized that though the Department was earlier focusing on mineral exploration activities, later on the focus was shifted to mining and its regulation related activities. He also informed that now-a-days rules regulating mining have become very stringent and clearances/licenses from five or more Central/State departments/agencies are required to carry out mining. He also emphasized about the introduction of mining plans for mining of minor minerals. Lack of availability of land, very small land holdings, thick population, high public awareness about environmental aspects, a lot of areas coming under forest, the inclusion of areas under Environmentally Sensitive Areas (ESA) etc. are posing limitations to start and operate large mines in Kerala. He said that the State has a plan to form a Natural Resource Corporation through which building materials will be supplied to the public.

Regarding identification of blocks for auction of major minerals, the Department is carrying out exploration for Bauxite in Kannur District. He requested GSI to provide information on the blocks identified for auction with respect to minerals like Iron Ore, Bauxite and PGE (platinum group of elements) for which GSI is currently carrying exploration activities. He stressed the need to prepare mineral exploration reports as per UNFC and Mineral (Evidence of Mineral Content) Rules 2015.

He informed that though GSI is identifying sand bearing areas in offshore, the mining of sand will not be possible as it is difficult to comply with the provisions of present Offshore Areas Mineral (Development and Regulation) Act 2002. He informed that Government of India has issued draft Offshore Areas Mineral (Development and Regulation) Amendment Bill 2017 and hoped that the mining would be possible once amendments in Act come into force.

He reminded that draft mining policy of Kerala (which is a part of Draft Industrial and Commercial Policy 2017) is available in the website of Government of Kerala and requested the members to send suggestion/remarks on the same.

The Member secretary invited the Chairman to address dignitaries.

54.1.1 Shri. Paul Antony, IAS, Chairman said that the State is facing many challenges in the mineral administration and exploration sector. He mentioned about the shortage of raw materials in the State which is affecting the industrial sector. He informed that the Director of Mining and Geology have already mentioned about the issues faced by the mining sector in the State. He added that Kerala has large reserve of beach sand minerals and that notification of beach sand minerals bearing areas based on threshold value would be done only after getting mineral investigation reports from AMD.

54.1.2 Shri. C. Thambu Cherian, Deputy Director of Mining and Geology, enquired the dignitaries regarding suggestions to be made in the minutes of the previous meeting held on 6th August, 2016. Since there were no suggestions, the Deputy Director declared the minutes of the 53rd SGPB meeting as confirmed. Further on, he invited all members to present the review of work done during the period from June 2016 to June 2017 and the proposed programs for the year 2017-18.

54.2.0 Shri. C. Muraleedharan, Deputy Director General, GSI State Unit, Kerala, gave an overview of the geological investigation programmes that were taken up by GSI during the period under review.

54.2.1 Shri. Mathew Joseph, Director, GSI, Kerala presented the details of work done by GSI and about the proposed programmes for the year 2017-18. While GSI was emphasizing about the landslide studies carried out, the Chairman enquired about the basis of classification of landslide prone areas "Red Zone" and pointed out that people have brought to the attention of Government that mining of granite building stone in certain villages of Kannur district have been banned citing that such villages falls under "Red

Zones". He added that classifying an entire village as "Red Zone" on account of previous occurrence of one or more landslides could eventually results in prohibition of mining of essential building materials in other safe areas in such villages. GSI reported that they do not carry out such zonation and that they are not aware of such zonation. GSI also expressed their willingness to carry out site specific studies on landslide susceptibility free of cost on getting written request from State. Chairman also observed that GSI could also take up investigation to delineate tile/brick clay bearing areas as tile/brick manufacturers in the State are on the verge of closing their manufacturing units due to non availability of raw materials. He pointed out that Government have taken the help of Kerala State Remote Sensing and Environment Center to delineate such areas in Thrissur district.

(Action: DMG,GSI)

54.3.0 Shri. Prasanth S. Hegde, Senior Mining Geologist of IBM, Regional Office Bangalore said that during the review period no major mineral prospecting work was carried out in the State. Also no reserve or resources were upgraded by any lessee. A two-day training programme on Mining plan was conducted by faculties from IBM in the Directorate of Mining and Geology during July 2017 as per the request of Director of Mining and Geology. He said that many China clay reserves in the State is going unutilized due to the Government's decision to set up IT parks, especially in Thonnackal area of Thiruvananthapuram district. He informed that a Mining Surveillance System has been developed for the major minerals by the IBM to detect illegal mining activities within a radius of 500 m of the lease boundary and that a trigger will be generated by the control room in the event any illegal mining and the save would be sent to the State DMG. He added that Ministry of Mines have issued directives to States to adopt this system for minor minerals also. He also mentioned that a 'Star Rating' system has been instituted by the Ministry of Mines through Indian Bureau of Mines (IBM), in which star rating will be awarded to the mining leases for their efforts and initiatives taken for implementation of the Sustainable Development Framework (SDF). He also informed that Ministry has given instruction to States to adopt similar system in the State and that a draft template was circulated to all States in this regard. He also added that IBM has proposed an action plan to develop and reuse abandoned major mineral mines and requested State Government to provide details of mines abandoned before 2013. DMG agreed to provide the details of abandoned mines.

(Action: DMG)

54.3.1 The Chairman asked Shri. Biju Sebastian, Senior Geologist to brief on the status regarding the matters raised by IBM. Regarding mining surveillance system Sri Biju Sebastian said that, there are ten major mineral leases in the State out of which few are not working and that so far no trigger has been received. Regarding implementation of MSS for minor minerals he informed that comments on the template circulated was forwarded to Ministry of Mines and one officer have been deputed to visit BISAG Gujarat for this work. He mentioned that as a part of e-Governance imitative, DMG has developed Kerala Online Mining Permit Awarding Services and a separate module have been developed for mining surveillance. He also informed that Government of Kerala has not taken a final decision to adopt MSS and Star Rating of Mines with respect to minor minerals. He informed that one major mineral in the State has submitted data for Star Rating in the respective portal and they have obtained a start rating less than 4. If 4 star rating is not received, as per the system, the mine has to be closed down. Hence the mine owners are not keen in submitting the data. He said that if such system is implemented for minor minerals (where the area of mining, resource and period of mining is less compared to that of major mineral), many quarry owners would not be able to comply with the sustainable development framework and eventually such quarries would be closed down. This would have a negative impact on the industrial sector. Sri Biju Sebastian said that since bauxite is major mineral and laterite is minor mineral, the Department had requested IBM to clarify on the chemical parameters for classification of bauxite and aluminous laterite and that the Department is awaiting a reply. Sri. Hegde said that the matter has been taken up with the headquarters and is awaiting decision.

[Action: DMG,IBM]

54.3.2 The Chairman said that the English India Clays Ltd. has approached the Government with a permission to grant permission to mine china clay in area notified for Technocity. The company put forward proposal to mine china clay and to reclaim the land and to handover the land to Technocity. The Chairman enquired whether mining would be possible without affecting the environment (dust pollution) since IT companies are already working in the said area. It was clarified that there would be dust problem especially when the mineral mined is china clay. DMG said that since the china clay has already been declared a minor mineral, the Department is empowered to grant concession for china clay. The Chairman enquired about the details of mining activities in the lease area of Malabar Cements Ltd and about the scope of finding additional reserves in the area. IBM mentioned that though Company will get deemed extension of mining lease, there would be some issue as the area fall within the reserve forest in Western Ghats region and that it come under the ESA villages as per Kasthurirangan report. It

was also brought to the notice of the board that the final notification of ESA villages is yet to be made by Government of India.

The Chairman expressed his disappointment in not having any mining engineering courses in any of the Engineering colleges, ITIs or Polytechnic Colleges in the State. He asked whether IBM could include a programme of training of persons in this regard in their forthcoming action plan, so that the quarry operators in the State would be benefited. He assured the support of the Department as well as the State Government in this regard. He also said that the KMML has taken up initiatives in this line.

[Action: IBM]

54.4.0 Smt. T.S.Anitha Syam, Scientist-D , Central Ground Water Board, Thiruvananthapuram, outlined the progress of work done by them during the review period, which included aquifer mapping, water quality assessments, bore well drilling and IEC activities etc. The Chairman enquired whether any safe limit to which ground water can be drawn from a site by an industry (which do not belong to the category of water bottling plan) has been fixed in the State and if not the reason there of. He pointed out that it was observed that new industries are facing problem to get permission for drilling of wells and drawing water for their regular use. Smt. T.S.Anitha Syam said that during the aquifer mapping, they classify Blocks as safe, critical and semi critical. The Chairman enquired whether there is provision to provide blanket permission to draw ground water to a particular limit in safe blocks. It was clarified that the ground water scenario is highly heterogeneous and only after doing pumping tests one can say how much ground water can be drawn from a particular well.

54.5.0 Smt. NilanjanaSorcar, Scientist-B, of National Centre for Earth Science Studies, Akkulam, said that during the review period, palaeomagnetic studies, granulite studies, geophysical studies, palaeofluid research studies and landslide studies were carried out. In connection with the landslide program, the slope maps of the Western Ghats were prepared.

54.6.0 Shri. T.S. Shaji, Scientific officer in charge, from AMD said that during the review period, detailed exploration as per UNFC guidelines were continued in parts of Neendakara -Kayamkulam coastal stretch. In addition deep drilling methods are deployed to find out additional deposits in Chavara block. He also mentioned about the morphodynamics study in selected beaches between Neendakara and Ambalapuzha. As part of the annual programme for 2017-18, the sample analysis and mineralogical studies of samples from various mining lease blocks of IREL at Chavara would be taken up.

54.6.1 The Chairman informed that for notifying the beach sand mineral bearing areas for mining by PSUs, the AMD's study reports (based on the threshold values) are required and that though Department had requested the same, it is yet to be shared. Shri. Shaji informed that AMD HQ is currently engaged in finalization of these reports.

[Action: AMD]

54.7.0 Shri. J. Ansari, Senior Principal Scientist, NIIST, Thiruvananthapuram briefed about the facilities of NIIST as well as about the projects undertaken by NIIST which includes the EIA study for KMML and IREL.

54.7.1 The Director of Mining and Geology, asked NIIST regarding the environment clearances of IREL and KMML. Sri. Ansari replied that KMML would get EC soon but it may take one more year for IREL to get the EC.

[Action: NIIST]

54.8.0 Shri. A.G. Gopakumar, Senior Hydrogeologist, State Ground water Department outlined the problems related to water sector which needed immediate attention and went on to brief the works under taken by the department during the review period. He warned that artificial recharge in landslide prone areas may trigger landslides. He said that the department was able to provide groundwater recharge facilities to many Government schools in the State and with more funds, the services can be extended to more schools in the State.

54.8.1 Shri. Biju Sebastian, Senior Geologist, Mining and Geology suggested the possibility of using water from abandoned quarries in the State to be used for public supply. The GWD said that as of now, they have no funds to take up such works.

54.9.0 Dr. E. Shaji, Assistant Professor, Department of Geology, Kariavattom campus, outlined the main achievements of the department during the review period. Dr. Shaji suggested if proper mining plans are made then there is a possibility of mining additional resources. He said that his Department proposes to conduct a seminar on Mineral Resources of Kerala, and it would be welcome if it can be done in collaboration with the Department of Mining and Geology. He added that the work of setting up of Mineralogy Museum is progressing.

[Action:DMG]

54.10.0 Shri. M. Bhaskaran, Senior Manager MECL said that, under the NMET sponsored programme, G4 level explorations are being conducted in Kasaragod district for bauxite and in Vettukathi Kottapla area of Malappuram

district for gold. Samples have been collected and sent to the Nagpur Chemical Laboratory and the results are awaited.

54.10.1 Shri. Biju Sebastian, Senior Geologist, Department of Mining and Geology said that a tripartite agreement has not been signed so far for this project which is undertaken under the aegis of NMET and said that the area under gold exploration falls in an ecologically sensitive village of Western Ghat and that the area falls within the reserved forest as well as near to Wild Life Sanctuary. Since the exploration works are conducted to auction away the potential blocks, the present work may prove futile in this light. It was also intimated that the area where bauxite exploration is carried out falls in thickly populated area of Kasaragod district where people have vehemently opposed mining of bauxite by a private company.

[Action: MECL]

54.11.0 Shri. Sony K. Kuriakose, Mining Engineer of Malabar Cements Ltd., said that the lease for the Pandarath Limestone Captive Mines of MCL shall be extended and be deemed to have been extended up to 24.09.2029 a period of 50 years from the date of grant of original lease and the letter in this regard has already been sent to the Director of Mining and Geology. The DGPS survey which was started in the previous year was continued in the review period too. The geo referenced cadastral lease maps of the Pandarath Limestone Mines of MCL prepared by DGPS survey through NABET accredited EIA consultant was handed over to the Director of Mining and Geology. The Director of Mining and Geology enquired about the status of their request regarding limestone exploratory drilling in their mine site by the Department of Mining and Geology and pointed out that the Department is awaiting confirmation letter regarding the payment of fee for exploratory drilling.

[Action: MCL, DMG]

54.12.0 Shri. Jameel Ahammed, Manager, (Mining) IRELChavara said that they are yet to get EC for some of the lease areas and the work has been entrusted to NIIST and that the status of the same was briefed by NIIST.

54.13.0 Shri. Biju Sebastian, Senior Geologist, Mining and Geology, said that all lessees holding major mineral leases are required to remit 30% of the royalty towards District Mineral Foundation, from the year September 2015 onwards, before 31st December, 2017 to the TSB account maintained by the District Collector, failing which they may have to remit the interest @15% per annum. The communication regarding this shall be intimated to all the lessees holding leases of major minerals.

[Action: KMML, MCL, IREL, KCL]

54.14.0 Shri. Samson.A Manager (Mines i/c), Kerala Ceramics Ltd. said that as per the request of the company, the Mineral Exploration and Prospecting Division of the Department of Mining and Geology has taken up detailed exploration for china clay in areas bordering the mines owned by Kerala Ceramics in Kanjirakkod, Kulappoika-Punnathadam area, and near the quarters of the company in Kollam district, and was able to identify and demarcate good quality china clay for the purpose of land acquisition. The company appreciated the efforts taken up by the Department.

54.15.0 Shri. C. Thambu Cherian, Deputy Director of Mining and Geology presented the progress of the works done by the Department during the review period. He also detailed about the proposed programs for the year 2017-18.

54.16.0 The Deputy Director General, GSI, Kerala, suggested that while doing exploration for bauxite and laterite, the core samples should be tested for trace elements especially Gallium. Sri. Biju Sebastian, Senior Geologist said that the Department had plans for analyzing Gallium and Vanadium, but since the department laboratory was not equipped for the same, the matter was dropped. He said that the Department is willing to share the core samples with the GSI on receiving written request.

[Action: GSI, DMG]

54.17.0 Before concluding the meeting it was pointed out that compared to previous meetings, the number of absentees are more.

54.18.0 Shri. C.K. Baiju, Deputy Director, Department of Mining and Geology, rendered the vote of thanks.

The 54th SGPB meeting was concluded at 13.00 hours.

Minutes approved by



Paul Antony
Additional Chief Secretary to Government,
Power, Industries and Commerce Department
& Chairman, SGPB

**LIST OF PARTICIPANTS OF THE 54th SGPB MEETING
HELD ON 30TH OCTOBER 2017**

Sl. No.	Name of Institution	Name & Designation of the Officers who attended the Meeting
1	Geological Survey of India Southern Unit, Kerala, Thiruvananthapuram	1. Shri C. Muralidharan Deputy Director General 2. Shri. Mathew Joseph Director
2	National Centre for Earth Science Studies	Smt. Nilanjana Sorcar Scientist
3	Irrigation Design and Research Board (IDRB), Thiruvananthapuram	Shri. Thomas Mathew Joint Director
4	Department of Geology University of Kerala	Dr. E. Shaji Assistant Professor
5	Ground Water Department Thiruvananthapuram	Shri A.G. Gopakumar, Senior Hydrogeologist,
6	Central Ground Water Board, (CGWB), Kerala	1. Shri V. Kunhambu Regional Director 2. Smt. Anitha Shyam Scientist-D
7	Indian Rare Earths Limited, (IREL) Chavara	Shri. Jameel Ahamed Senior Manager (Mining),
8	Industries Department Government Secretariat	Shri. Vinodan C K Deputy Secretary to Government
9	Indian Bureau of Mines (IBM) Regional Office, Bangalore	Shri. Prashant S. Hegde Senior Mining Geologist
10	Malabar Cements Ltd. Walayar, Palakkad	1. Shri .Sony K. Kuriakose Mining Engineer 2. Suraj H., Mines Surveyor

11	Atomic Minerals Directorate for Exploration & Research (AMD) Thiruvananthapuram	Shri .Shri T.S. Shaji, Scientific officer-G
12	National Institute for interdisciplinary Science and Technology, (NIIST)Thiruvananthapuram	Shri. J. Ansari Senior Principal Scientist
13	Kerala Minerals & Metals Limited, Chavara	1.Shri.Roy Kurian K.K. Managing Director 2.T.Karthikeyan Mines Manager
14	Kerala Ceramics Ltd, Kundara	Shri. Samson.A Manager (Mines i/c)
15	Mineral Exploration Corporation Ltd (MECL), Hyderabad	Sri.M. Bhaksaran Senior Manager(Geology)
16	Indian Rare Earths Limited, (IREL) Chavara	Shri.JameelAhamed SeniorManager(Mining),
17	Department of Mining & Geology	1.Shri TK.Ramakrishnam Director(i/c) 2.Shri C.K. Baiju Deputy Director 4.Shri C. Thambu Cherian Deputy Director 3.Sri. P A Siddique Sr. Administrative Officer 5.Shri.Biju Sebastian Senior Geologist