

Only through e-mail

Government of India
Ministry of Mines
National Mineral Exploration Trust

F.No.6/2/2015-NMET/302

New Delhi, 30th January, 2023

Subject: Circulation of minutes of 27th meeting of the Executive Committee (EC) of National Mineral Exploration Trust (NMET) held on 10th January, 2023.

Please find enclosed the minutes of 27th meeting of Executive Committee of NMET held on 10th January, 2023 for your kind perusal.

Action Taken Report on relevant paras may kindly be forwarded to this office.


[Vivek Kumar Sharma] 30.01.23
Director & HoD, NMET

To,

1. The Secretary, Dept. of Atomic Energy, Anushakti Bhawan, C.S.M. Marg, Mumbai- 400001.
2. The Secretary, Ministry of Coal, Shastri Bhawan, New Delhi- 110001.
3. The Secretary, Ministry of Petroleum and Natural Gas, Shastri Bhawan, New Delhi-110001.
4. The Joint Secretary and Financial Advisor, Ministry of Mines, Shastri Bhawan, New Delhi-110001.
5. The Director General, Geological Survey of India, 27, J. L. Nehru Road, Kolkata-700016.
6. The Controller General, Indian Bureau of Mines, 2nd Floor, Indira Bhawan, Civil Lines, Nagpur-440001.
7. The Principal Secretary, Mineral Resources Department, Govt. of Madhya Pradesh, Mantralaya, Vallabh Bhawan, Bhopal- 462004.
8. The Principal Secretary, Industries, Energy and Labour Dept. 114 Annex Building Mantralaya, Mumbai- 400032.
9. The Additional Chief Secretary, Department of Mines and Petroleum Main Building Secretariat, Jaipur- 302005.
10. The Additional Chief Secretary, Industries, Investment Promotion and Commerce Dept. Industries Department Secretariat, Chennai- 600009.
11. Shri Alok Sharma, (Retd.) GM &HoD (Exploration), CMPDIL, 402, Lake Garden, Kanke Road, Ranchi- 834008.
12. Shri Naresh Nautiyal, Head (Business Development & Planning) (Retd.), MECL, 109, KT Nagar, Katol Road, Nagpur- 440013.

13. Dr. Yamuna Singh, Scientist-H, Atomic Minerals Directorate for Exploration and Research (Retd.), Flat G-7, Block G, Rainbow Vistas Rock Garden, Opp- IDL, Green Hills Road, Sanathnagar PO, Moosapet, Hyderabad- 500018.
14. Dr. Laxman Singh Shekhawat, Dy. Director General (Retd.), Geological Survey of India, 695 Shanti Nagar (Road No-3), Near Durgapura Railway Station, Durgapura, Jaipur- 302018.
15. Dr. Sahendra Singh, Associate Professor, Department of Applied Geology, Indian Institute of Technology (ISM), Dhanbad- 826004.

Copy to:

1. The Secretary (Mines), Government of Andhra Pradesh.
2. The Secretary (Geology and Mining), Government of Arunachal Pradesh.
3. The Principal Secretary, Department of Mines and Minerals, Government of Assam.
4. The Principal Secretary-cum-Mines Commissioner, Government of Bihar.
5. The Secretary, Mineral Resource Department, Government of Chhattisgarh.
6. The Principal Secretary, Department of Mines and Geology, Government of Goa.
7. The Addl. Chief Secretary (Industries), Government of Himachal Pradesh.
8. The Principal Secretary (Industry and Mines), Government of Gujarat.
9. The Commissioner Secretary (Industries and Commerce), Government of Jammu & Kashmir.
10. The Secretary (Industries, Mines and Geology), Government of Jharkhand.
11. The Secretary, (Industries and Commerce), Government of Karnataka.
12. The Principal Secretary, Industries Department, Government of Kerala.
13. The Secretary, Mineral Resource Department, Government of Madhya Pradesh.
14. The Addl. Chief Secretary (Industries and Mines), Government of Maharashtra.
15. The Commissioner and Secretary, Mining and Geology Department, Government of Meghalaya.
16. The Commissioner & Secretary, Geology and Mining, Government of Nagaland.
17. The Principal Secretary (Steel and Mines), Government of Odisha.
18. The Principal Secretary, Mines and Geology, Government of Punjab.
19. The Principal Secretary (Mines), Government of Rajasthan.
20. The Principal Secretary (Industries), Government of Tamil Nadu.
21. The Principal Secretary (Industries and Mines), Government of Telangana.
22. The Secretary (Mines and Geology), Government of Uttar Pradesh.
23. The Principal Secretary (Mines), Government of Uttarakhand.
24. The Secretary (Industry, Commerce and Enterprises), Government of West Bengal.
25. The Secretary, Department of Industries, Administration of Union Territory of Ladakh.
26. The Principal Secretary, Mines and Geology Department, Government of Sikkim.
27. The Secretary, Department of Industries and Commerce, Government of Tripura.
28. The Secretary, Commerce and Industries, Government of Mizoram.

29. The Secretary, Textiles, Commerce and Industry, Government of Manipur.
30. The Principal Secretary, Department of Mines and Geology, Government of Haryana.

Copy to:

1. The Director, Department of Mines and Geology, Government of Andhra Pradesh.
2. The Director, Department of Geology and Mining, Government of Arunachal Pradesh.
3. The Director, Directorate of Geology and Mining, Government of Assam.
4. The Director, Department of Mines and Geology, Government of Bihar.
5. The Director, Directorate of Geology and Mining, Government of Chhattisgarh.
6. The Director of Mines and Geology, Government of Goa.
7. The Commissioner of Geology and Mining, Government of Gujarat.
8. The Director, Department of Industries, Government of Himachal Pradesh.
9. The Director, Department of Geology and Mining, Government of Jammu and Kashmir.
10. The Director (Mines), Directorate of Mines, Government of Jharkhand.
11. The Director, Department of Mines and Geology, Government of Karnataka.
12. The Director, Directorate of Mining and Geology, Government of Kerala.
13. The Director, Directorate of Geology and Mining, Government of Madhya Pradesh.
14. The Director, Directorate of Geology and Mining, Government of Maharashtra.
15. The Director, Directorate of Mineral Resources, Government of Meghalaya.
16. The Director, Directorate of Geology and Mining, Government of Nagaland.
17. The Director, Directorate of Geology, Government of Odisha.
18. The Director, Directorate of Mines and Minerals, Government of Punjab.
19. The Director, Mines and Geology Directorate, Government of Rajasthan.
20. The Commissioner of Geology and Mining, Government of Tamil Nadu.
21. The Director of Mines and Geology, Government of Telangana.
22. The Director, Directorate of Geology and Mining, Government of Uttar Pradesh.
23. The Director, Geology and Mining Unit, Government of Uttarakhand.
24. The Director, Directorate of Mines and Minerals, Government of West Bengal.
25. The Director, Directorate of Industries and Commerce, Government of Ladakh.
26. The Director, Department of Mines, Minerals and Geology, Government of Sikkim.
27. The Director, Department of Industries and Commerce, Government of Tripura.
28. The Director, Directorate of Geology and Mineral Resource, Government of Mizoram.
29. The Director, Department of Trade, Commerce and Industries, Government of Manipur.
30. The Director, Department of Mines and Geology, Government of Haryana.

Copy to:

1. The Additional Director General and Chairman, TCC-NMET, Southern Region, GSI Complex, Bandlaguda, Hyderabad-500068.
2. The Director, AMD, Department of Atomic Energy, AMD Complex, Begumpet, Hyderabad-500016.
3. The Chairman-cum-Managing Director, MECL, Dr. Babasaheb Ambedkar Bhawan, Seminary Hills, Nagpur-440006.
4. The Chairman-cum-Managing Director, CMPDIL, Gondwana Place, Kanke Road, Ranchi-834031.
5. The Dy. Director General, RSAS, GSI, Vasudha Bhavan, Kumaraswamy Layout, Bengaluru-560078.
6. The Chairman-cum-Managing Director, KIOCL Ltd, Block-II, Koramangala, Sarjapura Road, Bengaluru, Karnataka-560034.
7. The Chairman-Cum-Managing Director, NMDC Ltd., Khanij Bhavan, Castle Hills, Masab Tank, Hyderabad-500028.
8. The General Manager, Telangana State Mineral Development Corporation Limited, H. No.6-2-915, HMWSSB premises, Rear Block, 3rd Floor, Khairatabad, Hyderabad.
9. The Director, Directorate of Geology & Mining, Indirawati Bhawan, Block-4, First & Second Floor Naya Raipur, Chhattisgarh- 492002.
10. The GM (Exploration), OMECL, Govt. of Odisha. Odisha Mineral Exploration Corporation Ltd. 3rd Floor, Boyan Bhawan, Unit-3, Pandit Jawaharlal Nehru Marg, Bhubaneswar- 751001.
11. The Madhya Pradesh State Mining Corporation Ltd., Paryawas Bhawan, Block 'A', IInd floor, Jail Road, Arera Hills, Bhopal, Madhya Pradesh-462011.
12. The Director (Dept. of Mines & Geology), Govt. of Telangana, DRDK Building, Tank Bund Road, Hyderabad-500022.
13. The Chief Executive Officer, Mineral Exploration Research and Innovation Trust (MERIT), Department of Mines & Geology, 6th Floor, B-Wing, Sri Anjaneya Towers, Ibrahimpatnam, District: Krishna-521456.
14. The Managing Director, Odisha Mining Corporation, OMC House, Bhubaneswar-751001.

Copy for information to:

PSO to Secretary/ PPS to AS(SL)/ PS to JS&FA, Ministry of Mines, Shastri Bhawan, New Delhi-110001.

Government of India
Ministry of Mines
National Mineral Exploration Trust [NMET]

Minutes of the 27th Executive Committee (EC) meeting of the National Mineral Exploration Trust (NMET) held on 10th January, 2023

The 27th meeting of the EC of NMET was held under the Chairmanship of Shri Vivek Bharadwaj, Secretary (Mines) on 10th January, 2023 in Khanij Kaksh, Ministry of Mines, Shastri Bhawan, New Delhi through video conference. The list of participants is at **Annexure-1**.

Shri Sanjay Lohiya, Additional Secretary, Mines welcomed all the participants in the meeting. He informed that the meeting is the first Executive Committee meeting of Secretary, Mines after assuming charge and asked all the participants to introduce themselves. The meeting proceeded with agenda wise discussion.

Shri Vivek Kumar Sharma, Director & HoD, NMET presented the agenda points for the EC meeting.

Following are the agenda points discussed and decisions taken.

1. Approval of minutes of 26th meeting of EC held on 25th August, 2022.

The minutes of the 26th meeting of EC held on 25th August, 2022 was circulated on 02nd September, 2022. No comments have been received.

Decision of EC:

EC approved the minutes of the 26th meeting of EC held on 25th August, 2022.

2. Action Taken Report (ATR) for minutes of 26th meeting of EC held on 25th August, 2022.

The ATR on minutes of the 26th meeting of EC held on 25th August, 2022 were presented in the meeting.

Shri Vivek Kumar Sharma, Director & HoD, NMET informed that necessary action have been taken on decisions of the minutes of 26th EC meeting.

Decision of EC:

EC accepted the action taken reports on minutes of 26th meeting of EC held on 25th August, 2022.

3. Nomination of representative from any four State Governments and experts with experience in exploration to the Executive Committee of NMET.

EC was informed that as per the NMET Notification G.S.R.633(E) dated 14th August, 2015 stipulates that "one representative from any four State Governments, as decided by the Central Government, not below the rank of Secretary to the State Government or equivalent on rotation basis for a term not exceeding two years at a time, with eligibility for re-nomination shall be Member (*ex-officio*) in the EC". Accordingly, the inclusion of

one representative as Member of EC from States **Andhra Pradesh, Chhattisgarh, Madhya Pradesh** and **Jharkhand** was approved by Hon'ble Minister of Mines on 27th March, 2018. The members have completed their tenure in March 2020.

Apart from *ex-officio* members, the EC shall consist five persons with experience in exploration or in research in related field at least for a period of two years, to be nominated by the Chairperson of the EC of NMET. Accordingly, five expert members for EC were nominated by the Chairperson of the EC of NMET dated 10.07.2018. The nominated EC members have completed the period of two years.

- (i) Dr. N. Pazhamalai Nathan, Dy. Director General (Retd.), GSI
- (ii) Shri Alok Sharma, General Manager (Exploration) (Retd.), CMPDIL
- (iii) Shri Pratap Singh Parihar, Director (Retd.), AMD
- (iv) Shri Naresh Nautiyal, Head & Business Development & Planning (Retd.), MECL
- (v) Prof. (Dr.) Hari Shankar Pandalai, Professor (Retd.), IIT Bombay

After completion of tenure, the Secretary, Mines and Chairperson EC, NMET has nominated one representative as Member of EC from four States and five *expert members* of the EC of NMET *w.e.f.* 1st October, 2022.

A. Representative from State as Member (*ex-officio*) EC, NMET

- (i) Madhya Pradesh
- (ii) Maharashtra
- (iii) Rajasthan
- (iv) Tamil Nadu

B. Five expert members of the EC of NMET

- (i) Shri Alok Sharma, GM (Exploration) (Retd.) CMPDIL
- (ii) Shri Naresh Nautiyal, Head (Business Development & Planning) (Retd.), MECL
- (iii) Dr. Yamuna Singh, Scientist-H, Atomic Minerals Directorate for Exploration and Research (Retd.)- New Member
- (iv) Dr. Laxman Singh Shekhawat, Dy. Director General (Retd.), Geological Survey of India - New Member
- (v) Dr. Sahendra Singh, Associate Professor, Department of Applied Geology, Indian Institute of Technology (ISM)- New Member

EC Decision:

EC noted the nominations of new Members of EC from four States and new expert members in the Committee.

4. Financial sanction for revised cost of Multi Sensor Aero-geophysical survey over block-15 of GSI project.

EC was informed that the project "Multi Sensor Aero-geophysical surveys over blocks 13 to 22 under National Airborne Geophysical Mapping Programme (NAGMP) was approved at an estimated cost of ₹243.98 Cr. (including 18% GST) in 21st EC meeting held on 19th July, 2021. The estimated cost in respect of block-15 was ₹25.12 Cr. out of

total approved cost of ₹243.98 Cr. subject to appraisal by Delegated Investment Board (DIB) and approval of DIB recommendation by competent authority.

The recommendations of Delegated Investment Board (DIB) chaired by Secretary, Mines were considered and approved by the Hon'ble Minister, Ministry of Mines on 18.08.2021.

GSI in 25th EC meeting held on 29th June, 2022 informed that the tendering process for block-15 has completed and M/s McPhar International Pvt. Ltd. in consortium with M/s Xcalibur Multiphysics Group of Companies with Xcalibur Geophysics Spain S.L. (referred as Xcalibur) is selected as lowest bidder with final cost of ₹33,41,93,637/- (including 18% GST). As the estimated cost for block-15 approved by EC was ₹25,11,04,997/- (including 18% GST) which is lower than the final bid cost of ₹33,41,93,637/- (including 18% GST), hence financial sanction for the revised cost is required for block-15.

As per the decision of 25th EC meeting, GSI submitted the detailed justifications for 33% cost escalation of L1 cost vis-à-vis approved estimated cost for Aero-geophysical survey in NAGMP block-15 tendered through GeM.

EC in its 26th EC meeting held on 25th August, 2022 discussed the proposal again and suggested to take up the matter with IFD, Mines for clarification on competent authority of Department/Administrative Ministry for approval of such projects funded by NMET. Accordingly, IFD, Mines had clarified that before approaching NMET for funds, the Central agencies/Organisations should take due approval of Competent Authority for enhancement of the cost of the project and NMET may consider the apportioning of funds once due approvals are in place.

GSI has taken approval of Competent Authority from Ministry of Mines for cost enhancement for Multi Sensor Aero-geophysical surveys [block-15] of ₹33,41,93,637/- (Rupees Thirty three crore Forty one lakh Ninety three thousand Six hundred and Thirty seven only).

EC Decision:

EC accorded the financial sanction for revised cost of Multi Sensor Aero-geophysical survey [Block-15] for ₹33,41,93,637/- (Rupees Thirty three crore Forty one lakh Ninety three thousand Six hundred and Thirty seven only) including 18% GST.

(Action: NMET/GSI)

5. Approval of comprehensive list for the procurement of machinery/ laboratory equipment/ instruments for financial assistance through NMET fund to State DGMs/DMGs.

EC was informed that NMET is providing financial assistance to State Government DGMs/DMGs for strengthening the technical infrastructure and enhancing the mineral exploration activities in the State.

Technical-cum-Cost Committee [TCC] of NMET in its 45th meetings held on 26th and 27th September, 2022 recommended a comprehensive list of instruments/ equipment/ software for providing financial assistance to State DGMs/DMGs. The list of the instruments/ equipment/ software is given below:

<p>A. Field equipment's</p> <ol style="list-style-type: none"> 1. Digital Camera 2. Brunton compass 3. Geologists Hammer 4. Handheld GPS 5. UV Lamp 6. Handheld XRF 7. Scintilometer 	<p>B. Sample processing/ preparation</p> <ol style="list-style-type: none"> 1. Rock cutting, Polishing and mounting unit 2. Pulverizer 3. Stereo zoom microscope 4. Polarizing microscope 5. Transmitted and reflected light research microscope with software attached camera
<p>C. Chemical and petrological laboratory</p> <ol style="list-style-type: none"> 1. WD-XRF 2. Fusion bead machine 3. Press pellet machine 4. AAS 5. Fire Assay 6. ICP-MS 7. Hot Plates 8. Muffle Furnace/Proximate Analyzer 9. Air Oven 10. Bomb Calorimeter 	<p>D. Software for map preparation and data analysis</p> <ol style="list-style-type: none"> 1. GIS softwares 2. Surfer 3. Corel Draw
<p>E. Drilling activities</p> <ol style="list-style-type: none"> 1. Drilling Machine upto 1000m capacity. 2. Hydrostatic truck mounted drill machine with 600m to 1000m capacity. 3. Bits, drill rods, casing, core barrel (for one year requirement for one time) 4. Pumps (pressure/mud) 5. Core splitter/core splitter hydrostatic 	<p>F. Survey</p> <ol style="list-style-type: none"> 1. DGPS 2. Total Station 3. Borehole camera 4. Resistivity-Potential Meter

It is also mention that list may be further modified as per the requirements of the State Governments.

Discussion:

Shri Alok Sharma, [Nominated EC expert member] suggested that the State Government may be asked to submit the detailed justifications for procurement of instruments, list of the instruments/ equipment/ software available in States and trained manpower to operate these instruments. He also suggested to obtain justification about the requirement of drilling rig capacity for the mineral exploration in the State.

Additional Secretary, Mines informed that the drilling machines recommended to the State Government will be reviewed by Chairman, TCC. He also opined that State may be given consumable items like Bits, drill rods, casing, core barrel etc. for one year requirement for one time as suggested by TCC.

Secretary, Mines said that the State DMGs/DGMs have to submit the proposal along with all the details of instruments/ equipment/ softwares available, manpower,

requirement, work load in the State. He also suggested that the State Governments need to submit details of mineral exploration activities being carried out by DMGs/DGMs as well as future exploration programmes envisaged for the next five years to ascertain the requirements of equipments/ instruments/ software. Besides certificates regarding optimum utilization of equipment /instrument/ software etc. should also be submitted.

EC Decision:

EC approved the list of the instruments/ equipment/ softwares for providing financial assistance to State DGMs/DMGs and also directed Chairman, TCC to review the proposal of drilling machine of 1000m capacity proposed by State Governments. EC asked Chairman, TCC to conduct review meeting for drilling machine with DGM Nagaland and DMG Sikkim and finalize the amount to be sanctioned.

(Action: NMET/All State DMGs &DGMs)

6. Approval of TCC recommended project proposal for financial assistance for procurement of machinery/ laboratory equipment/ instruments through NMET fund.

EC was informed that the project proposals received from State Governments for financial assistance for strengthening of technical infrastructure of State DGMs/DMGs is being technically and financially reviewed in TCC meeting held in every month. TCC recommend the project proposals for approval by EC which is being held in every three-four month.

It was informed that to avoid delay in approval by EC regarding the recommended project for financial assistance to the State Governments, approval may be given by Chairman and the same will be ratified in next EC meeting.

Discussion:

Shri Naresh Nautiyal, EC expert member suggested that approval of the proposal may be done by circulation within EC members and comments of the EC members should be considered. He also suggested that State may be asked to submit certificate for the minimum utilisation of the instruments procured through NMET fund.

EC Decision:

EC agreed that in case of immediate requirement, approval of the proposals for financial assistance recommended by TCC may be done through circulation.

(Action: NMET)

7. Approval of new project proposals recommended by the Technical-cum-Cost Committee (TCC) held during August, September, October, November and December, 2022.

Shri Janardan Prasad, ADG and Chairman, TCC, NMET presented the details of projects recommended for EC approval. He informed that TCC in its 44th, 45th, 46th, 47th and 48th meetings held on 25th& 26th August; 26th& 27th September; 27th& 28th October; 28th&

29th November and 22nd & 23rd December, 2022 respectively recommended 25 nos. of mineral exploration projects with estimated cost of **₹3902.14 Lakh** and 12 nos. of projects for financial assistance with estimated cost of **₹11783.65 Lakh** for EC approval.

The mineral exploration projects are of different commodities [Graphite (4), Iron Ore (2), Coal (4), Basemetal (3), Phosphorite/Glauconitic sandstone (3), Gold (1), PGE & associated minerals- Chromium, Nickel, Cobalt (2), Tin and associated minerals (1), Manganese (2), Bauxite (1) and Limestone (2)].

The financial assistance proposals recommended by TCC for the procurement of instruments/ equipment/ softwares are submitted by:

- Geological Survey of India [GSI] (1 no.)
- Indian Bureau of Mines [IBM] (2 Nos.)
- Department of Mines and Geology Karnataka (1 no.)
- Directorate of Geology and Mining, Maharashtra (1 no.)
- Directorate of Geology and Mining, Assam (2 Nos.)
- Directorate for Trade, Commerce and Industries, Manipur (1 no.)
- Directorate of Geology and Mining, Mizoram (1 no.)
- Directorate of Geology and Mining, Nagaland (1 no.)
- Department of Mines and Geology, Sikkim (1 no.)
- Department of Mines and Geology, Rajasthan (1 no.)

The detailed discussion and EC decision for project proposals recommended for approval of EC are as follows:

7.1 Preliminary exploration (G3) for Graphite in Lamer-Panga block A (13.99 sq. km), District: Kalahandi, Odisha.[Estimated cost ₹232.66 Lakh and Scheduled Timeline- 16 months] [Implementing agency- OMECL]

Discussion:

Shri Janardan Prasad, ADG GSI & Chairman, TCC, NMET discussed the technical and financial aspect of project. He informed that geological mapping (1:4,000 scale), 10 Line km of Self Potential (SP), trenching 200 cu. m, drilling 1000m (conditional), Bed rock sampling will be carried out. It was also informed that outcome of the geological and geophysical survey will be reviewed after eight months thereafter the decision on drilling will be taken in case of encouraging results.

EC Decision:

EC approved the project with estimated cost of **₹232.66 Lakh** and timeline of **16 months**.

(Action: NMET)

7.2 Preliminary exploration (G3) for Iron Ore in Thakurani block (1.399 sq. km) in District: Keonjhar, Odisha. [Estimated cost ₹223.08 Lakh and Scheduled Timeline- 10 months] [Implementing agency- OMECL]

Discussion:

Shri Janardan Prasad, ADG GSI & Chairman, TCC, NMET discussed the technical and financial aspect of project. He informed that geological mapping (1:2,000 Scale) surface sampling, chemical analysis and drilling (conditional). On the basis of review of

geological mapping and chemical analysis, further drilling (1000m) in 16 boreholes may be carried out. The project will be reviewed after five months.

Secretary, Mines enquired about the estimated cost of the project for graphite and Iron Ore project above and also procedure followed for calculation of the estimated cost.

Chairman, TCC informed that projects are being technical evaluated in TCC meeting and on the basis of the work components recommended for mineral exploration, the estimated costs for different work components are calculated by financial members of TCC on basis of the NMET Scheduled of Charges (SoC).

Additional Secretary, Mines suggested to discussed the matter with Joint Secretary and Financial Advisor (JS&FA), Coal & Mines and appraise the details of the estimated cost of the projects.

EC Decision:

EC approved the project with estimated cost of **₹223.08 Lakh** and timeline of **10 months**.

(Action: NMET)

7.3 Preliminary exploration (G3) for graphite in Lamer Panga Graphite Block-B (12.994 sq. km) Kalahandi district Odisha. [Estimated cost ₹216.61 Lakh and Scheduled Timeline- 14 months] [Implementing agency- OMECL]

Discussion:

Shri Janardan Prasad, ADG GSI & Chairman, TCC, NMET discussed the technical and financial aspect of the project. He informed that 900m drilling in 15 boreholes (6 boreholes in southern and 9 boreholes in northern side of the block) with 30m vertical depth will be carried out. It was also suggested to take up Self Potential (SP: 30 Line km) over potential zone, trenching (100 cu. m). The outcome of chemical analysis [BRS & trench sample] and SP survey will be reviewed after six months.

EC Decision:

EC approved the project with estimated cost of **₹216.61 Lakh** and timeline of **14 months**.

(Action: NMET)

7.4 Preliminary exploration (G3) for coal in North of Urtan North block (10.28 sq. km), Sohagpur coalfield, District: Anuppur, Madhya Pradesh.[Estimated cost ₹345.22 Lakh and Scheduled Timeline- 12 months] [Implementing agency- CMPDI]

Discussion:

Shri Janardan Prasad, ADG GSI & Chairman, TCC, NMET discussed the technical and financial aspect of project. He informed that 3,000m drilling in 5 boreholes at 1600mx1600m grid pattern will be carried out. All boreholes may be drilled upto Seam-I depth. The outcome of exploration work will be reviewed after completion of three boreholes or after eight months.

Shri Alok Sharma (EC expert member) informed that this is of coking coal with average coal seam thickness of 20m.

EC Decision:

EC approved the project with estimated cost of **₹345.22 Lakh** and timeline of **12 months**.

(Action: NMET)

7.5 Preliminary exploration (G3) for coal in North of Saoner (15.16 sq. km), Kamptee coalfield, District: Nagpur, Maharashtra.[Estimated cost ₹265.02 Lakh and Scheduled Timeline- 14 months] [Implementing agency- CMPDI]

Discussion:

Shri Janardan Prasad, ADG GSI & Chairman, TCC, NMET discussed the technical and financial aspect of project. He informed that 2250m drilling in seven boreholes on a 1600mx1600m grid pattern up to the depth of lowermost coal seam will be drilled. The outcome of project will be reviewed after completion of three boreholes or after seven months.

Dr. L. S. Shekhawat, EC expert member suggested for representative borehole section may be shown so that thickness of coal seam can be visualized.

EC Decision:

EC approved the project with estimated cost of **₹265.02 Lakh** and timeline of **14 months**.

(Action: NMET)

7.6 Reconnaissance survey (G4) for coal in West of Ghugus and Bellora block (39.15 sq. km), Wardha Valley Coalfield, District: Yavatmal, Maharashtra.[Estimated cost ₹215.77 Lakh and Scheduled Timeline- 12 months] [Implementing agency- CMPDI]

Discussion:

Shri Janardan Prasad, ADG GSI & Chairman, TCC, NMET discussed the technical and financial aspect of project. He informed that 1800m drilling in three boreholes (P1, P2 and P3) upto seam-I depth will be drilled. The progress of exploration work will be reviewed after six month or completion of borehole P3 and its analyses.

EC Decision:

EC approved the project with estimated cost of **₹215.77 Lakh** and timeline of **12 months**.

(Action: NMET)

7.7 Preliminary exploration (G3) for coal in Brahmani North block (21.73 sq. km), Talcher Coalfield, District: Dhenkanal, Odisha.[Estimated cost ₹254.50 Lakh and Scheduled Timeline- 12 months] [Implementing agency- CMPDI]

Discussion:

Shri Janardan Prasad, ADG GSI & Chairman, TCC, NMET discussed the technical and financial aspect of project. He informed that exploration will be carried out by deploying drilling in five boreholes with 2,200m drilling [P1-550m, P2-350m, P3-200m, P4-350m, P5-200m]. The progress of exploration work will be reviewed after six month or completion of 3 boreholes.

EC Decision:

EC approved the project with estimated cost of **₹254.50 Lakh** and timeline of **12 months**.

(Action: NMET)

7.8 Reconnaissance survey (G4) for Zinc and associated minerals in Jamua area (120 sq. km), District: Giridih, Jharkhand.[Estimated cost ₹47.40 Lakh and Scheduled Timeline- 12 months] [Implementing agency- CMPDI]

Discussion:

Shri Janardan Prasad, ADG GSI & Chairman, TCC, NMET discussed the technical and financial aspect of project. He informed that geological mapping, BRS/Soil/ Stream sample collection and pitting/ trenching (50 cu. m) will be carried out for mineral exploration in the block. The outcome of the project will be reviewed after six months.

EC Decision:

EC approved the project with estimated cost of **₹47.40 Lakh** and timeline of **12 months**.

(Action: NMET)

7.9 Preliminary exploration (G3) for bauxite in Dhuluapat block (4.0 sq. km), District: Lohardaga and Gumla, Jharkhand.[Estimated cost ₹82.21 Lakh and Scheduled Timeline- 12 months] [Implementing agency- CMPDI]

Discussion:

Shri Janardan Prasad, ADG GSI & Chairman, TCC, NMET discussed the technical and financial aspect of project. He informed that bauxite is varying in thickness from 0.50m to 9.0m. The bands are persistent over a length of 500m but often they peter out abruptly within a short distance. The exploration activities will be carried out by deploying 15 boreholes with 300m drilling meterage and detail mapping (1: 4,000 scale). One borehole up to granite basement whereas other boreholes may be drilled up to lithomarge. The outcome of the project will be reviewed after six months.

EC Decision:

EC approved the project with estimated cost of **₹82.21 Lakh** and timeline of **12 months**.

(Action: NMET)

7.10 Preliminary exploration (G3) for Basemetal (Cu, Pb, Zn) in Chintakuntala block (5.00 sq. km), District: Nalgonda, Telangana.[Estimated cost ₹232.19 Lakh and Scheduled Timeline- 14 months] [Implementing agency- MECL]

Discussion:

Shri Janardan Prasad, ADG GSI & Chairman, TCC, NMET discussed the technical and financial aspect of project. He informed that geochemical, geological (1:2,000 scale) and geophysical (SP and IP only, 11 Line km) survey may be taken up over the proposed block and potential zones may be demarcated. After review of the exploration work, 800m drilling will be carried out. Five boreholes with 60m vertical depth for first level may be taken up thereafter in case of encouraging results the second level drilling with 100m vertical depth may be taken up.

Shri B. Saravanan, Director, AMD suggested to carry out REE and Uranium-Thorium (U-Th) analysis also.

It was informed that composite samples have been recommended for ICP-MS (34 Elements) analysis which include REE and U-Th analysis too.

EC Decision:

EC approved the project with estimated cost of **₹232.19 Lakh** and timeline of **14 months**.

(Action: NMET)

7.11 Preliminary exploration (G3) for phosphorite in Kachaldara East block (5.60 sq. km), District: Jhabua, Madhya Pradesh.[Estimated cost ₹180.77 Lakh and Scheduled Timeline- 12 months] [Implementing agency- MECL]

Discussion:

Shri Janardan Prasad, ADG GSI & Chairman, TCC, NMET discussed the technical and financial aspect of project. He informed that geological mapping on 1:5000 scale, BRS and 500m drilling [10 boreholes with average 50m depth] over the mineralised zone at 400mx400m grid interval will be carried out. The outcome of exploration will be reviewed after six months.

EC Decision:

EC approved the project with estimated cost of **₹180.77 Lakh** and timeline of **12 months**.

(Action: NMET)

7.12 Reconnaissance Survey (G4) for glauconitic sandstone in Pindra SW extension block (40.0 sq. km), District: Satna, Madhya Pradesh.[Estimated cost ₹117.43 Lakh and Scheduled Timeline- 12 months] [Implementing agency- MECL]

Discussion:

Shri Janardan Prasad, ADG GSI & Chairman, TCC, NMET discussed the technical and financial aspect of project. He informed that geological mapping, BRS and 500m drilling

[10 boreholes] will be carried out. The outcome of exploration will be reviewed after six months

EC Decision:

EC approved the project with estimated cost of **₹117.43 Lakh** and timeline of **12 months**.

(Action: NMET)

7.13 Reconnaissance survey (G4) for PGE, Chromium, Nickel, Cobalt in Chandiposh block (111.00 sq. km) District: Sundargarh, Odisha.[Estimated cost ₹89.90 Lakh and Scheduled Timeline- 12 months] [Implementing agency- MECL]

Discussion:

Shri Janardan Prasad, ADG GSI & Chairman, TCC, NMET discussed the technical and financial aspect of project. He informed that geological mapping (1:12,500 scale), trenching (50 cu.m), magnetic survey (50m station interval and 500m space interval) for 600 station points will be carried out over the expected ultramafic body. The review of the work progress will be done after 8 months.

Dr. L. S. Shekhawat, EC expert member suggested to target the host rock for PGE mineralisation and also High Mg rich area work by GSI. It was suggested that magnetic survey will help to locate ultramafic rocks.

EC Decision:

EC approved the project with estimated cost of **₹89.90 Lakh** and timeline of **12 months**.

(Action: NMET)

7.14 Reconnaissance survey (G4) for PGE, Nickel, Chromite & associated basemetal mineralization in Yentem-Ningthi area (73.00 sq. km), District: Kamjong (Ukhrul), Manipur.[Estimated cost ₹127.04 Lakh and Scheduled Timeline- 12 months] [Implementing agency- MECL]

Discussion:

Shri Janardan Prasad, ADG GSI & Chairman, TCC, NMET discussed the technical and financial aspect of project. He informed that remotesensing, geological mapping (1:12,500 scale), trenching (50 cu.m) and sample collection will be carried. The outcome of the project will be reviewed after six months.

EC Decision:

EC approved the project with estimated cost of **₹127.04 Lakh** and timeline of **12 months**.

(Action: NMET)

7.15 Preliminary exploration (G3) [Phase-I] for gold in Kudrikonda area (2.74 sq. km) area for geophysical survey in Shimoga schist belt, District: Devanagere, Karnataka.[Estimated cost ₹116.99 Lakh and Scheduled Timeline- 6 months] [Implementing agency- MECL]

Discussion:

Shri Janardan Prasad, ADG GSI & Chairman, TCC, NMET discussed the technical and financial aspect of project. He informed that SP survey with 300 nos. of soundings points in north-western part of the block area (2.74 sq. km) will be carried out. In case of encouraging results in north-western part the entire block may be considered for G3 stage exploration with drilling.

Shri Alok Sharma,[Nominated EC expert member] informed that the low altitude EM data is available for the area and may be considered for demarcation of potential zones. He also suggested to incorporate all the geophysical data available before start of the further geophysical survey in the area.

Chairman, TCC also said that GSI has proposed heliborne survey and Time Domain Electro Magnetic survey [TDEM] work. The project proposal may be put in abeyance till the heliborne survey work completed.

EC Decision:

EC suggested to put the project proposal in abeyance till the heliborne survey work is completed.

(Action: NMET/GSI/MECL)

7.16 Reconnaissance survey (G4) for Copper, Lead, Zinc and Gold in Tarichar Khurd block (101.00 sq. km), District: Niwari, Madhya Pradesh.[Estimated cost ₹49.35 Lakh and Scheduled Timeline- 12 months] [Implementing agency- MECL]

Discussion:

Shri Janardan Prasad, ADG GSI & Chairman, TCC, NMET discussed the technical and financial aspect of project. He informed that geological mapping, sampling, pitting/trenching and petrographic study will be carried out.

EC Decision:

EC approved the project with estimated cost of **₹49.35 Lakh** and timeline of **12 months**.

(Action: NMET)

7.17 Reconnaissance survey (G4) for phosphorite in Ram Ka Munna area (40 sq. km) District: Banswara, Rajasthan.[Estimated cost ₹49.23 Lakh and Scheduled Timeline- 12 months] [Implementing agency- MECL]

Discussion:

Shri Janardan Prasad, ADG GSI & Chairman, TCC, NMET discussed the technical and financial aspect of project. He informed that geological mapping (1:12,500 scale) and geochemical sampling will be carried out. The project will be reviewed after five months.

EC Decision:

EC approved the project with estimated cost of **₹49.23 Lakh** and timeline of **12 months**.

(Action: NMET)

7.18 Reconnaissance Survey (G4) for tin and associated minerals in Pendra block (110.362 sq. km), District: Gaurela-Pendra-Marwahi [Bilaspur], Chhattisgarh.[Estimated cost ₹119.79 Lakh and Scheduled Timeline- 12 months] [Implementing agency- MECL]

Discussion:

Shri Janardan Prasad, ADG GSI & Chairman, TCC, NMET discussed the technical and financial aspect of project. He informed that geological mapping, geochemical sample collection (200 nos.), pitting/ trenching, drilling (auger drilling), petrological / mineralogical studies will be carried out. The progress of work along with analytical results of surface samples will be reviewed after six months.

EC Decision:

EC approved the project with estimated cost of **₹119.79 Lakh** and timeline of **12 months**.

(Action: NMET)

7.19 Reconnaissance survey (G4) for manganese ore in Taljuri-Gunchadihi block (80.0 sq. km), District: Balangir, Odisha.[Estimated cost ₹166.60 Lakh and Scheduled Timeline- 14 months] [Implementing agency- MECL]

Discussion:

Shri Janardan Prasad, ADG GSI & Chairman, TCC, NMET discussed the technical and financial aspect of project. He informed that geophysical survey(SP and magnetic- 20 Line km), geological mapping, 500m drilling in eight boreholes with 60m average depth, and trenching (100 cu. m) will be carried out. The outcome of project will be reviewed after six months.

EC Decision:

EC approved the project with estimated cost of **₹166.60 Lakh** and timeline of **14 months**.

(Action: NMET)

7.20 Reconnaissance survey (G4) for manganese and associated minerals in Katori-Jhiriya block (140.22 sq. km), District: Balaghat, Madhya Pradesh.[Estimated cost ₹167.82 Lakh and Scheduled Timeline- 14 months] [Implementing agency- MECL]

Discussion:

Shri Janardan Prasad, ADG GSI & Chairman, TCC, NMET discussed the technical and financial aspect of project. He informed that geological mapping (1:12,500 scale), magnetic survey (450 station), trenching (100 cu. m) and 500m drilling (8 boreholes) will be carried out. The progress of work will be reviewed after six months.

EC Decision:

EC approved the project with estimated cost of ₹167.82 Lakh and timeline of 14 months.

(Action: NMET)

7.21 Preliminary exploration (G3) for limestone in Malkhed block- 1 and 2 (18.01 sq. km), Bhima Basin, District: Gulbarga (Kalaburagi), Karnataka.[Estimated cost ₹147.77 Lakh and Scheduled Timeline- 10 months] [Implementing agency- MECL]

Discussion:

Shri Janardan Prasad, ADG GSI & Chairman, TCC, NMET discussed the technical and financial aspect of project. He informed that two blocks [Malkhed-1 and Malkhed-2 block] have been club and exploration will be carried by deploying 600m drilling in 10 boreholes with 50 m borehole depth [5 boreholes in each block]. One borehole may be drilled up to basement. Two separate geological reports [Malkhed-1 and Malkhed-2 block] for auctioning purpose by the State Government will be submitted.

EC Decision:

EC approved the project with estimated cost of ₹147.77 Lakh and timeline of 10 months.

(Action: NMET)

7.22 Preliminary exploration (G3) for limestone, bauxite and fire clay in Piparhat-Kubri block (2.51 sq. km), District: Satna, Madhya Pradesh.[Estimated cost ₹81.10 Lakh and Scheduled Timeline- 9 months] [Implementing agency- MECL]

Discussion:

Shri Janardan Prasad, ADG GSI & Chairman, TCC, NMET discussed the technical and financial aspect of project. He informed that 210m drilling in five boreholes with average drilling meterage of 35-40m and detailed geological mapping on 1:4,000 scale will be carried out. The proposed exploration will locate and quantify the different grade of limestone based on the requirement for the different industries.

EC Decision:

EC approved the project with estimated cost of **₹81.10 Lakh** and timeline of **9 months**.

(Action: NMET)

7.23 Preliminary exploration (G3) of graphite occurrence around Bandhabhuin area (1.00 sq. km), District: Dhenkanal, Odisha. [Estimated cost ₹166.17 Lakh and Scheduled Timeline- 10 months] [Implementing agency- DMG, Odisha]

Discussion:

Shri Janardan Prasad, ADG GSI & Chairman, TCC, NMET discussed the technical and financial aspect of project. He informed that 700m drilling in 10 boreholes will be carried out in both first and second level of drilling [first level (30m vertical depth) and second level (60m vertical depth)]. The second level drilling will be taken up only in case of encouraging results of first level drilling. The outcome of project will be reviewed after completion of first level drilling in six months.

EC Decision:

EC approved the project with estimated cost of **₹166.17 Lakh** and timeline of **10 months**.

(Action: NMET)

7.24 Preliminary exploration (G3) for graphite around Naringapanga block (S & W) (0.143 sq. km) block, District: Rayagada, Odisha. [Estimated cost ₹120.93 Lakh and Scheduled Timeline- 9 months] [Implementing agency- DMG, Odisha]

Discussion:

Shri Janardan Prasad, ADG GSI & Chairman, TCC, NMET discussed the technical and financial aspect of project. He informed that geophysical survey [Self Potential (12 Line km)] and after review of the SP survey, 400m drilling in six boreholes with 30m vertical depth for five boreholes and one borehole up to 60m will be taken. The outcome of the project will be reviewed after completion of SP survey and pitting after four months.

EC Decision:

EC approved the project with estimated cost of **₹120.93 Lakh** and timeline of **9 months**.

(Action: NMET)

7.25 Research project on genesis of BIF-hosted high grade Iron ores in Chhattisgarh State with special reference to geological controls on mode of occurrence of Ore Beneath ore and implications on future game changing exploration in India.[Estimated cost ₹86.59 Lakh and Scheduled Timeline- 24 months] [Implementing agency- NMDC]

Discussion:

Shri Janardan Prasad, ADG GSI & Chairman, TCC, NMET discussed the technical and financial aspect of project. He informed that proposal is aimed to study genesis of Banded Iron Formation [BIF] hosted high-grade iron ores of the Bailadila deposits with special emphasis to geological control on mode of occurrence of ore-body and to establish concealed iron ore deposits. This is a research based project and EC may take a view on the funding of this specialized research project.

Dr. L. S. Shekhawat [EC expert member] suggested that the project proposal may be more appropriate and helpful for defining concealed iron ore deposits on basis of fault line other than Sulphur/Carbon Isotope analysis.

Dr.Sahendra Singh, [EC expert member] opined that the research project should be taken in collaboration with IITs/NGRI or research institutes so that new technologies and high specific scientific instruments can be utilised for the deep seated mineral exploration in the country. He also informed that as per the technical discussion with NMDC official, there is no clarity about the methodology for the executing the work.

Shri Naresh Nautiyal [EC expert member] informed that the project proposal was discussed in 23rd EC meeting and suggested to take up the with its own fund.

Additional Secretary, Mines informed that the proposal was considered after inclusion of two more deposits viz.,Hahaladdi and Dalli Rajhara Iron ore blocks of Kanker and Baloddistricts of Chhattisgarh along with Bailadilalron ore deposit for borehole core samples analysis.

Secretary, Mines suggested that project proposal may be taken up by NMDC with its own funds.

EC Decision:

EC did not approve the project proposal and suggested to take up the research work with its own funds.

(Action: NMET/NMDC)

Procurement of machinery/ laboratory equipment/ instruments etc. aimed at enhancing the exploration activities and capacity enhancement in state Government [DMGs/DGMs] and other Central Organization [GSI/IBM].

7.26 Procurement of geophysical instruments for capacity enhancement in ground gravity-magnetic mapping of GSI. [Geological Survey of India]**Discussion:**

Shri Janardan Prasad, ADG GSI & Chairman, TCC, NMET discussed the technical and financial aspect of project. He informed that to fast-tracking the baseline data generation through gravity-magnetic survey for demarcation of promising areas, GSI endeavors to complete NGPM work in priority area of about 3.50 lakh sq. km under 500 toposheets in first phase through outsourcing. It has been envisaged to cover additional 1.15 lakh sq. km priority area by increasing its in-house capacity, which necessitates deployment of 35 additional instruments for NGPM survey. To achieve the additional target of 1.15 lakh sq. km, GSI require 24 additional set of gravimeter, magnetometer

and DGPS to augment its existing capacity to complete the survey in priority areas with estimated cost of ₹7020.0 Lakh.

EC Decision:

EC approved the project with estimated cost of **₹7020.0 Lakh** and timeline of **12 months**.

(Action: NMET)

7.27 Procurement of laboratory scale mineral processing equipments, characterization and analysis instruments for modern mineral processing laboratory, IBM, Nagpur. [Indian Bureau of Mines]

EC was informed that following equipment's have been recommended by the TCC with estimated cost submitted by IBM or restricted to the cost provided by GSI.

A. Laboratory Scale Mineral Processing Equipment's

Name of Equipment	Total Estimated cost (in Lakh)
(i) Wet High Intensity Magnetic Separator (WHIMS)	140
(ii) Air Jig for Dry Separation	100
(iii) Flotation Column	50
(iv) Air Pulsated Batac Jig (for wet separation)	50
(v) Leach Column	30
(vi) Electrostatic Separator	60
(vii) High Intensity Disc Magnetic Separator (Dry)	30
(viii) Electrophoretic Cell for Zeta Potential	50
(ix) Slurry Rheometer	30
(x) BET Surface Area Analyzer [Rs. 40.0 Lakh]	40
(xi) LAARMANN Flotation Cell with External Air Supply (for Roughing and Cleaning)	40

B. Mineralogy- Characterization Instrument

Name of Equipment	Total Estimated cost (in Lakh)
(i) Field Emission Scanning Electron Microscope with Energy Dispersive Spectrometer (FE-SEM with EDS) along with Carbon Coating Machine and ancillary units	300
(ii) Digital X-Ray Diffractometer with Solid State Detector, Search Match Software, PDF-4 Mineral Data and ancillary units	200

C. Chemical Laboratory- Analysis Instruments

Name of Equipment	Total Estimated cost (in Lakh)
(i) Fire Assay Assembly along with accessories	25
(ii) Proximate Analyzer along with accessories	35

EC Decision:

EC approved the project with estimated cost of ₹1180.0 Lakh and timeline of 12 months.

(Action: NMET)

7.28 Procurement of laboratory scale mineral processing equipment's, characterization and analysis instruments for Regional Mineral Processing Laboratory, Bengaluru. [Indian Bureau of Mines]

EC was informed that following equipment's have been recommended by the TCC with estimated cost submitted by IBM or restricted to the cost provided by GSI.

A. Mineral processing equipments

Name of Equipment	Total Estimated cost (in Lakh)
(i) High Intensity Magnetic Separator Induced Roll "Lift Type" Laboratory Model	35
(ii) High Temperature Furnace 1600° C with gas inlet provision	30
(iii) Hindered Bed Separator with feed pump and necessary accessories	40
(iv) Electrostatic Plate Separator	35
(v) Spiral HG and MG configuration (each 1 No.)	30
(vi) Hydro-cyclone test rig assembly to test with different types of hydrocyclones with product and tailing handling pumps with different cyclone arrangements	95
(vii) Leaching circuit with autoclave for pressure leaching and solvent extraction unit	20
(viii) Column Flotation Cells	40
(ix) Flotation Cells - Rougher 3 cells (0.5 m ³ each) and Scavenger 1 cell (0.5 m ³) circuit with feed pumps, 2 conditioning tanks with agitator, along with flotation product and tailing pumps, reagent dosing system and pilot scale filtration system for concentrator and tails (For Replacement of existing facilities)	175

B. Mineralogy instrument & equipments

Name of Equipment	Total Estimated cost (in Lakh)
(i) Thermogravimetry and Differential Thermal Analyser (TG-DTA)	90
(ii) Rock Cutting-cum-Automatic Thin Section Preparation equipment along with accessories and ancillary units (For Replacement of existing facilities)	45

C. **Chemical analysis instruments**

Name of Equipment	Total Estimated cost (in Lakh)
(i) Inductively Coupled Plasma Optical Emission Spectrophotometer (ICP-OES) with microwave digesting system[90
(ii) Carbon and Sulphur Analyzer	35

EC Decision:

EC approved the project with estimated cost of **₹760.0 Lakh** and timeline of **12 months**.

(Action: NMET)

7.29 Procurement of machinery/ laboratory equipment/instruments etc. aimed at enhancing the exploration activities. [Department of Mines and Geology, Karnataka]

EC was informed that following equipment's have been recommended by the TCC with estimated cost submitted by DMG, Karnataka or restricted to the cost provided by GSI.

Name of Equipment	Total Estimated cost (in Lakh)
(i) ICP-MS (1 no.)	170
(ii) WD-XRF (including water chiller, standards, gas cylinders & fitting, software and other accessories) (1 no.)	215
(iii) Rock cutting polishing and mounting unit (1 no.)	32

EC Decision:

EC approved the project with estimated cost of **₹417.0 Lakh** and timeline of **12 months**.

(Action: NMET)

7.30 Procurement of machinery/ laboratory equipment/instruments etc. aimed at enhancing the exploration activities. [Directorate of Geology and Mining, Maharashtra]

EC was informed that following equipment's have been recommended by the TCC with estimated cost submitted by DGM, Maharashtra or restricted to the cost provided by GSI.

A. **Geological and sample processing items/instruments-**

Name of Equipment	Total Estimated cost (in Lakh)
(i) Rock cutting machines floor mounted (1 no.)	1.8
(ii) Section grinding /polishing machine-double disc (1 no.)	1.8
(iii) Section mounting Press-spring type (1 no.)	0.165
(iv) Core cutting machine (1 no.)	1.7

(v) Pol Trinocular Research Microscope with imaging system and Pelcon automatic point counter (1 no.)	25.2
(vi) XMET8000 Expert Geo handheld XRF Analyzer (1 no.)	30

B. Chemical laboratory instruments-

Name of Equipment	Total Estimated cost (in Lakh)
(i) ICP-MS (1 no.)	170
(ii) Crusher (1 no.)	10
(iii) Vibratory cup mill (1 no.)	10
(iv) Pulveriser (1 no.)	10

C. Drilling activities instruments/items-

Name of Equipment	Total Estimated cost (in Lakh)
(i) Drilling rig Truck Mounted (600m capacity) (1 no.)	80
(ii) Drilling rig Tractor mounted (1 no.)	50
(iii) Reciprocating pump set (trolley mounted) (1 no.)	10
(iv) Centrifugal pumping set (Multi stage 2 cylinder) (2 nos.)	1.8
(v) NQ drill rod 3 m long (225 nos.)	33.75
(vi) 6" casing plug to NW box (20 nos.)	2
(vii) NQ core barrel 3m long (10 nos)	3.5
(viii) NX Casing Diamond bit (30 nos.)	0.9

EC Decision:

EC approved the project with estimated cost of **₹442.615 Lakh** and timeline of **12 months**.

(Action: NMET)

7.31 Procurement of machinery/ laboratory equipment/instruments etc. aimed at enhancing the exploration activities. [Directorate of Geology and Mining, Assam]

EC was informed that following equipment's have been recommended by the TCC with estimated cost submitted by DGM, Assam or restricted to the cost provided by GSI.

A. List of the equipment's recommend in 47th TCC meeting held in November, 2022

Name of Equipment	Total Estimated cost (in Lakh)
(i) DSLR Camera with lens (3 nos.)	1.5
(ii) Digital toposheets (6 nos.)	5
(iii) GIS software (1 no.)	13
(iv) Magnetic Susceptibility meter with analysis	3.5

software (1 no.)	
(v) Handheld XRF (2 nos.)	60
(vi) Portable Core Drilling Machine (Bagpack) (3 nos)	8
(vii) DGPS set (1 no.) Rs. 16.0 Lakh	16

B. List of the equipment's recommend in 48th TCC meeting held in December, 2022

S. No.	Item	Quantity	Estimated cost of Per unit (Rs.)	Total Estimated cost (Rs.)
1	Brunton compass	6	10,000	60,000
2	Handheld GPS	10	60,000	6,00,000
3	Handheld XRF	1	13,00,000	13,00,000
4	Thin Section Cutting and Grinding Machine	1	5,00,000	5,00,000
5	Reflected light research microscope with software attached camera	1	12,00,000	12,00,000
6	Pulverizer	1	20,00,000	20,00,000
7	WD XRF	1	2,20,00,000	2,20,00,000
8	Fusion bead machine	1	20,00,000	20,00,000
9	Press pellet machine	1	3,90,000	3,90,000
10	Hot Plates (with stirrer)	1	10,000	10,000
11	Microwave Desiccation System	1	15,00,000	15,00,000
12	Bomb Calorimeter	1	2,00,000	2,00,000
13	GIS software	1	25,00,000	25,00,000
14	Drilling bits			
	NX Casing Bit	3	3,850	11,550
	NX Casing Shoe Bit	5	3,750	18,750
	BX Casing Bit	3	3,100	9,300
	BX Casing shoe Bit	5	3,000	15,000
	AX Casing Bit	3	2,850	8,550
	AX Casing Shoe Bit	5	2,700	13,500
	BX Diamond Core Bit	20	2,850	57,000
	BX Reamer Shell (Single Tube)	5	1,800	9,000
	BX Reamer Shell (Double Tube)	3	1,800	5,400
	NX Diamond Core Bit	10	3,500	35,000
	NX Reamer Shell (Single Tube)	5	3,450	17,250
	NX Reamer Shell (Double Tube)	5	3,400	17,000
	AX Diamond Core Bit	20	2,600	52,000
	AX Reamer Shell (Single Tube)	5	1,600	8,000
	AX Reamer Shell (Double Tube)	5	1,650	8,250
15	Drill Rod			
	BW Drill Rod with Coupling R/H 3.00Mtr Long	100	4,500	4,50,000

	AW Drill Rod with Coupling R/H 3.00Mtr Long	100	3,350	3,35,000
16	Casing			
	HX M.S. Flush Coupled Casing with coupling 3.00Mtr Long and Screw flush but joins with square from of thread parallel screwing thread protection should be provided in both hands	5	7,000	35,000
	HX Casing 5 Feet Long	3	3,850	11,550
	HX Casing 3 Feet Long	3	2,650	7,950
	HX Casing 2 Feet Long	3	2,250	6,750
	HX Casing 1 Feet Long	3	1,850	5,550
	NX M.S. Flush Coupled Casing with coupling 3.00Mtr Long and Screw flush but joins with square from of thread parallel screwing thread protection should be provided in both hands	50	4,800	2,40,000
	NX Casing 5 Feet Long	3	2,800	8,400
	NX Casing 3 Feet Long	3	2,250	6,750
	NX Casing 2 Feet Long	3	1,650	4,950
	NX Casing 1 Feet Long	3	1,400	4,200
	BX M.S. Flush Coupled Casing with coupling 3.00Mtr Long and Screw flush but joins with square from of thread parallel screwing thread protection should be provided in both hands	50	4,250	2,12,500
	BX Casing 5 Feet Long	3	2,450	7,350
	BX Casing 3 Feet Long	3	1,850	5,550
	BX Casing 2 Feet Long	3	1,500	4,500
	BX Casing 1 Feet Long	3	1,250	3,750
	AX M.S. Flush Coupled Casing with coupling 3.00Mtr Long and Screw flush but joins with square from of thread parallel screwing thread protection should be provided in both hands	100	3,850	3,85,000
	AX Casing 5 Feet Long	3	2,100	6,300
	AX Casing 3 Feet Long	3	1,600	4,800
	AX Casing 2 Feet Long	3	1,200	3,600
	AX Casing 1 Feet Long	3	1,050	3,150
17	Core Barrel			

	NX Core Barrel 3.00Mtr Long (single Tube)	2	6,500	13,000
	BX Core Barrel 3.00Mtr Long (single Tube)	2	5,000	10,000
	BX Core Barrel 3.00Mtr Long (Double Tube)	2	8,500	17,000
	AX Core Barrel 3.00Mtr Long (single Tube)	2	3,250	6,500
	AX Core Barrel 3.00Mtr Long (Double Tube)	2	6,500	13,000
18	Core Lifter			
	NX Core Lifter (Single Tube)	5	300	1,500
	NX Core Lifter (Double Tube)	5	300	1,500
	BX Core Lifter (Single Tube)	5	250	1,250
	BX Core Lifter (Double Tube)	5	250	1,250
	AX Core Lifter (Single Tube)	5	180	900
	AX Core Lifter (Double Tube)	5	180	900
19	Accessories of NQ Series			
	NQ drill rod 3.00 m			35,00,000
	NQ wireline core barrel 3.00 m			
	NQ core bit impregnated			
	NQ core bit surface set			
	NQ over shot			
	NQ reamer shell			
	NQ core case			
	NQ core lifter			
20	Total Station	1	5,00,000	5,00,000
				4,03,64,950

EC Decision:

EC approved the project with estimated cost of ₹510.65 Lakh and timeline of 12 months.

(Action: NMET)

7.32 Procurement of machinery/ laboratory equipment/instruments etc. aimed at enhancing the exploration activities. [Directorate for Trade, Commerce and Industries, Manipur]

EC was informed that following equipment's have been recommended by the TCC with estimated cost submitted by DTCL, Manipur or restricted to the cost provided by GSI.

S. No.	Item	Quantity	Estimated cost Per unit (Rs.)	Total estimated cost (Rs.)
1	Digital Camera	3	60,000	1,80,000

2	Brunton compass	3	10,000	30,000
3	Geologists Hammer	3	10,000	30,000
4	Handheld GPS	3	50,000	1,50,000
5	Handheld XRF	1	9,50,000	9,50,000
6	Scintilometer	1	6,00,000	6,00,000
7	Portable Water Analysis Kit	3	15,000	45,000
8	Pulverizer	1	6,00,000	6,00,000
9	Research Polarising Microscope with software attached camera for Transmitted and Reflected light with accessories	1	12,00,000	12,00,000
10	WD-XRF	1	40,00,000	40,00,000
11	Fusion bead machine	1	20,00,000	20,00,000
12	Press pellet machine	1	3,90,000	3,90,000
13	Hot Plates/Fume Hood	1	10,000	10,000
14	GIS softwares	1	13,00,000	13,00,000
15	Drilling machine up to 600 m capacity (Skid mounted) with all accessories (core barrels, casing, drill rods, bits, pulley wire rope etc)	1	70,00,000	70,00,000
16	High Pressure water Pump	1	15,00,000	15,00,000
17	Core Splitter/Core splitter hydrostatic	1	2,00,000	2,00,000
18	DGPS (1 set)	1	16,00,000	16,00,000
19	Total Station	1	3,00,000	3,00,000
20	Borehole Camera	1	50,000	50,000
				2,21,35,000

EC Decision:

EC approved the project with estimated cost of **₹221.35 Lakh** and timeline of **12 months**.

(Action: NMET)

7.33 Procurement of machinery/ laboratory equipment/instruments etc. aimed at enhancing the exploration activities. [Directorate of Geology and Mining, Mizoram]

EC was informed that following equipment's have been recommended by the TCC with estimated cost submitted by DGM, Mizoram or restricted to the cost provided by GSI.

S. No.	Item	Quantity	Estimated cost Per unit (Rs.)	Total estimated cost (Rs.)
1	Digital Camera DSLR	1	1,25,000	1,25,000
2	Brunton compass	10	10,000	1,00,000
3	Geologists Hammer	10	7,200	72,000

4	Handheld GPS	10	8,000	80,000
5	Scintilometer	1	6,00,000	6,00,000
6	Rock processing unit (Polishing, grinding, mounting)	1	10,00,000	10,00,000
7	Pulverizer	1	6,00,000	6,00,000
8	Research Polarising Microscope with software attached camera for Transmitted and Reflected light with accessories	1	12,00,000	12,00,000
9	WD-XRF	1	40,00,000	40,00,000
10	Fusion bead machine	1	20,00,000	20,00,000
11	Press pellet machine	1	3,90,000	3,90,000
12	Hot Plates	1	10,000	10,000
13	Muffle furnace	1	1,00,000	1,00,000
14	Air Oven	1	55,000	55,000
15	GIS softwares	1	13,00,000	13,00,000
16	Hydrostatic drill machine upto 600m capacity	1	80,00,000	80,00,000
17	Drill Accessories			80,00,000
18	Pumps	1	15,00,000	15,00,000
19	Core Splitter	1	2,00,000	2,00,000
20	DGPS (1 set)	1	16,00,000	16,00,000
				3,09,32,000

EC Decision:

EC approved the project with estimated cost of ₹309.32 Lakh and timeline of 12 months.

(Action: NMET)

7.34 Procurement of machinery/ laboratory equipment/instruments etc. aimed at enhancing the exploration activities. [Directorate of Geology and Mining, Nagaland]

EC was informed that following equipment's have been recommended by the TCC with estimated cost submitted by DGM, Nagaland or restricted to the cost provided by GSI.

S. No.	Item	Quantity	Estimated cost Per unit (Rs.)	Total estimated cost (Rs.)
1	Skid mounted wireline drilling technology with capacity 1000 m with HQ rod, 1000 m with NQ rod	1	68,90,000	68,90,000
	HX casings 10*long with coupling	90	10,925	9,83,250
	NX casings 10*long with coupling	200	7,400	14,80,000
	HQ drill rod 3mtr	180	13,650	24,57,000
	NQ drill rod 3mtr	350	9,125	31,93,750
2	Bits, Casings, Barrel (one time requirement)			

	HQ surface core bit 60/80 s.p.c	25	13,875	3,46,875
	HQ surface shoe bit 60/80 s.p.c	25	14,155	3,53,875
	HQ reamer shell 25/40s.p.c	25	11,305	2,82,625
	NQ surface core bit 60/80 s.p.c	25	12,255	3,06,375
	NQ surface shoe bit 60/80 s.p.c	25	11,685	2,92,125
	NQ reamer shell 25/40 s.p.c	25	10,545	2,63,625
	HQ barrel 3 m	15	69,600	10,44,000
	NQ barrel 3 m	15	55,200	8,28,000
	Clamp for HX, NX casings	4	7,125	28,500
3	Core splitter hydrostatic	1	2,00,000	2,00,000
4	DGPS (1 set)	1	16,00,000	16,00,000
5	Total Station	1	6,96,000	6,96,000
6	Pulverizer	1	40,00,000	40,00,000
7	Research Polarising Microscope with software attached camera for Transmitted and Reflected light with accessories	1	12,00,000	12,00,000
8	Muffle furnace	1	1,00,000	1,00,000
				2,65,46,000

EC Decision:

EC deferred the proposal in view of the decision taken in Agenda 5.

(Action: NMET)

7.35 Procurement of machinery/ laboratory equipment/instruments etc. aimed at enhancing the exploration activities. [Department of Mines and Geology, Sikkim]

EC was informed that following equipment's have been recommended by the TCC with estimated cost submitted by DMG, Sikkim or restricted to the cost provided by GSI.

S. No.	Item	Quantity	Estimated cost Per unit (Rs.)	Total estimated cost (Rs.)
1	Digital Camera	3	1,20,400	3,61,200
2	Brunton compass	12	10,000	1,20,000
3	Geological Hammer	10	10,000	1,00,000
4	Handheld GPS	10	29,736	2,97,360
5	Handheld XRF	1	30,00,000	30,00,000
6	Pulverizer	1	1,07,380	1,07,380
7	Research Polarising Microscope with software attached camera for Transmitted and Reflected light with accessories	1	12,00,000	12,00,000
8	Hot Plates	1	10,000	10,000
9	Muffle Furnace	1	1,00,000	1,00,000
10	Air Oven	1	18,000	18,000

11	GIS Software	1	14,95,300	14,95,300
12	Drilling machine upto 1000 m capacity	1	60,00,000	60,00,000
13	Bits, drill rods, casing, core barrel (for one year requirement for one time)	1	20,00,000	20,00,000
14	Pumps (Pressure /Mud)	1	10,00,000	10,00,000
15	Core Splitter/ Core Splitter Hydrostatic	1	2,00,000	6,00,000
16	DGPS (1 set)	1	16,00,000	16,00,000
17	Total Station	1	6,96,000	6,96,000
				1,87,05,240

EC Decision:

EC deferred the proposal in view of the decision taken in **Agenda 5**.

(Action: NMET)

7.36 Financial assistance for procurement to procure machinery /laboratory equipment's instruments etc. aimed at enhancing the exploration activities. [Department of Mines and Geology, Rajasthan]

EC was informed that following equipment's have been recommended by the TCC with estimated cost submitted by DMG, Rajasthan or restricted to the cost provided by GSI.

S. No.	Item	Quantity	Estimated cost Per unit (Rs.)	Total estimated cost (Rs.)
1	Digital Camera	5	50,000	2,50,000
2	Brunton	20	10,000	2,00,000
3	Geological Hammer	20	6,000	1,20,000
4	Handheld GPS	20	35,000	7,00,000
5	Handheld XRF	5	30,00,000	1,50,00,000
6	Research Polarising Microscope with software attached camera for Transmitted and Reflected light with accessories	5	5,00,000	25,00,000
7	Pulverizer	1	50,000	50,000
8	Ball Mill	1	20,00,000	20,00,000
9	WD-XRF	1	2,20,00,000	2,20,00,000
10	GIS software	2	15,00,000	30,00,000
11	Core Splitter	6	2,00,000	12,00,000
				4,70,20,000

EC Decision:

EC approved the project with estimated cost of **₹470.20 Lakh** and timeline of **12 months**.

(Action: NMET)

8. Approval of timeline extension for ongoing projects.

EC was informed that TCC in its 44th and 48th meetings held on 25th & 26th August and 22nd & 23rd December, 2022 respectively recommended 3 projects for timeline extension for ongoing project.

S. No.	Block/Project	Implementing Agency	Schedule date of completion	Required timeline (upto)	Status of Exploration work/Geological Report
1	Preliminary exploration for Iron ore in Deojhar (Balita) block (3.99 sq. km), District: Keonjhar, Odisha.	OMC	26.06.2022	31.10.2022 (4 months)	Geological report writing is in progress
2	Preliminary exploration for manganese ore in Lashi block (1.60 sq. km), District: Sundargarh, Odisha.	OMC	26.07.2022	31.12.2022 (6 months)	Geological report writing is in progress
3	Reconnaissance survey (G4) for iron ore Khandadhar Block (40.46 sq. km), District: Sundergarh, Odisha.	OMECL	12.01.2022	31.01.2023 (12 months)	Geological report writing is in progress

For the extended period, the payment will be as per Schedule of Charges (SoC) applicable during the original approved period of the project.

EC Decision:

EC approved the timeline extension for projects without cost overrun.

(Action: NMET)

9. Approval for pre closure of the approved projects of DGM, Telangana/TSMDC.

EC was informed that Department of Mines and Geology, Telangana had submitted total of 15 limestone blocks (as detailed in table below) for mineral exploration for G4, G3 and G2 stage through NMET fund.

TCC in its 14th meeting held in 21st and 22nd May, 2018 recommended to club all 15 limestone blocks into 8 clusters for reconnaissance survey (G4). It was also recommended that after completion of G4 stage exploration, review of the G4 work will be done and thereafter the decision on further stage of exploration will be taken up.

The proposal for exploration from G4 stage to G2 stage in all the clusters was approved by EC in its 8th meeting held on 12th June 2018. The details of 15 blocks and 8 clusters are given in the table below:

S. No.	Cluster	Block Name	G4 (₹ Lakh)	G3 (₹ Lakh)	G2 (₹ Lakh)	Total Cost (₹ Lakh)
1	Cluster-1	Mellacheruvu Block	63.32	73.30	125.58	655.82
2		MallareddyGudem Block		80.06	107.15	
3		Yepal Madhavaram Block		86.27	120.14	
4	Cluster-2	Mattampally-1 Block	47.90	72.61	120.04	394.23
5		Mattampally-2 Block		61.21	92.47	
6	Cluster-3	Raghunathapalem-1 Block	47.55	72.26	120.03	390.17
7		Raghunathapalem-2 Block		59.62	90.71	
8	Cluster-4	Wazigudem Block	43.72	77.68	129.81	430.37
9		Veerappagudem Block		70.68	108.48	
10	Cluster-5	Ramapuram Block	33.81	51.93	109.74	195.48
11	Cluster-6	Dondapadu Block	47.90	70.68	125.48	396.87
12		Kothagudem Block		51.93	100.88	
13	Cluster-7	Jiwangi-1 Block	47.55	41.57	81.10	308.05
14		Jiwangi-2 Block		47.96	89.87	
15	Cluster-8	Malkapur Block	34.31	47.26	124.31	205.88
Total			366.06	965.02	1645.79	2976.87

TSMDC has completed G4 level mineral exploration in 8 clusters and submitted the geological reports for peer review. NMET has made reimbursement of **₹3,35,35,294/** against the sanctioned cost of **₹336.06 Lakh**.

TCC in its 25th meeting held in November, 2020 reviewed **Cluster-2** and **Cluster-6** wherein the committee had suggested not to take up further stage of exploration [G3 and G2 stage] in the blocks.

Again, in TCC in its 41st meeting held on 30th and 31st May 2022 reviewed **Cluster-1**, **Cluster-3** and **Cluster-4** wherein the committee had suggested not to take up further stage of exploration [G3 and G2 stage] in the blocks.

Further, TCC in its 45th meeting held on 26th and 27th September, 2022 reviewed exploration work carried out for **Cluster- 5, 7 and 8**. The Committee noted the outcome of limestone exploration and suggested that blocks may be put up for auction in light of recent amendments in Mineral (Auction) Second Amendment Rules, 2021 and Minerals (Evidence of Mineral Contents) Amendment Rules, 2021 for Composite Licence (CL) and recommended not to take up further stage of exploration. The details are as follow:

S. No.	Cluster	Block Name	G3 (₹ Lakh)	G2 (₹ Lakh)	Total Cost (₹ Lakh)
1	Cluster-5	Ramapuram Block	51.93	109.74	161.67
2	Cluster-7	Jiwangi-1 Block	41.57	81.10	260.50
3		Jiwangi-2 Block	47.96	89.87	
4	Cluster-8	Malkapur Block	47.26	124.31	171.57
Total			188.72	405.02	593.74

Shri Janardan Prasad, ADG GSI & Chairman, TCC, NMET informed that mineral exploration work at G4 level have been completed and geological reports have been submitted to NMET. There is no scope for further exploration and close the approved projects of DMG, Telangana/TSMDC for G3 and G2 exploration work in Ramapuram, Jiwangi-1, Jiwangi-2 and Malkapur limestone blocks with estimated cost of **₹593.74 Lakh**.

EC Decision:

EC approved for pre closure of the approved projects of DGM, Telangana/TSMDC for G3 and G2 exploration work in Ramapuram, Jiwangi-1, Jiwangi-2 and Malkapur limestone blocks with estimated cost of **₹593.74 Lakh**.

(Action: NMET)

10. Reimbursement for Net Present Value (NPV) for forest permission for exploration in “Preliminary exploration for coal in Gurwani block, Main Basin, Singrauli Coalfield, District: Singrauli, Madhya Pradesh”.

EC was informed that in 23rd EC meeting held on 16th March, 2022 approved “Preliminary exploration for coal in Gurwani block, Main Basin, Singrauli Coalfield, District: Singrauli, Madhya Pradesh” with estimated cost of ₹3.93 Cr. in time schedule of 16 months.

Now, CMPDI informed that on submission of application for forest permission for exploration in block, the PCF Bhopal, MP has granted in principal approval for exploration and has requested to deposit ₹11,05,731/- (Rupee Eleven Lakh Five Thousand Seven Hundred and Thirty One only) as Net Present Value (NPV). An additional amount of Rs 80,000/- (Rupee Eighty Thousand only) is also required with the NPV application as registration fees Rs. 5,000/- and processing fee Rs. 75,000/- (Rupee Seventy Five Thousand only).

It is pertinent to mention that deposit of NPV is a statutory requirement as per notification issued by Ministry of Environment, Forest and Climate Change (MoEF&CC) dated 17th November, 2020 for grant of forest permission for exploration in forest area.

CMPDI has requested Rs. 11,85,731/- (Rupee Eleven Lakh Eighty Five Thousand Seven Hundred and Thirty One only) for reimbursement of NPV for forest permission for coal exploration in “Preliminary exploration for coal in Gurwani block, Main Basin, Singrauli Coalfield, District: Singrauli, Madhya Pradesh”.

In view of above, it is proposed to approve Rs. 11,85,731/- (Rupee Eleven Lakh Eighty Five Thousand Seven Hundred and Thirty One only) for reimbursement of NPV for forest clearance from NMET fund in addition to cost of exploration already approved in 23rd EC meeting being statutory dues.

EC Decision:

EC approved ₹11,85,731/- (Rupee Eleven Lakh Eighty Five Thousand Seven Hundred and Thirty One only) for reimbursement of NPV for forest clearance from NMET fund in addition to cost of exploration already approved for “Preliminary exploration for coal in Gurwani block, Main Basin, Singrauli Coalfield, District: Singrauli, Madhya Pradesh” being statutory dues .

(Action: NMET)

- 11. Financial sanction for revised cost of Heliborne survey projects-**
- i. **Heliborne Survey (Phase-I) over 8 mineral target zones identified from interpreted Legacy Aero-geophysical data in parts of Odisha, Chhattisgarh, AP, Telangana and Karnataka.**
 - ii. **Heliborne Time Domain Electromagnetic (TDEM) and Magnetic Survey over target mineral areas H1 and H2 as follow up surveys recommended by analysis of Aero-geophysical data over OGP Blocks 1 & 2 (Phase-I).**

EC was informed that in 19th EC meeting held on 26th March, 2021 approved the projects (i) Heliborne Survey (Phase-I) over 8 mineral target zones identified from interpreted Legacy Aero-geophysical data in parts of Odisha, Chhattisgarh, AP, Telangana and Karnataka with estimated cost of **₹19.00 Cr.** (including 18% GST). and (ii) Heliborne Time Domain Electromagnetic (TDEM) and Magnetic Survey over target mineral areas H1 and H2 as follow up surveys recommended by analysis of Aero-geophysical data over OGP Blocks 1 & 2 (Phase-I) with estimated cost of **₹7.00 Cr.** (including 18% GST).

GSI informed that the administrative approval and financial sanction of ₹26,77,55,531/- (Rupees Twenty Six Crore Seventy Seven Lakhs Fifty Five Thousand Five Hundred and Thirty One Only) inclusive 18% GST to carry out the Heliborne Magnetic and Time-Domain Electromagnetic Aero-geophysical Surveys over different mineral potential areas of the two approved projects by engaging the consortium of M/s McPhar International Private Limited, India with M/s Xcalibur Multiphysics Spain S.L. and Global Vectra Helicorp Ltd., India has been taken from Ministry of Mines vide M.I-11/26/2022-Mines-I dated 31.10.2022.

EC Decision:

EC approved the financial sanction for revised cost of **₹26,77,55,531/-** (Rupees Twenty Six Crore Seventy Seven Lakhs Fifty Five Thousand Five Hundred and Thirty One Only) inclusive 18% GST for two heliborne survey projects.

(Action: NMET)

12. Status of expenditure vis-à-vis Budget Estimates (BE) & Revised Estimates (RE) for Financial Year 2022-23.

EC was informed that in FY 2022-23, NMET received BE of ₹100 Cr. and RE ₹250 Cr. Out of the total ₹250 Cr. fund received, NMET has made expenditure and processed payments of total ₹131.00 Cr. (approx..) till 09.01.2023. The details of BE & RE for FY 2022-23 are given below-

• Budget Estimates (BE)	₹100 Cr.
• Revised Estimates (RE)	₹250 Cr.
• Expenditure incurred + Bills in process (till 09.01.2023)	₹131 Cr.
• Fund to be released as 1 st instalment after 27 th EC (10.01.2023)	₹26 Cr.

1. Status of the expenditure vis-à-vis BE/RE submitted by GSI

• Revised Estimates (RE) submitted by GSI	₹84.64 Cr.
• Payment made till date (09.01.2023)	₹6.30 Cr.
• Balance	₹78.35 Cr.

2. **Status of the expenditure vis-à-vis BE/RE submitted by MECL**

- Revised Estimates (RE) submitted by GSI ₹76.38 Cr.
- Payment made till date (09.01.2023) ₹33.92 Cr.
- Balance **₹42.46 Cr.**

***Rastriya Khanij Vikas Puraskar (RKVP) ₹17 Cr.**

Additional Secretary, Mines informed that on basis of demand given by GSI and MECL, RE proposal was submitted for ₹250 Crore. However, the progress of expenditure was reviewed recently and both GSI and MECL will fall significantly short of committed target.

Secretary, Mines directed Director, Finance [IFD, Mines] to find reasons for non-utilisation of NMET fund by GSI & MECL for R.E for FY 2022-23 in respect of NMET approved projects and fix responsibility for non-utilisation of fund by GSI and MECL.

(Action: IFD, Mines/GSI/MECL)

Meeting ended with vote of thanks by Shri Vivek Kumar Sharma, Director & HoD NMET.

Annexure-1

**List of participants in 27th EC Meeting held on 10th January, 2023 at Khanij Kaksh,
Ministry of Mines, New Delhi**

S. No.	Name & Designation	Organization/email	Remarks
1	Shri Vivek Bharadwaj, IAS Secretary, Mines & Chairman EC,NMET	Ministry of Mines secy_mines@nic.in	In chair
2	Shri Sanjay Lohiya, IAS Additional Secretary, Mines & Member Secretary , EC, NMET	Ministry of Mines sanjay.lohiya@gov.in	Member Secretary, <i>Ex officio</i>
3	Dr. S. Raju, Director General	Geological Survey of India dg.gsi@gov.in	Member, <i>Ex officio</i>
4	Ms. Nirupama Kotru, Joint Secretary and Financial Advisor	Ministry of Coal and Mines	Member, <i>Ex officio</i>
5	Shri B. Saravanan, Director Atomic Minerals Directorate for Exploration and Research	AMD, Dept. of Atomic Energy, director.amd@gov.in	Representative of Dept. of Atomic Energy
6	Shri R. K. Kureel, Director	Ministry of Petroleum and Natural Gas rk.kureel@nic.in	Representative of Ministry of Petroleum and Natural Gas
7	Shri Ravindra Gurav, Joint Secretary	Industries, Energy and Labour Dept., Government of Maharashtra ravindra.gurav@nic.in	Representative of Industries, Energy and Labour Dept.,
8	Shri Sandesh Nayak, IAS Director	Department of Mines and Petroleum, Government of Rajasthan director.uda.mg@rajashtan.gov.in	Representative of Department of Mines and Petroleum
9	Shri J. Jayankanthan, IAS Commissioner	Industries, Investment Promotion and Commerce Dept., Government of Tamil Nadu; geomines@nic.in	Representative of Industries, Investment Promotion and Commerce Dept.
10	Shri Alok Sharma, GM &HoD (Exploration) (Retd), CMPDIL	Exploration Expert, aloksharma360@gmail.com	Nominated Member
11	Shri Naresh Nautiyal, Head (Retd.), MECL	Exploration Expert, nautiyal.naresh5@gmail.com	Nominated Member
12	Dr. L. S. Shekhawat, DDG (Retd.)	Exploration Expert, shekhawatls57@gmail.com	Nominated Member
13	Dr. Yamuna Singh, (Retd.), Scientist-H, AMD	Exploration Expert, yamunasingh1957@gmail.com	Nominated Member
14	Dr.Sahendra Singh Associate Professor	Exploration Expert, sahendra@iitism.ac.in	Nominated Member

15	Shri Janardan Prasad, Addl. Director General & Chairman, TCC	Geological Survey of India janardan.prasad@gsi.gov.in	Invitee
16	Shri Vivek Kumar Sharma, Director	Ministry of Mines vksharma.ofb@gov.in	HoD, NMET
17	Shri Maneesh Khar, Director, GSI	Ministry of Mines nmet-mines@gov.in	NMET

Annexure-2

The details of the projects approved in 27th EC meeting held on 10th January, 2022.

A. Mineral exploration projects

S. No.	Project/Block Name	Commodity	Stage	Duration (Months)	Proposed cost (₹ Lakh including GST)
Implementing Agency: OMECL					
1	Preliminary exploration (G3) for Graphite in Lamer-Panga block A (13.99 sq. km), District: Kalahandi, Odisha.	Graphite	G3	16	232.66
2	Preliminary exploration (G3) for Iron Ore in Thakurani block (1.399 sq. km) in District: Keonjhar, Odisha.	Iron	G3	10	223.08
3	Preliminary exploration (G3) for graphite in Lamer Panga Graphite Block-B (12.994 sq. km) Kalahandi district Odisha.	Graphite	G3	14	216.61
					672.35
Implementing Agency: CMPDI					
4	Preliminary exploration (G3) for coal in North of Urtan North block (10.28 sq. km), Sohagpur coalfield, District: Anuppur, Madhya Pradesh.	Coal	G3	12	345.22
5	Preliminary exploration (G3) for coal in North of Saoner (15.16 sq. km), Kamptee coalfield, District: Nagpur, Maharashtra.	Coal	G3	14	265.02
6	Reconnaissance survey (G4) for coal in West of Ghugus and Bellora block (39.15 sq. km), Wardha Valley Coalfield, District: Yavatmal, Maharashtra.	Coal	G4	12	215.77
7	Preliminary exploration (G3) for coal in Brahmani North block (21.73 sq. km), Talcher Coalfield, District: Dhenkanal, Odisha.	Coal	G3	12	254.50
8	Reconnaissance survey (G4) for Zinc and associated minerals in Jamua area, District: Giridih, Jharkhand.	Zinc and associated minerals	G4	12	47.40
9	Preliminary exploration (G3) for bauxite in Dhuluapat block (4.0 sq. km), District: Lohardaga and Gumla, Jharkhand.	Bauxite	G3	12	82.21

1210.12**Implementing Agency: MECL**

10	Preliminary exploration (G3) for Basemetal (Cu, Pb, Zn) in Chintakuntala block (5.00 sq. km), District: Nalgonda, Telangana.	Basemetal	G3	14	232.19
11	Preliminary exploration (G3) for phosphorite in Kachaldara East block (5.60 sq. km), District: Jhabua, Madhya Pradesh.	Phosphorite	G3	12	180.77
12	Reconnaissance Survey (G4) for glauconitic sandstone in Pindra SW extension block (40.0 sq. km), District: Satna, Madhya Pradesh.	Glauconitic sandstone	G4	12	117.43
13	Reconnaissance survey (G4) for PGE, Chromium, Nickel, Cobalt in Chandiposh block (111.00 sq. km) District: Sundargarh, Odisha.	PGE, Chromium, Nickel, Cobalt	G4	12	89.90
14	Reconnaissance survey (G4) for PGE, Nickel, Chromite & associated basemetal mineralization in Yentem-Ningthi area (73.00 sq. km), District: Kamjong (Ukhrul), Manipur.	PGE, Nickel, Chromite	G4	12	127.04
15	Reconnaissance survey (G4) for Copper, Lead, Zinc and Gold in Tarichar Khurd block (101.00 sq. km), District: Niwari, Madhya Pradesh.	Copper, Lead, Zinc and Gold	G4	12	49.35
16	Reconnaissance survey (G4) for phosphorite in Ram Ka Munna area (40 sq. km) District: Banswara, Rajasthan.	Phosphorite	G4	12	49.23
17	Reconnaissance Survey (G4) for tin and associated minerals in Pendra block (110.362 sq. km), District: Gaurela-Pendra-Marwahi [Bilaspur], Chhattisgarh.	Tin and associated minerals	G4	12	119.79
18	Reconnaissance survey (G4) for manganese ore in Taljuri-Gunchadihi block (80.0 sq. km), District: Balangir, Odisha.	Manganese	G4	14	166.60
19	Reconnaissance survey (G4) for manganese and associated minerals in Katori-Jhiriya block (140.22 sq. km), District: Balaghat, Madhya Pradesh.	Manganese and associated minerals	G4	14	167.82
20	Preliminary exploration (G3) for limestone in Malkhed block- 1 and 2 (18.01 sq. km), Bhima Basin,	Limestone	G3	10	147.77

	District: Gulbarga (Kalaburagi), Karnataka.				
21	Preliminary exploration (G3) for limestone, bauxite and fire clay in Piparhat-Kubri block (2.51 sq. km), District: Satna, Madhya Pradesh.	Limestone & Bauxite	G3	9	81.10
					1528.99
Implementing Agency: Directorate of Geology, Odisha					
22	Preliminary exploration (G3) of graphite occurrence around Bandhabhuin area (1.00 sq. km), District: Dhenkanal, Odisha.	Graphite	G3	10	166.17
23	Preliminary exploration (G3) for graphite around Naringapanga block (S & W) (0.143 sq. km) block, District: Rayagada, Odisha.	Graphite	G3	9	120.93
					287.10
Sub Total- A					3698.56 Lakh

B. Financial assistance projects

S. No.	Project/Block Name	Duration (Months)	Proposed cost (₹ Lakh including GST)
Implementing Agency: GSI			
1	Procurement of geophysical instruments for capacity enhancement in ground gravity-magnetic mapping of GSI.	12	7020.0
			7020.0
Implementing Agency: IBM			
2	Procurement of laboratory scale mineral processing equipments, characterization and analysis instruments for modern mineral processing laboratory, IBM, Nagpur.	12	1180.0
3	Procurement of laboratory scale mineral processing equipment's, characterization and analysis instruments for Regional Mineral Processing Laboratory, Bengaluru.	12	760.0
			1940.0
Implementing Agency: DMG, Karnataka			
4	Procurement of machinery/ laboratory equipment/instruments etc. aimed at enhancing the exploration activities.	12	417.0
			417.0
Implementing Agency: DGM, Maharashtra			
5	Procurement of machinery/ laboratory equipment/instruments etc. aimed at enhancing the	12	442.615

	exploration activities.		
			442.615
Implementing Agency: DGM, Assam			
6	Procurement of machinery/ laboratory equipment/instruments etc. aimed at enhancing the exploration activities.	12	107.0
7	Procurement of machinery/ laboratory equipment/instruments etc. aimed at enhancing the exploration activities.	12	403.65
			510.65
Implementing Agency: Directorate for Trade, Commerce and Industries, Manipur			
8	Procurement of machinery/ laboratory equipment/instruments etc. aimed at enhancing the exploration activities.	12	221.35
			221.35
Implementing Agency: Directorate of Geology and Mining, Mizoram			
9	Procurement of machinery/ laboratory equipment/instruments etc. aimed at enhancing the exploration activities.	12	309.32
			309.32
Implementing Agency: Department of Mines and Geology, Rajasthan			
10	Financial assistance for procurement to procure machinery /laboratory equipment's instruments etc. aimed at enhancing the exploration activities.	12	470.20
			470.20
		Sub Total- B	11331.14 Lakh
