

Ministry of Mines
National Mineral Exploration Trust
Minutes of the 64th Technical-cum-Cost Committee (TCC) meeting held on 25th, 29th & 30th
April, 2024 through video conferencing

The 64th meeting of Technical-cum-Cost Committee [TCC] of National Mineral Exploration Trust [NMET] was held through video conferencing under the chairmanship of Dr. S. Ravi, Dy. Director General, Geological Survey of India (DDG, GSI) and Chairman, TCC, NMET on 25th, 29th & 30th April, 2024.

Members of TCC-NMET and representatives from Geological Survey of India, MECL, KIOCL, Karnataka, CMPDI, MPSMC, OMC, Odisha, DMG, Rajasthan, DGM, Karnataka, DMG, Telangana, DGM, Chhattisgarh, DMG, Odisha, DGM, Assam, DGM, Mizoram, DGM, Maharashtra, DGM, Assam, DGM, Madhya Pradesh, DGM, Nagaland, DGM, J&K, Gemcokati Exploration Pvt. Ltd, Maheshwari Mining Pvt. Ltd, Geovale Services Private Limited, United Exploration India Pvt Ltd, GeoMarine Solutions Pvt. Ltd, GeoExpore Pvt. Ltd, Novamine India Pvt Ltd, V. M. Salgaocar and Brother Pvt Ltd, have attended the meeting through their respective VC modes.

The participants are listed in Annexure-1.

Shri C. Parthasarathi, Director, GSI and Member Secretary, TCC-NMET, welcomed Dr. S. Ravi, DDG, GSI and Chairman, TCC, NMET, Members of the TCC and participants representing various Notified Exploration Agencies [NEAs] and Notified Private Exploration Agencies [NPEAs].

Dr. S. Ravi, DDG, GSI and Chairman, TCC extended a warm welcome to the TCC members and participants representing various Notified Exploration Agencies (NEAs) and Notified Private Exploration Agencies (NPEAs). During his opening remarks, the chairman recommended that all NEAs and NPEAs adhere to a standard colour code when preparing geological maps. He emphasized the importance of agencies proposing items based on their manpower capabilities to ensure high-quality outputs. Additionally, he instructed all the agencies to clearly indicate in-house and outsourced components when submitting new project proposals.

Subsequently, the proceeding of meeting was initiated as per circulated agenda.

Agenda 64.1 Review of Ongoing Projects/Completed Project & Timeline Extension

Agenda 64.1.1. Reconnaissance Survey (G4 stage) for Lithium and Potassium in Merak Block (114.19 sq. km), Districts- Leh, Ladakh (UT) [Implementing Agency: MECL]

- a) MECL informed that the project was approved in the 23rd EC Meeting held on 16th March, 2022. Sanction order was issued on 25th March, 2022 with timeline of 24 months and approved cost was INR Rs. 2,13,04,062/-.
- b) MECL informed that the comments of the peer reviewer have been incorporated and the GR is ready for submission.

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Agenda 64.3: Technical evaluation of new project proposals:

Agenda 64.3.1 Reconnaissance survey (G-4) for graphite in Temrimal area (57.15 sq km), Balangir and Bargarh districts, Odisha.

[Implementing Agency: MECL]

- d) The proposed area belongs to Eastern Ghat Mobile Belt in Odisha and falls in SOI toposheet nos. 64L/09, 64L/10, 64L/13, 64L/14
- e) The area consists of a cluster of 10A 2(b) leases or taken-over leases, which were selected for further exploration by the State Technical Committee (JWG) on 06.02.2023 and allocated to MECL for required actions.
- f) Graphite in the Sargipali graphite belt mostly occur in disseminated form in khondalite and less commonly in quartzite and granite gneisses in the areas.
- g) After working in Sargipalli-Bardhapalli Belt during 1970-71, GSI found major surface deposits exhausted due to mining, recommending close-spaced geophysical prospecting (SP and IP methods) to find out graphite deposit extensions.
- h) MECL's preliminary field visit to the proposed block and surrounding areas identified four graphite mineralized areas (FC%:4.42%-12.67%) from old working pits and surface exposure. The field geologist also noted the consistent trend in graphite mineralization, supported by graphite quarries and local mining activities at regular intervals along the mineralized strike direction.
- i) The committee noted that despite the area falling under the 10A2(B) case, MECL lacks any relevant data.
- j) Additionally, it was noted that MECL's chosen block consists of over 50% granite gneiss, whereas the graphite is primarily found within khondalite.
- k) Since, GSI has conducted LSM in and around the area and identified 9 SP anomalies, the committee has decided to proceed with G3 stage exploration in the area.

Recommendation of TCC:

The committee recommended developing a G3 stage proposal specifically focusing on the potential areas within the proposed G4 area. They suggested submitting this proposal for review at the next TCC meeting of NMET.

Agenda 64.3.2 Reconnaissance survey (G-4) for Iron-PGE and associated minerals in Chitrangi area, Singrauli district, Madhya Pradesh.

[Implementing Agency: MECL]

- a) The proposed area belongs to Paleoproterozoic Mahakoshal belt which is well known for hosting numerous economic mineralization like Sulphides, Gold, PGE, Manganese, Iron (BHQ/BMQ) etc

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- b) During 1987-88, GSI reported presence of glauconite in the central and eastern part of the proposed block. GSI conducted G4 stage investigation in Kotera-Reghai area (located NW of the proposed block) for glauconite, and reported glauconite bearing sandstone of Lohardih Formation.
- c) Furthermore, the presence of phosphorite blocks in the north and northeast of the proposed block, including Sambalpur G-2 block (F.S 2022-23), Nawagaon G-4 block (F.S. 2023-24), Latabor G-4 block (F.S. 2023-24), and Nipani Kharra G-4 block (F.S. 2024-25), indicates the area's suitability for fertilizer minerals exploration.
- d) NGCM data from stream sediment samples, C-horizon soil samples, and regolith samples, also confirms the presence of glauconite (K₂O: 1.00% to 2.05%) in the block.
- e) The committee assessed the proposed item and advised conducting drilling activity only following a thorough review.

Recommendation of TCC:

The committee recommends the proposal for the approval of EC for “Reconnaissance survey (G-4) for glauconitic sandstone in Parsada-Nawapara-Gurur area, Balod district, Chhattisgarh.” with an estimated cost of Rs. 116.75 lakh (including GST) within time schedule of 12 months and submission of report as per Annexures 5A & 5B.

Agenda 64.3.5. Reconnaissance survey (G-4) for manganese Ore in Dhavalapur area, Nagpur district, Maharashtra.

[Implementing Agency: MECL]

- a) The Dhavalapur Manganese block lies in Sausar Mobile Belt (SMB) and originally leased to Shri Amol B. Nagpure from 24/09/2004 to 23/09/2006 under section 10(A) 2(B) of the MMDR Act-15, but has been lapsed. DGM, Maharashtra requested MECL to explore this lapsed area through letter no. Tech/1848/2023/3938, dated 22/12/2023.
- b) Shri Amol B. Nagpure conducted prospecting activities, including 5 pits and 2 trenches, analyzing 7 samples with manganese oxide (MnO₂) ranging from 23.99% to 35.87% and manganese (Mn) from 15.16% to 22.66%. They estimated manganese ore resources of 0.9 million tonnes and extracted 200 tonnes of manganese ore with 25% to 30% MnO₂ content.
- c) MECL reviewed data from DGM Maharashtra and conducted a field visit to Dhavalapur and noticed surface indications of manganese mineralization in the

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block area and gondite is the host for Mn in the area. MECL collected 5 samples from the area for analysis which yielded 23.55% to 32.25% Mn.

- d) Again, the committee feels that the proposed area is very less for G4 stage survey. The committee suggested to modify the block and propose a G3 stage exploration item mainly targeting the lease hold area making a regular block shape.
- e) Accordingly, MECL prepared a G3 stage proposal covering 2 sqkm area including the 10A2(B) Lease hold area

Recommendation of TCC:

The committee recommends the proposal for the approval of EC for “Preliminary Exploration (G3) for manganese ore in Dhavalapur block, District: Nagpur, Maharashtra” with an estimated cost of Rs. 231.60 lakh (including GST) within time schedule of 12 months and submission of report as per Annexures 6A & 6B. The item will be reviewed after 05 months.

**Agenda 64.3.6 Aerogeophysical survey over NAGMP Blocks 16, 17, 19 & 20.
[Implementing Agency: Geological Survey of India]**

- a) The Geological Survey of India (GSI) under the National Aerial Geophysical Mapping Program (NAGMP) submitted a proposal for administrative approval for tendering Group-A and Group-B over specific NAGMP blocks to the Ministry of Mines on 15.09.2023. The approval for these tenders was received on 27.09.2023, leading to the floating of two tenders: Group-A for Blocks 16, 17, 19 & 20, and Group-B for Blocks 13, 18 & 21, aimed at engaging a Private Implementing Agency (PIA) for aerogeophysical surveys.
- b) Technical bids were received for the Group-A tender from four bidders, with three bidders qualifying and one being disqualified due to non-compliance with tender conditions. The Tender Evaluation Committee (TEC) evaluated these bids on 21.03.2024, and their minutes were approved by the Director-General (DG) of GSI on 22.03.2024.
- c) The TEC (Price) committee recommended awarding the contract to a consortium led by M/s IIC Technologies Private Limited, Hyderabad, along with partners from Canada and Mongolia, at a total cost of INR 95,03,81,566.26 (including GST @18%). This cost was lower than the approved estimate in the GeM tender. The DG, GSI approved this recommendation on 03.04.2024, leading to the submission of a letter to the Director of NMET, Ministry of Mines, New Delhi, to obtain financial sanction for awarding the contract to the selected bidder.

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Estimated cost for Preliminary Exploration (G3) for manganese ore in Dhavalapur block, District: Nagpur, Maharashtra.
[Block area- 2.00 sq. km; Schedule timeline- 12 months, BH: 14, 1000m , Review: after 5 months]

S. No.	Item of Work	Unit	Rates as per NMET SoC 2020-21		Estimated Cost of the Proposal		Remarks
			SoC-Item -SI No.	Rates as per SoC			
					Qty.	Amount (Rs)	
A	GEOLOGICAL WORK						
1	Geological mapping (1: 2000) and Topo survey						
i	Charges for one Geologist- Field	day	1.2	11,000	150	16,50,000	
ii	Charges for one Geologist per- HQ	day	1.2	9,000	30	2,70,000	
iii	2 labours/ party (As per rates of Central Labour Commissioner)	day	5.7	522	300	1,56,600	Amount will be reimburse as per the notified rates by the Central Labour Commissioner or respective State Govt. whichever is higher
iv	Trench and Core Sampling -1 Samplers Labour charge not included	day	1.5.2	5,100	37	1,88,700	

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v	4 labours/ party for smpling (As per rates of Central Labour Commissioner)	day	5.7	522	148	77,256	Amount will be reimburse as per the notified rates by the Central Labour Commissioner or respective State Govt. whichever is higher
2	Survey (on 1:2000 Scale)						
i	Bore Hole Fixation and determination of co-ordinates & Reduced Level of the boreholes by DGPS and boundary coordinates	Per Point of observation	1.6.2	19,200	24	4,60,800	14 BHs and 10 boundary coordinates
ii	Charges of Surveyor	one surveyor per day	1.6.1a	8,300	30	2,49,000	
iii	Labours Charges for survey work; Base rate - Rs.522	day	5.7	522	120	62,640	Amount will be reimburse as per the notified rates for unskilled labor by the Central Labour Commissioner or respective State Govt. whichever is higher
	Sub Total- A					31,14,996	
B	PITTING AND TRENCHING						
i	Trenching (1m x 2mx 10 m) x 7 trenches	Cu m	2.1.1	3330	140	4,66,200	
	Sub Total- B					4,66,200	
C	DRILLING (After Review)						

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i	Drilling upto 300m (Hard Rock) (1 rigs)	m	2.2.1.4a	11,500	1,000	1,15,00,000	
ii	Borehole deviation Survey	m	2.2.6	330	1,000	3,30,000	
iii	Land / Crop Compansation	per BH	5.6	20,000	14	2,80,000	Amount will be reimburse as per actuals or max. Rs. 20000 per BH with certification from local authorities
iv	Construction of concrete Pillar (12"x12"x30")	per borehole	2.2.7a	2,000	14	28,000	
v	Transportation of Drill Rig & Truck associated per drill	Km	2.2.8	36	300	10,800	Certification in this regard is required to be provided
vi	Monthly Accomodation Charges for drilling Camp (up to 2 Rigs)	month	2.2.9	50,000	4	2,00,000	
vii	Drilling Camp Setting Cost	Nos	2.2.9a	2,50,000	1	2,50,000	
viii	Drilling Camp Winding up Cost	Nos	2.2.9b	2,50,000	1	2,50,000	
ix	Approach Road Making (Hilly Terrain)	Km	2.2.10b	32,200	5	1,61,000	Road Making will be considered as per the requirement and Road Making Charges will be reimbursed later
x	Core Preservation: One complete borehole plus mineralised cores of all the remaining Bhs	m	5.3	1,590	300	4,77,000	This amount will be reimbursed after successful delivery of the cores to concerned libraries/authorities
	Sub Total- C					1,34,86,800	
D	LABORATORY STUDIES						

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1	Chemical Analysis						
i	Primary & Check samples						
	a. Primary Samples 6 radical (Mn, SiO ₂ , P ₂ O ₅ , Fe ₂ O ₃ , MnO ₂ and Insolubles)- by XRF	Nos	4.1.15a	4,200	270	11,34,000	Trench-70, BH-200
	c-External(10%) Check samples from NABL Lab for 6 radical (Mn, SiO ₂ , P ₂ O ₅ , Fe ₂ O ₃ , MnO ₂ and Insolubles)	Nos	4.1.15a	4,200	27	1,13,400	
2	Physical & Petrological Studies						
i	Preparation of thin section	Nos	4.3.1	2,353	10	23,530	
ii	Complete petrographic study report	Nos	4.3.4	4,232	10	42,320	
iii	Preparation of polished section	Nos	4.3.2	1,549	10	15,490	
iv	Complete mineragraphic study report	Nos	4.3.4	4,232	10	42,320	
v	Digital Photographs	Nos	4.3.7	280	10	2,800	
vi	Bulk density	Nos	4.10	3,540	10	35,400	
	Sub Total- D					14,09,260	
E	Total A to D					1,84,77,256	
F	Geological Report Preparation		5.2	iii		7,50,000	Reimbursement will be made after submission of the final Geological Report in Hard Copies (5 Nos) and the soft copy to NMET.

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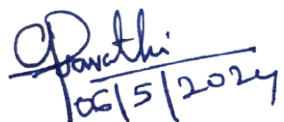
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G	Peer review Charges		As per EC decision			30,000	
H	Preparation of Exploration Proposal (5 Hard copies with a soft copy)	5 Hard copies with a soft copy	5.1	2% of the Cost or Rs.5 Lakhs whichever is lower		3,69,545	EA has to submit the Hard Copies and the soft copy of the final proposal along with Maps and Plan as suggested by the TCC-NMET in its meeting while clearing the proposal.
I	Total Estimated Cost without GST					1,96,26,801.12	
J	Provision for GST (18% of I)					35,32,824.20	GST will be reimburse as per actual and as per notified prescribed rate
K	Total Estimated Cost with GST					2,31,59,625.32	
	Rs. (in lakhs)					231.60	
Note:							
1	Strict adherence to the Ministry of Finance's and GFR guidelines is mandatory. Every transaction must adhere to GFR rule 21.						
2	In case of delay/non- performance, the appropriate action will be taken by competent authority against delinquent agency as per prevailing govt. of India rules/guidelines on procurement.						
3	If any part of the project is outsourced, the amount will be reimbursed as per the Paragraph 3 of NMET SoC and Item no. 6 of NMET SoC. In case of excusion of the project by NEA on its own, a Certifiante regarding non outsourcing of any component/project is required.						
4	Necessary efforts should be made to minimize any adverse impact on the environment during exploration activities.						
5	Any item of work not mentioned above shall be added as per SoC.						

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Annexure 6B															
Time schedule/ Action Plan for Preliminary Exploration (G-3) for Manganese in Dhavalapur Block, Districts: Nagpur, Maharashtra [Block area-2.00 sq. km; Schedule timeline- 12 months]															
S. No.	Particulars	Months	1	2	3	4	5		6	7	8	9	10	11	12
1	Camp Setting	Months						Review							
2	Survey Party days (1 Party)	days													
3	Trenching / Pitting	cu.m													
4	Drilling (2 rig)	m													
5	Geologist Party days (1 Party)	days													
6	Sampling days for Trench & Core Sampling (1 Party)	days													
7	Camp winding	Months													
8	Laboratory Studies	days													
9	Geologist days, HQ	days													
10	Report Writing with Peer Review	days													


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